





# ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK











#### ARMENIAN TERRITORIAL DEVELOPMENT FUND



## ARMENIA TOURISM AND REGIONAL INFRASTRUCTURE PROJECT

## ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

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#### ACRONYMS

ACM	Asbestos-Containing Material		
AIDS	Acquired Immunodeficiency Syndrome		
ATDF	Armenian Territorial Development Project		
BMP	Biodiversity Management Plan		
CAP	Correction Action Plan		
CDP	Cluster Development Plan		
CERC	Contingent Emergency Response Component		
СНМР	Cultural Heritage Management Plan		
DMO	Destination Management Office		
DPM	Deputy Prime Minister		
E&S	Environmental and Social		
EIA	Environmental Impact Assessment		
EIAE	Environmental Impact Assessment and Expertise		
EIEC	Environmental Impact Expertise Center		
EPMIB	Environmental Protection and Mining Inspection Body		
ESCP	Environmental and Social Commitment Plan		
ESF	Environmental and Social Framework		
ESHS	Environmental, Social, Health and Safety		
ESIA	Environmental and Social Impact Assessment		
ESMF	Environmental and Social Management Framework		
ESMP	Environmental and Social Management Plan		
ESR	Environmental and Social Rreview		
ESS	Environmental and Social Standards		
GIIP	Good International Industry Practices		
GM	Grievance Mechanism		
GoA	Government of Armenia		
H&S	Health and Safety		
HIV	Human Immunodeficiency Viruses		
HLIB	Health and Labor Inspection Body		
нмс	Hydrometeorology and Monitoring Center		
HoReCa Hotel, Restaurant, and Catering			
ILO	International Labor Organization		
IPF	Investment Project Financing		

LEIDP Local Economy and Infrastructure Development Project

LMP Labor Management Procedures

LWG Local Working Group

MoE Ministry of Economy

MoEnv Ministry of Environment

MoESCS Ministry of Education, Science, Culture and Sport

MP Monitoring Plan

MTAI Ministry of Territorial Administration and Infrastructures

NGO Non-Governmental Organization

NP National Park

OHS Occupational Health and Safety

PAP Project Affected Person

PC Public Consultation

PIA Project Implementing Agency

POM Project Operations Manual

PPE Personal Protective Equipment

PPI Public Private Investment

PPP Public Private Partnership

PSC Project Steering Committee

RF Resettlement Framework

RoA Republic of Armenia

RP Resettlement Plan

SEA Sexual Exploitation and Abuse

SEP Stakeholder Engagement Plan

SH Sexual Harassment

SNCO State Non-Commercial Organization

TA Technical Assistance

TC Tourism Committee

TRIP Tourism and Regional Infrastructure Project

WB World Bank

WMP Waste Management Plan

#### 1. EXECUTIVE SUMMARY

Armenia Tourism and Regional Infrastructure Project (TRIP) consists of four integrated components that will collectively contribute to improving the access to climate-resilient infrastructure for the benefit of local communities and visitors, enhancing the attractiveness of selected sites, enabling job creation, and increasing the contributions to the local economy from the tourism sector.

**Component 1: Fostering Integrated and Sustainable Cluster Development** will finance technical assistance (TA), consultancy services, goods and equipment, for, inter alia, the preparation of Cluster Development Plans (CDPs) and the associated analytical and technical studies to develop and implement the CDPs.

Component 2: Supporting climate-resilient infrastructure and promoting private sector participation in local economies aims at closing the identified gaps across all seven clusters and tackling no-regret improvements to basic infrastructure, tourism and service delivery from the regional and tourism development perspectives across the seven project-supported priority clusters. Selection of the activities under this component will be informed by the CDPs developed and completed under Component 1. The component will finance feasibility studies, engineering and technical site surveys, management and supervision consultant services, and other technical assessments, architectural and detailed engineering designs, and civil works. The component includes the following sub-components: (i) Subcomponent 2.1: Rehabilitating and upgrading infrastructure and services; (ii) Subcomponent 2.2: Fostering private sector participation, enhancing professional skills, and enabling job creation.

**Component 3: Program Management and Operational Support** will finance overall project management costs, including operational costs, consulting services, non-consulting services, vehicles, goods, communications, outreach, audits, and training.

Component 4: Contingent Emergency Response Component, CERC (zero allocation). This zero-dollar, exante mechanism will allow for the rapid reallocation of uncommitted project funds towards urgent needs in the event of a disaster (geophysical, climate-related, or man-made), or public health emergency.

TRIP aims to promote sustainable, inclusive, and climate-resilient tourism in seven clusters: Areni, Dilijan, Dvin, Goris, Gyumri, Jermuk, and Yeghegis. This framework ensures that E&S considerations are integrated into Project planning, design, and implementation to minimize adverse impacts and enhance benefits for local communities.

The Environmental and Social Management Framework (ESMF) for the Armenia Tourism and Regional Infrastructure Project (TRIP) outlines a structured approach to managing environmental and social (E&S) risks while ensuring compliance with Armenia's national regulations and the World Bank's (WB) Environmental and Social Framework (ESF). It also sets guidelines to align TRIP activities with regulatory requirements while minimizing risks and maximizing positive impacts. The ESMF serves as a critical tool to ensure that TRIP promotes sustainable tourism while safeguarding Armenia's natural and cultural heritage.

The objective of ESMF is to guide the implementing entity in executing respective components of the Project in compliance with the national and local regulations, and in alignment with the WB's Environmental and Social Standards (ESSs) relevant for the TRIP. Below are few main objectives of the ESMF;

- Assess potential social and environmental risks and impacts from the project and project activities;
- Outline the clear steps, process, procedures and methodologies for screening, reviewing and monitoring E&S requirements, risks and impacts;
- Define roles and responsibilities for supervision, management, reporting and monitoring E&S risks, impacts and compliance;
- Provide a framework for consultation and information disclosure; and for preparing the E&S mitigation plans to address the adverse impacts; and
- Assess capacity and suggest capacity strengthening measures.

The primary objective of the ESMF is to guide the identification, assessment, and mitigation of E&S risks. It establishes screening and assessment procedures, defines impact mitigation measures, and ensures compliance with regulatory requirements and WB's Environmental and Social Standards (ESSs). The framework also provides monitoring and reporting mechanisms, promotes stakeholder engagement, and ensures that grievance redress mechanisms (GRMs) are in place for affected communities. Furthermore, it guides the preparation of site-specific E&S instruments, such as Environmental and Social Impact Assessments (ESIAs), Environmental and Social Reviews (ESRs) and Environmental and Social Management Plans (ESMPs), Cultural Heritage Management Plans (CHMPs) and risks screening and identification tool for project activities.

The activities under Component 2 including civil works: rehabilitation and construction of infrastructures, small-scale nature-tourism development activities, will trigger 8 ESSs.

**ESS1:** Assessment and Management of E&S Risks and Impacts - Implementation of civil works implies E&S risks and impacts which should be assessed, mitigated, managed and monitored. ESS1 is applicable for all cluster-related activities.

**ESS2:** Labor and Working Conditions - The Project contractors should have workforce management policies, Environmental Social Health and Safety (ESHS) policies and Code of Conduct, they should provide safe and healthy working conditions to the workers. ESS2 is applicable for all kind of worker-management relationships.

**ESS3:** Resource Efficiency and Pollution Prevention and Management - Before commencement of the civil works the possible pollution to air, water and land should be assessed, prevention and mitigation measures developed to be monitored during the civil works. ESS3 is applicable for all infrastructure rehabilitation activities for all clusters.

**ESS4:** Community Health and Safety - The health, safety, and security risks and impacts on project-affected communities should be considered and addressed avoiding or minimizing such risks and impacts, with particular attention to vulnerable groups. ESS4 is applicable for all infrastructure rehabilitation activities in all affected communities of all clusters.

**ESS5:** Land Acquisition, Restrictions on Land Use and Involuntary Resettlement - Resettlement impacts should be assessed and possibly avoided. If involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on project-affected persons (PAP) will be carefully planned and implemented. ESS5 is applicable for all infrastructure rehabilitation activities which include impacts on private property, involuntary resettlement and permanent and/or temporary use of private land.

**ESS6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources - The impacts on biodiversity and living natural resources will be carefully assessed and measures to minimize the impact will be developed. ESS6 is applicable for those infrastructure rehabilitation activities which will

be conducted outside residential and agricultural areas, in or around natural environment such as forests, protected areas, and highlands.

**ESS8: Cultural Heritage -** The impacts on cultural heritage should be assessed and protected throughout the project life-cycle.

ESS8 is applicable for those infrastructure rehabilitation activities which will be conducted in the areas that are protected as cultural heritage and/or near cultural monuments.

**ESS10:** Stakeholder Engagement and Information Disclosure - The stakeholders of the Project are identified from the very beginning of the Project. A separate SEP has been prepared for the Project which provides details on how the stakeholders will be identified, be consulted, involved in the discussions and engaged in implementation for E&S sustainability of the Project, its acceptance and significant contribution to its successful implementation. ESS10 is applicable for all cluster-related activities.

TRIP's overall E&S risk rating is classified as Substantial, requiring careful management throughout the project lifecycle.

The environmental risks include soil erosion and degradation, air and noise pollution, biodiversity risks, and waste management challenges. Erosion control measures and land restoration techniques will be implemented to prevent soil degradation. Air and noise pollution will be managed through dust suppression, vehicle emission controls, and restricted construction hours in residential areas. Biodiversity risks will be addressed by preserving protected areas, replanting disturbed vegetation, and enforcing conservation measures in ecologically sensitive regions. Waste management plans will ensure proper disposal of hazardous and non-hazardous waste, including asbestos-containing materials.

Social risks associated with TRIP include land acquisition and resettlement, labor and working conditions, community health and safety, and cultural heritage impacts. The Resettlement Framework (RF) will be followed to ensure fair compensation and livelihood restoration for affected persons. Labor Management Procedures (LMP) will be enforced to protect worker rights, occupational health, and safety standards. Traffic management measures, site safety protocols, and emergency response plans will be put in place to safeguard community health and safety. To protect cultural heritage, the Chance Find Procedures will be adopted to prevent damage to historical and archaeological sites during construction.

The ESMF aligns with Armenia's E&S legal framework, including the Environmental Impact Assessment and Expertise (EIAE) Law, the Labor Code, the Waste Management Law, the Law on Preservation and Use of Immovable Monuments of History and Culture and of the Historic Environment, Urban Development Law, and the Water Code. It also adheres with WB's ESF, ensuring compliance with the relevant ESSs. Institutional responsibilities for implementing the ESMF are assigned to the Armenian Territorial Development Fund (ATDF), the Tourism Committee (TC), and relevant government agencies.

Present draft ESMF will be disclosed through the ATDF's web site and made available in print version at the regional administrations in Armenian and English languages. Consultation on it will be undertaken with relevant government and non-government institutions. The draft ESIAs and ESMPs shall be sent to the WB for review and approval. After the approval is received from the Bank the ATDF will disclose the ESIA or ESMP in the affected community. The draft ESMP will be posted on ATDF's and the affected community's websites with an announcement on PC meeting held in the community in 10 days after posting of the announcement. After the PC the PT will finalize the draft ESMP by attaching the minutes of the PC and the required documents obtained from the community: letters on waste disposal site, agreement of the community on project implementation on community lands, and construction permit at

a later stage. The updated ESMP will be sent to the Bank for review, will be revised if required to seek final approval and disclosed on ATDF website.

Detailed record of PC process will be kept. Minutes of all meetings held will be produced to include the agenda, questions raised, list of participants, date and location. Personal data will be available for internal use only.

Public consultations will continue during the construction phase led by the construction and supervision contractors, and records of E&S issues raised and complaints received during consultations, field visits, informal discussions, formal letters, etc., will be followed up. The records will be kept in the ATDF office and be available for the WB upon request.

The implementation and monitoring of the ESMF will follow a structured approach, including: (i) E&S screening and risk classification of subprojects, (ii) development of site-specific E&S instruments, (iii) SE and information disclosure on both the ESMF and site-specific E&S instruments to ensure transparency and inclusive decision-making, (iv) regular monitoring and supervision by ATDF and local authorities, and (v) capacity-building initiatives for stakeholders.

Capacity-building trainings will be held for various groups of stakeholders including:

- Contracted E&S specialists to upgrade their skills and knowledge on ESHS issues for successful implementation of site-specific ESMPs, RPs (if any);
- ATDF engineers to introduce site-specific ESMPs and RPs (if any);
- Capacity-building initiatives for interested groups of stakeholders in tourism development trends, leadership etc.

The total cost of implementing these activities under the ESMF during the first 18 months of the project is \$203,500. This estimate is based on the procurement plan included all five sub-projects. By implementing the ESMF, TRIP aims to achieve environmentally sustainable and socially inclusive tourism development, ensuring the protection of natural and cultural heritage sites while enhancing community well-being. The framework also promotes climate resilience, disaster risk reduction, transparent decision-making, and meaningful SE, contributing to Armenia's long-term sustainable tourism growth.

#### 2. INTRODUCTION

TRIP will support activities and interventions for sustainable, inclusive, and climate and natural-disaster resilient tourism in seven prioritized clusters of **Areni, Dilijan, Dvin, Goris, Gyumri, Jermuk** and **Yeghegis**. The development objective of the Project is to improve access to sustainable, resilient and climate smart infrastructure services for increased tourism contribution to the local economy of project-supported clusters in Armenia. The main interventions would seek to address the key constraints to tourism development in each of the clusters, including a lack of basic and quality infrastructure and services, and a need to diversify the offerings and develop the respective main niches identified under the Government of Armenia (GoA) cluster approach. The proposed Project will also follow-on and build on the investments, experience, and lessons learned from the ongoing Local Economy and Infrastructure Development Project (LEIDP).

The TC, under the MoE, serves as the primary government agency with the mandate for tourism development and promotion in the country. In this capacity, the TC will play a critical role of supporting the formulation and identification of investments under the Project and will be the main counterpart in the MoE responsible for coordination and policy support across the project. The ATDF will serve as the Project Implementing Agency (PIA). ATDF will be responsible for the execution of all project activities and fiduciary responsibilities, including procurement and financial management, environment and social (ES) monitoring, and all related responsibilities regarding technical assessment, design, and civil works, including works supervision, monitoring, and evaluation (ME), and reporting.

The ESMF for the TRIP is a comprehensive instrument designed to ensure that E&S considerations are systematically integrated into the planning, design, implementation, and monitoring of the Project. This framework is aligned with the WB's ESF and the relevant national regulations. By implementing this ESMF, the TRIP aims to achieve sustainable development outcomes that are environmentally sound and socially inclusive, thereby contributing to the overall well-being of the communities involved.

The ESMF provides guidance to Project staff and other users on the requirements for ES assessments, the development and implementation of appropriate mitigation measures, and ensuring compliance with national laws and WB's ESSs at various stages of sub-projects. It includes sample checklists for E&S screening, outlines for preparing site-specific plans, and a field monitoring form.

It also describes existing E&S regulations and standards of the Republic of Armenia (RoA) relevant to the Project and makes reference to institutions at the local and national levels responsible for issuing permits, licenses, and enforcing compliance with environmental standards.

This ESMF should be read together with other plans prepared for the Project, including the Stakeholder Engagement Plan (SEP), the Resettlement Framework (RF) and Labor Management Procedures (LMP).

#### 3. PROJECT DESCRIPTION

#### 3.1. Project Development Objective

Project development objecive (PDO) is to improve access to climate-resilient infrastructure and increase tourism contribution to the local economy of project-supported clusters in Armenia. The project activities and related outputs and outcomes are expected to achieve the PDO by addressing both physical infrastructure gaps and issues related to institutional and operational sustainability of the tourism sector in project-supported clusters. The Project will implement several key initiatives to foster integrated and sustainable cluster development including through the preparation and operationalization of comprehensive cluster development plans using participatory and inclusive approaches, introduction of more sustainable approaches for the management of tourism assets, and establishment of destination management offices to market and position the clusters as tourism destinations both domestically and internationally. To support climate resilient infrastructure, the Project will upgrade and rehabilitate essential basic infrastructure and services that will benefit both the visitors and local communities, including enhancing urban connectivity, green spaces, energy-efficient and climate resilient facilities, and preservation of cultural and natural heritage assets. The project will also seek to enhance economic opportunities and job creation through the provision of vocational education, enabling business and employment opportunities in creative industries and other private sector initiatives, and boosting overall economic growth through increased tourism spending.

#### 3.2. Project Components

**TRIP consists of four integrated components** that will collectively contribute to improving the access to climate-resilient infrastructure for the benefit of local communities and visitors, enhancing the attractiveness of selected sites, enabling job creation, and increasing the contributions to the local economy from the tourism sector.

Component 1: Fostering Integrated and Sustainable Cluster Development will finance technical assistance (TA), consultancy services, goods and equipment, for, inter alia, the preparation of CDPs and the associated analytical and technical studies to develop and implement the CDPs. The CDPs will help facilitate integrated and sustainable development and comprise the overall vision for the cluster over a 10-year planning horizon, including the detailed development plans covering the short, medium, and long term for capitalizing on each cluster's potential for tourism development and job creation. The CDPs will be approved by the Project Steering Committee (PSC)<sup>1</sup> and will serve as the guiding document for prioritizing interventions under the respective clusters, including their overall management, and operations and maintenance provisions. The following main TA activities are envisioned under this component include:

(a) Development and finalization of CDPs for Dilijan, Dvin, Goris, Jermuk, and Yeghegis to be approved by the PSC<sup>2</sup>. The CDPs will consider green, resilient, and inclusive development approaches and ensure coherence with existing regional and other municipal development plans. Demand assessments and economic analysis will be undertaken as part of the CDP development, and the priorities for cluster

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 $<sup>^{1}</sup>$  The PSC is chaired by the DPM and further described in "Section III. Project implementation."

<sup>&</sup>lt;sup>2</sup> The CDP for Areni was developed under LEIDP, and the potential investments will be designed under TRIP once it is effective. For Gyumri, TRIP will utilize the existing strategies and development plans already developed, and a new CDP will not be developed.

development will be selected through participatory approaches engaging with the local communities, businesses, and other stakeholders. The CDPs will be informed by Climate-Smart Action Plans that identify low-carbon and adaptation investment options for the clusters<sup>3</sup>. The CDPs will also aim to maximize the employment potential of the clusters within the tourism and tourism-related sectors. Prioritized interventions from the CDPs will be undertaken under Component 2.

- (b) Preparation of climate and disaster resilient zoning and master plans, investment planning studies, and other analytical work (e.g. feasibility studies) as required to inform preparation, development and finalization of CDPs.
- (c) Public awareness campaigns and associated citizen engagement activities during and after preparation of CDPs to foster local ownership, inform future urban and spatial planning, and support decision-making.
- (d) Development of site management and/or operational and maintenance plans for selected tourism assets and cultural heritage sites to support natural, cultural and social asset monitoring and preservation for long-term sustainable operations and management of the touristic assets.
- (e) Conducting surveys and other tourism data acquisition activities for the collection of anonymized information and reporting of local tourism statistics through tourism stakeholders, such as the TC, local Destination Management Offices (DMO)'s, and other tourism stakeholders.
- (f) Support to the establishment and/or operations of DMOs in Areni, Dilijan, Yeghegis and Jermuk clusters through provision of trainings and capacity building, goods and equipment.
- (g) Leadership training activities and promoting local participation of women to assume leadership roles in decision-making bodies within the tourism value chain, including through increased representation in Local Working Groups (LWG) under the Project<sup>4</sup> and supporting women with the necessary capacity building and skills enhancement.

Component 2: Supporting climate-resilient infrastructure and promoting private sector participation in local economies aims at closing the identified gaps across all seven clusters and tackling no-regret improvements to basic infrastructure, tourism and service delivery from the regional and tourism development perspectives across the seven project-supported priority clusters. Selection of the activities under this component will be informed by the CDPs developed and completed under component 1. The component will finance feasibility studies, engineering and technical site surveys, management and supervision consultant services, and other technical assessments, architectural and detailed engineering designs, and civil works. The component includes the following sub-components:

**Subcomponent 2.1: Rehabilitating and upgrading infrastructure and services** will finance consultant services and civil works for improving basic and tourism-relevant infrastructure, and urban upgrading to improve access to touristic sites and surrounding areas. All the infrastructure will be designed and implemented to withstand climate and disaster risks, including earthquakes, in accordance with Armenia's norms and building standards, and considering global best practice. The investments under the component will include, but are not limited to, the following activities<sup>5</sup>:

(a) Improving the quality and condition of roads and transport-related infrastructure, including promoting the adoption of green and eco-friendly alternative modes of transportation (e.g., public

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 $<sup>^{\</sup>rm 3}$  See also Section IV: Project Appraisal Summary. Paris Alignment of the PAD.

<sup>&</sup>lt;sup>4</sup> For more information on the LWGs, please see "Institutional and Implementation Arrangements" under Section III: Project

<sup>&</sup>lt;sup>5</sup> The potential list of interventions in each cluster and their readiness is provided in Annex 2.

transport systems such as ropeways, electric buses, cycling, etc.). This activity will include construction, rehabilitation/improvement, and/or maintenance of roads and bridges, expansion of pedestrian zones, streetscaping and installation of light-emitting diode (LED) street lighting, and use of other green infrastructure elements for climate resilience and enhancing the attractiveness of streets, access roads, and parking areas. The investments will be designed in accordance with national standards and consider global best practices for disability inclusion as well as improving climate and disaster resilience (e.g., introducing flood mitigation and erosion control measures). The improvements will also include facilities for public transportation to improve access to the tourism facilities and the sites, parking, and pedestrian connectivity to encourage more non-motorized access to key attractions.

- (b) Upgrading of basic infrastructure and services and rehabilitation of municipal infrastructure, including improving existing local water supply connections; rehabilitation and upgrading of sewerage systems, and wastewater collection and discharge systems; and improvements for proper storm water management. The subcomponent will also seek to support the rehabilitation and/or upgrading of telecommunications infrastructure to improve digital access and connectivity of local communities and businesses.
- (c) Enhancing the attractiveness of public areas and spaces, including rehabilitation and/or expansion of green spaces, public park upgrading, streetscaping, and the provision of related urban amenities for satisfactory touristic experiences.
- (d) Provision of tourism-related infrastructure and services, including the construction or rehabilitation of tourism facilities, such as destination management offices and museums, and the preservation and improvement of cultural heritage assets. The rehabilitation of facilities will prioritize energy efficiency improvements, and all newly constructed buildings will adhere to energy efficiency standards at least equivalent to Excellence in Design for Greater Efficiencies Standards (EDGE-Level) 1. The designs will also include considerations for reducing waste, using low-carbon materials, and enhancing water use efficiency.
- (e) Support for Public-Private investments (PPI), which includes the provision of complementary public infrastructure improvements to attract private investments. This activity would provide public infrastructure required to ensure the viability of commercial investments, such as new or rehabilitated adjacent public facilities, roads and streets, water and sanitation, and telecommunications<sup>6</sup>. Based on demonstrated interest and commitment by the private sector entities, this activity will aim to contribute to the enabling environment for wider economic development and crowding in of commercial investments. The specific procedures for identifying, selecting and processing of PPI investments will be elaborated in the Project Operations Manual (POM).

Finalizing the CDPs is not a pre-requisite for initiating activities under component 2. While the CDPs are being prepared, the type of eligible sub-projects for component 2 is limited to investments that would be beneficial to the community and tourism development, regardless of the final outputs of the CDPs—i.e., 'no regret' investments. The potential no-regret investments are described included in Annex 2.

Subcomponent 2.2: Fostering private sector participation, enhancing professional skills, and enabling job creation (US\$5 million) will finance consultant services for promotion of the clusters and increasing

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<sup>&</sup>lt;sup>6</sup> Proposal submission, selection procedures and criteria for approval will be specified in the Project Operations Manual.

the participation of local firms and individuals in the tourism sector for local economic development. Proposed activities will include:

- (a) Branding, marketing, and promotion activities within the tourism value chain.
- (b) Promoting public private partnerships (PPPs), including the assessment, design, and preparation of potentially viable PPPs to be identified under the CDPs e.g., the need for long-term arrangements for operations and maintenance of tourism-related public transport systems (e.g., proposed ropeway system under consideration in Dilijan).
- (c) Providing professional skills development in the Hotel, Restaurant, and Catering (HoReCa) sector for local workers involved in tourism and tourism-related businesses, with priority given to vulnerable and disadvantaged groups (e.g., women, youth and vulnerable groups who may lack the necessary skills, financial ability, and employment opportunities). This will also include the development and implementation of upskilling programs for a targeted number of tourism professionals.
- (d) Providing on-the-job training (e.g. restaurant and culinary training) and formal learning (e.g. HoReCa certification programs) to be developed and implemented with selected partners active in the sector<sup>7</sup>.
- (e) Delivering trainings and other capacity building activities for local tourism firms and entrepreneurs that incorporate women's preferences, needs and design contributions through a participatory gender-inclusive process.
- (f) Developing studies and analytical work to design, support implementation, and/or monitor activities for fostering the creation of job opportunities in the tourism sector across the clusters, including identifying potential interventions that could be supported through the Project.
- (g) Development and/or promotion of digital tools, such as software applications for providing real-time information on transportation options, events, calendars of festivals, available amenities, hiking trails, and tour builders, for example.

Component 3: Program Management and Operational Support (US\$4.5 million) will finance overall project management costs, including operational costs, consulting services, non-consulting services, vehicles, goods, communications, outreach, audits, and training. It will finance the costs of the PIA to carry out project management functions and ensure all project activities meet the Bank requirements related to environmental, social, fiduciary, and technical standards, as well as a monitoring and evaluation consulting firm to support and augment the capacities of the implementing agency's existing internal M&E systems. The component will also seek to enhance capacities of the project implementing agency, the ATDF, through training and knowledge sharing activities.

Component 4: Contingent Emergency Response Component, CERC (zero allocation). This zero-dollar, exante mechanism will allow for the rapid reallocation of uncommitted project funds towards urgent needs in the event of a disaster (geophysical, climate-related, or man-made), or public health emergency. Such events may include floods, earthquakes, droughts, wildfires, and disease outbreaks. An agreed trigger for the CERC would enable reallocation of the uncommitted project funds to support immediate response and recovery needs from other project components. The positive list of eligible activities will be specified in the CERC Manual, and disbursements would be made against a positive list of critical goods, civil works, and consulting services required to support the immediate response and recovery needs.

Please refer to "Project Description", subsection "E. Role of Partners" for further details on the proposed activities with partners for providing professional and skills training programs.

#### 3.3. Project Clusters

The project will include 7 clusters: Areni, Dilijan, Dvin, Yeghegis, Goris, Jermuk and Gyumri.

#### Areni Cluster

Areni stands out among Armenia's top destinations due to its strategic geographic location, rich cultural heritage, and distinctive natural landscape. Welcoming over 500,000 visitors annually, Areni gained prominence with the discovery of a 6,000-year-old winery, reinvigorating Armenia's wine culture. The cluster concept for Areni has been developed under the ongoing LEIDP and endorsed by the Government's Investment Committee, and the following investments for potential inclusion under the project have been identified:

- Road and Street Networks rehabilitation to enhance urban mobility and access to key landmarks and tourist attractions.
- Providing HoReCa training and tourism development programs to address the skills gap.
- Developing hiking trail networks and establishing new camping sites to facilitate nature tourism activities
- Establishment/Rehabilitation of Museums and Cultural Centers.

#### Gyumri Cluster

Armenia's second-largest city, possesses a rich urban heritage and vibrant local culture. With over 100,000 annual visitors, Gyumri is renowned for its artistic legacy and traditional craftsmanship. Investments under the LEIDP have upgraded urban and tourist infrastructure, laying the groundwork for future initiatives to revitalize the city market, establish vocational training facilities, and promote creative industries. The focus of potential interventions would be to support quality enhancement of local and regional vocational education and services. Potential activities may include:

- Rehabilitation of Gyumri Marketplace to rehabilitate and repurpose the space to preserve the cultural heritage of the market, allow for better organization, user experience and pedestrian flow, and create a new destination.
- Renovation and repurposing of the former Surgical Hospital building ("Gulbenkian" historical building) to host a branch of the Ecole hôtelière de Lausanne international certificate program a first international hospitality education center in Armenia that will be licensed by the EHL Hospitality Business School.
- Establishment of an Artisans school to preserve and revitalize traditional Armenian craftsmanship, with particular attention to Gyumri specific arts and crafts<sup>8</sup>, while fostering innovation and self-sustainable business models to ensure the younger generations motivation to learn and sustain the acquired careers.

#### Dilijan Cluster

Dilijan boasts a century-long historical legacy and is positioned as the nature and culture hub within Armenia's tourism landscape. With approximately 250,000 annual visitors, Dilijan's strategic location as a transport hub between Armenia and Georgia presents significant tourism potential. The cluster's development hinges on enhancing urban connectivity, creating safe pedestrian zones, and revitalizing public spaces. Potential activities may include:

• Enhancing intracity connectivity and rehabilitation of road Infrastructure.

<sup>&</sup>lt;sup>8</sup> The tradition of Gyumri's blacksmithing was inscribed on the UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in December 2023. Over the centuries, the creation of iron objects was a cultural feature of Armenian cities. In the mid-20th century, this craft all but disappeared, Gyumri being the only urban center where blacksmithing has survived.

- Reducing pollution of the City's Main River (Aghstev River) and flood risk mitigation investments, such as reinforcement and raising of embankment walls, nature-based solutions for the restoration of parts of the riverbank by replanting native vegetation and improving drainage systems, and construction of pedestrian bridges to improve access to the adjacent Dilijan City Park.
- Ropeway Construction, linking Dilijan City Center to the Takhta District to reduce traffic congestion while enhancing connectivity and accessibility across the city
- Streetscaping and establishing pedestrian zones and touristic routes.
- Expansion of public spaces and greenery.

#### **Dvin Cluster**

Dvin is centered around Artashat, boasts a wealth of cultural and historical attractions, including ongoing archaeological studies. Positioned as a cultural tourism niche, Dvin aims to attract visitors with a deep interest in archaeology. Investments are proposed to improve tourist infrastructure, including access points, roads, pedestrian zones, lighting, signage, and visitor management systems. Detailed architectural and engineering designs for the urgent rehabilitation works and museum construction have been developed under LEIDP. Potential activities may include:

- Partial reconstruction of the Dvin historical site monuments and archeological site.
- Construction of Museum building which will also host archeological research station.

#### Jermuk Cluster

Jermuk is one of the three tourist clusters in Vayots Dzor region, along with Areni and Yeghegis, included in the Cluster strategy. Historically, it served as a popular destination for medical tourism, primarily due to its mineral waters and favorable climate. The town contains over 40 thermal springs, with mineral water bottling also taking place locally. Today, it remains a popular spa town, attracting both international and domestic visitors, with an annual tourist flow of around 200,000. Under LEIDP, there are two ready-to-go investments, such as:

- Drinking Gallery and adjacent infrastructure reconstruction.
- Rehabilitation of Jermuk Waterfall approach road and pathways, construction of bridge, sidewalks, and enhancement of the overall tourism experience.
- Further development of the cluster will be complemented through selected soft investments, such as positioning Jermuk as an international wellness destination, and marketing and promotional campaigns.

#### **Goris Cluster**

Goris is situated between Armenia and Iran, is a key historical and cultural destination. Popular among tourists visiting Southern Armenia, Goris underwent revitalization efforts to showcase its cultural heritage and natural attractions under LEIDP. Potential investments will focus on:

- Heritage center renovation, house and façade restoration, and cultural environment preservation.
  - Future interventions would also consider consolidation of surrounding settlements under a unified brand identity, with themed attractions and hiking trails connecting the region's historical and natural landmarks.

#### Yeghegis Cluster

The cluster along with nearby settlements offers significant potential for tourism development, particularly given current global travel trends seeking nature-based experiences, pristine landscapes, perfect for hiking and skiing. These features appeal to eco-conscious and adventure-seeking tourists. Additionally, Yeghegis boasts a wealth of cultural and historical sites, including ancient monuments and

medieval structures, which are particularly attractive to cultural heritage tourists, especially from Europe. Potential investments will focus on:

- Improving roads, pedestrian and tourism value chain infrastructure, and restoration and preservation of historical and cultural sites.
- Supporting initiatives aimed at promoting cultural events, festivals, and exhibitions that highlight Armenia's rich heritage and traditions, attracting tourists throughout the year.

#### 4. ESMF APRROACH, RATIONAL, OBJECTIVE AND SCOPE

#### 4.1. ESMF Approach and Methodology

The ESMF serves as a framework to:

- Systematically identify and manage E&S risks.
- Ensure that project activities comply with applicable E&S laws, regulations, and international standards.
- Promote sustainability and minimize adverse E&S impacts.
- Provide guidelines for SE and grievance redress mechanisms.

The process begins with screening and risk categorization, where the project is reviewed to determine potential E&S impacts. This initial step identifies sensitive areas, such as protected ecosystems or vulnerable communities, and classifies risks as low, moderate, substantial, or high.

Once risks are identified, the next phase involves a detailed E&S assessment. This assessment includes identification of potential impacts and conducting studies such as ESIAs or ESR if needed. These analyses evaluate the direct, indirect, and cumulative effects of the project, focusing on areas such as biodiversity, land use, water resources, and community well-being.

Following the assessment, mitigation measures are developed to address identified risks and impacts. The mitigation hierarchy guides this process, emphasizing avoidance of impacts wherever possible, minimization of unavoidable impacts, restoration of affected areas, and offsetting residual effects. These measures are documented in a site-specific ESMP, which outlines specific actions, responsibilities, and timelines for implementation.

A critical component of the methodology is SE and consultation, which ensures transparency and inclusivity throughout the project lifecycle. Stakeholders, including local communities, government agencies, and NGOs, are identified and engaged through public consultations. Feedback is collected and addressed, and a Grievance Mechanism (GM) is established to manage complaints and disputes effectively.

#### 4.2. Rationale and Objective

The rationale for having an ESMF is to provide a structured framework for managing E&S risks and impacts associated with the TRIP. Although preselected locations exist for the Project, specific sites for civil works will be identified during Project implementation making the ESMF essential for ensuring compliance with national regulations, the WB's ESF, and Good International Industry Practices (GIIP) at each site.

The objective of ESMF is to guide the implementing entity in executing respective components of the Project in compliance with the national and local regulations, and in alignment with the WB's ESSs relevant for the TRIP. Below are few main objectives of the ESMF;

 Assess potential social and environmental risks and impacts from the project and project activities;

- Outline the clear steps, process, procedures and methodologies for screening, reviewing and monitoring E&S requirements, risks and impacts;
- Define roles and responsibilities for supervision, management, reporting and monitoring E&S risks, impacts and compliance;
- Provide a framework for consultation and information disclosure; and for preparing the E&S mitigation plans to address the adverse impacts; and
- Assess capacity and suggest capacity strengthening measures.

#### The scope of this ESMF includes:

- (i) E&S regulation and Laws relevant for the Project;
- (ii) Implementation arrangements and institutional framework;
- (iii) Procedures for E&S screening of Project activities;
- (iv) Procedures and guidelines for undertaking site-specific ESIA, if required, and preparing sitespecific ESMPs;
- (v) E&S risks and mitigation measures;
- (vi) Institutional arrangements for E&S monitoring and reporting, including reporting by works contractors, supervision consultants, and both with ATDF and TC;
- (vii) SE procedures.

The ESMF identifies disadvantaged and vulnerable groups relevant to the Project and outlines differentiated measures to ensure they face no disproportionate harm and have equal access to Project benefits.

The ESMF is based on the E&S analysis, including primary research in proposed clusters, which identifies key environmental sensitive receptors, the social baseline, beneficiary profiles, potentially affected people, and the poverty and social implications of Project activities.

#### 4.3. Potential Users of the ESMF

This ESMF will be used by:

- Government and Public sector agencies; PIA's specialists;
- Non-governmental organizations (NGOs);
- Project affected communities and persons;
- Local authorities.

## 5. ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS, AND LAWS

#### 5.1. National Legal Framework

The existing E&S legal framework governing the use of natural resources, E&S protection and other related fields consists of the Constitution of RoA, the national laws and legal acts, and the international treaties.

#### Constitution of the RoA (1995, last amended in 2015)

The "Article 12. Preservation of the Environment and Sustainable Development" stipulates that the State shall promote the preservation, improvement and restoration of the environment, the reasonable utilization of natural resources, guided by the principle of sustainable development and taking into account the responsibility before future generations. Everyone shall be obliged to take care of the preservation of the environment.

The summaries of several laws which are most relevant to the TRIP are presented in the table below:

Table 1 - Relevant Legal Framework of Armenia

Codes, Laws, Decrees Description and Relevance to Project Activities			
Land Code (2001, last amended in 2022)	The Land Code defines the main directives for management and use of the state land, including those allocated for various purposes, such as agriculture, urban construction, industry and mining, energy production, transmission and communication lines, transport and other purposes. The Code defines the land under the specially protected areas as well as forested, watered and reserved land. It also establishes the measures aimed to the land protection, as well as the rights of state bodies, local authorities and citizens towards the land.  Any type of temporary or permanent land take that may be required for the Project implementation will be carried out in agreement with the Land Code.		
Water Code (2002, last amended in 2022)	i i		
	Possible investments of the Project into rehabilitation of water supply and waste water collection schemes will be designed and implemented in harmony with the Water Code. The Code will also be respected while planning and undertaking any other activity which may have implications for water quantity and quality in the country.		
Forest Code (2005, last amended in 2022)	The Code shall regulate relations connected with sustainable forest management – guarding, protection, rehabilitation, afforestation and rational use of forests and forest lands of the RoA as well as with forest stock-taking, monitoring, control and forest lands.  The provisions of the Code should be taken into account in case TRIP involves activities in or		
	around forest areas or forest land.		
Civil Code (1998, last	The Civil Code defines the legal status of participants in civil commerce, the basis for the		

#### amended in 2023) acquisition and exercise of ownership and other property rights, and regulates contractual and other obligations, along with related property and personal non-property relations. A set of issues may arise during the implementation of the TRIP concerning land use rights. The regulations of the law serve as an "umbrella" and should be considered during all phases of the Project within the context of civil and legal relations. Labor Code regulates collective and individual labor relations, defines the principles for Labor Code (2004, last amended in 2023) establishing, modifying, and terminating these relations, and outlines the procedures for their implementation. It also sets forth the rights, obligations, and responsibilities of parties involved in labor relations, as well as the conditions for ensuring employee safety and health. All the regulations of the Labor Code will be applied to the Project staff, as well as to the personnel of contractors, subcontractors and consultants involved in the Project at different phases. The Law on Environmental Impact Assessment and Expertise (EIAE) provides legal basis for Law on **Environmental Impact** implementation and introduction of state expertise of planned activities and concept frameworks as well as presents the standard steps of the Environmental Impact Assessment (EIA) process for Assessment and Expertise (2014, last various projects and activities in Armenia. The planned activities are classified into two categories amended in 2023) reflecting different levels of environmental impact assessment according to severity of potential environmental impacts. The Law stipulates provisions directly related to recreation and tourism sector. Particularly in the Chapter 3 "Intended Activities Subject to Expertise" the Law enumerates the types of planned activities subject to EIA. According to the Article 12 of the Law the construction or reconstruction of ski lines, cableways, zip lines and infrastructure are classified as Category B. In addition, an EIA is also applicable to activities to be implemented in protected areas, forests, areas of historical monuments and public green spaces which are not listed in the Article 3 "Intended Activities Subject to Expertise". These activities fall under Category B. Works to be undertaken under TRIP may include new construction and/or reconstruction of existing infrastructure and access roads, activities in recreational zone of DNP, etc. which according to the Law of EIAE require environmental assessment and issuance of an expert conclusion. The activities planned under the Project will be screened and classified to determine the law's applicability. A positive EIA and expertise conclusion must be obtained before the commencement of the construction works subject to state EIAE. Law on Surveillance The Law provides objectives and types of effective use and conservation of RoA lands, inspection over the Land Use related to enforcement of land legislation and institutions, procedures of control, rights and responsibilities of entities controlling land use and protection. The Law applies to all lands of the and Land Conservation (2008. RoA Land Fund, irrespective of purpose, ownership and/or right to use. last amended in 2020) Law on Alienation of The Law describes the procedures for land acquisition and compensation, lists the types of Property for Public projects that are justified to use eminent domain, describes the procedures of establishment and and State Needs expropriation of eminent domain. The Law stipulates that the alienation of the property must not (2006, last amended do unjustified harm to the owner of the property but does not require that adverse economic and in 2018) social impacts are mitigated beyond compensation for land. The Provision of the Law will be applied as specified in the Project RF. Law on Wastes (2004, The law regulates legal and economic relations connected to the collection, transfer, last amended in 2015) maintenance, development, reduction of volumes, prevention of negative impact on human health and environment. The law defines objects of waste usage, the main principles and

directions of state policy, the principles of state standardization, inventory, and introduction of statistical data, the implementation of their requirements and mechanisms, the principles of

wastes processing, the requirements for presenting wastes for the state monitoring, activities to decrease the amount of the wastes, including nature utilization payments, as well as the compensation for the damages caused to the human health and environment by the legal entities and individuals, using the wastes, as well as requirements for state monitoring and legal violations. The law defines the rights and obligations of the state governmental and local governmental bodies, as legal entities and individuals.

Law on Wastes will govern disposal of excess material and construction waste generated in the course of the TRIP implementation.

This law will be respected while planning and undertaking the disposal of construction waste and excess material during Project-financed physical works.

#### Law on Atmospheric Air Protection (1994, last amended in 2022)

The objective of the Law is to ensure favorable air quality for human health and the environment by protecting it from pollution (both natural and anthropogenic), elimination and prevention of the negative impact on the atmospheric air, climate and biodiversity. The law aims also to regulate public relations in the field of air protection, prevent and reduce harmful chemical and biological impacts on the atmosphere, eliminate irreversible consequences of air pollution, and ensure the completeness and accessibility of information regarding air pollution.

This Law also regulates the emission licenses and provides maximum allowed loads/concentrations for atmospheric air pollution, etc.

The requirements and provisions established by the Law for safeguarding atmospheric air during design, construction, and operation activities under the TRIP must be followed.

### Law on Flora (1999, last amended in 2018)

The law defines the RoA state policy in the field of maintenance, protection, usage and regeneration of flora. The law defines objectives of flora examination, state monitoring, state inventory, requirements and approaches to the preparation of the Red Book of plant species, conditions, peculiarities, limitations of allocation of flora objects for purposeful use, basis of termination of the right to use, provisions on flora maintenance, and economic encouragement of usage and implementation of supervision.

This law will be complied with if the Project invests in physical activities in or around natural habitats of plant species or otherwise affects protected flora.

### Law on Fauna (2000, last amended in 2023)

The law defines RoA state policy in the field of maintenance, protection, usage and regeneration of fauna. The law defines the objectives of survey of the fauna, state monitoring, state inventory, requirements and approaches of red book preparation on fauna, conditions, peculiarities, limitations of allocation of fauna objects for purposeful usage, basis of termination of the right to use, provisions on fauna maintenance, and economic encouragement of usage and implementation of supervision.

This law will be complied with if the Project invests in physical activities in or around natural habitats of animal species or otherwise affects protected fauna.

Law	on	Spec	ially
Protec	cted	Areas	of
Natur	e (2	2006,	last
amen	ded ir	n 2023)	

This Law defines legal basis and relations of state policy for development, restoration, maintenance, reproduction and use of natural complex and separate objects, as well as ecosystems of specially protected natural areas. According to the law, specially protected natural areas are divided into four categories (i) State Reserves; (ii) NPs; (iii) Sanctuaries; and (iv) Nature Monuments. The list of the nature monuments is approved by the RoA Government Decree No. 967-N dated 14.08.2008. The forth category is divided into three separate types: areas of international, republican and local importance.

This law will be followed in relation to the legally defined regimes of protected areas near the Project, especially around Dilijan NP, to ensure that the individual activities under the Project comply with the established management protocols for these protected areas.

## Law on Environmental Oversight (2005, last amended in 2020)

The Law regulates the organization and implementation of oversight regarding enforcement of the environmental legislation of the RoA and defines the legal and economic basis underlying the specifics of oversight, the relevant procedures, conditions and relations, as well as environmental control in the RoA.

The presence of a positive EIAE conclusion, along with the execution of measures outlined and required in the EIA documents to be prepared under the TRIP, will be subject to state environmental oversight.

#### Law on Compensation Rates for Damage Caused as a Result of Environmental infringements to flora and fauna (2005, last amended in 2023)

This Law defines the rates of damage compensation caused as a result of environmental infringements to flora and fauna, as well as the calculation and collection procedure of these tariffs

The Law should be applied in case of causing any damage to the flora and fauna during the TRIP implementation.

#### Law on Road Safety Provision (2005, last amended in 2019)

The Law regulates road safety, establishes the principles and the directions of Armenia's policy on traffic safety, the legal basis for traffic safety provision as well as defining the powers and responsibilities of State and local self-governmental bodies and other traffic related participants.

The regulations of the Law should be considered during the implementation of the activities directly related to ensuring road safety and issues of placing signs.

#### Law on Automobile Roads (2006, last amended in 2020)

The Law regulates economic, legal and organizational basis for development and administration of a motor road network; designing, construction, repair and maintenance, classification and registration of roads in the RoA, as well as regulates legal relationships between bodies and organizations implementing those functions.

The regulations of the Law should be considered during the implementation of the activity directly related to road construction, reconstruction and rehabilitation.

#### Law on Equal Rights and Equal Opportunities of Women and Men (2013, last amended in 2020)

The law defines the guarantees for ensuring equal rights and equal opportunities of men and women in political, social, economic, cultural and other fields and regulates the relationships arising with the regard thereto.

Provision of the Law on Equal Rights and Equal Opportunities for Men and Women will be respected in all aspects of the Project implementation to ensure meaningful participation in and full benefit from the project activities of all stakeholders, indiscriminative of gender.

#### Law on the Protection and Use of Fixed Cultural and Historic

This Law provides the legal and policy basis for the protection and use of such monuments in Armenia and regulates the relations between protection and use activities. Article 15 of the Law describes procedures for, among other things, the discovery and state registration of monuments,

#### Monuments and Historic Environment (1998, last amended in 2023)

the assessment of protection zones around them, and the creation of historic-cultural reserves. Article 20 requires that "a newly discovered or newly valued object with historical, scientific, artistic or other cultural value receives the status of a newly discovered monument and is preserved until it is included in the state list of monuments in accordance with the procedure established by the legislation. The legal or physical person managing the newly discovered monument is obliged to ensure its safety, and in case of taking it by the state, the damage suffered by the owner is compensated according to the procedure established by the legislation. The person who hides the fact of the discovery of the monument, creates obstacles for its accounting and study, as well as destroys or misappropriates the finds, bears responsibility in accordance with the procedure established by the legislation of the RoA". Article 22 requires the approval of the authorized body (Department of Historic and Cultural Monuments Preservation) before land can be allocated for construction, agricultural and other types of activities in areas containing monuments.

All Project-supported activities pertaining physical cultural resources of the RoA will be undertaken in full compliance with this Law.

#### Law on Intangible Cultural Heritage (2009, last amended in 2018)

The Law regulates the legal relations arising from the processes of preservation, safeguarding, and development of intangible cultural heritage, including identification, documentation, research, application, recreation, teaching, and dissemination of intangible cultural values, protection of the property rights over such values, maintenance of intangible cultural heritage of Armenia, international cultural cooperation, cultural communication between peoples of foreign countries and those of the RoA.

All Project-supported activities pertaining intangible cultural resources of the RoA will be undertaken in full compliance with this Law.

#### Law on Urban Development (1998, last amended in 2023)

This law defines the principles of urban development activities in the RoA and regulates the relations of these activities.

The Law on Urban Development stipulates that territorial administration and local self-government bodies are obliged to inform individuals and legal entities about the changes in their living environment, zoning, and other planned urban development matters. The awareness-raising channels should include publications in mass media, public discussions, programs, project demonstrations. Both infrastructure development projects and public policies/concept papers are subject to public consultation, require a design task (design permit), and a construction permit.

#### Law on Real Estate Valuation Activity (2005, last amended in 2021)

This law defines the fundamentals of real estate appraisal activities in the RoA and regulates relations related to real estate appraisal activities.

In the sense of this law, property valuation objects are real estates: plots of land, parts of the subsoil, isolated water bodies, forests, perennial plants, underground and above-ground buildings, buildings and other property attached to the land, that is, those objects that cannot be separated from the land without causing damage to the property or plot of land or lead to the change of their purpose, termination or impossibility of further use for their intended purpose.

## Law on Freedom of Information (2015)

This law regulates relations connected to freedom of information, defines information managers in the field of information provision, as well as the procedure, forms and conditions of obtaining information.

The operation of this law extends to state and local self-government bodies, state institutions, organizations financed from budgets, as well as public organizations and their officials.

# RoA Government Decree N 1325-N on the Procedure for Public Notification and Discussion (2014,

This procedure regulates the relations connected to the procedure of public notification, discussions and hearings (hereinafter referred to as discussions) of the strategic environmental impact assessment of the founding document and all categories of planned activities: environmental impact assessment and expertise.

last amended in 2023)	
RoA Government Decree N 1404-N «On establishment of norms for excavation of fertile layer of soil and storage and use of excavated fertile layer» (2017)	This decree defines the requirements for establishment of norms for excavation of fertile layer of soil and storage and use of fertile layer of soil for improvement of less efficient soils. The validity of this decree shall extend on the excavation of soil fertile layer during construction works and mineral resource extraction works in the area of the RA, and use of soil fertile layer for improvement of less efficient soils.
RoA Government Decree N 1173-N "On approving procedure for identification, documentation, preservation and information exchange and of intangible cultural values and certificate format of intangible cultural values" (2010)	This decree defines relations in the field of identification, documentation, preservation and information exchange of intangible cultural values. The provisions of this order refer both to the lists of intangible cultural heritage of RoA and values in need of immediate protection approved by the Government, as well as to intangible cultural heritage recognized by the professional council of the state authorized body in the field of culture of the RoA; values that are subject to inclusion in the lists.

## 5.2. National Environmental and Social Impact Assessment and Expertise

The development of the legal framework for environmental impact assessment and expertise started in 1995, when the RoA Law "On Environmental Impact Assessment and Expertise" was adopted. Later the law underwent amendments and was adopted in 2014. The Law was amended several more times and the most significant change was the complete edition of the Law which was adopted on May 3, 2023 and came into force on June 09, 2023.

The RoA Ministry of Environment (MoEnv) is the authorized state body for the state EIAE. The review of environmental assessment reports, organization of expert examination process and issuance of expert conclusions is organized by the "of for Environmental Impact Expertise Center" (EIEC) State Non-Commercial Organization (SNCO) operating under the MoEnv.

Below are the provisions of the 2023 edition of the RoA Law on EIAE, which may be applicable to TRIP Clusters and possible sub-projects.

The law separates the assessment and expertise processes for the fundamental documents and design documents of the planned activities. The law provides for strategic environmental assessment and expertise process for fundamental documents. The types of planned activities subject to assessment and expertise are classified into two categories: A and B, based on the degree of impact on the environment.

Activities under Category A will not be eligible for financing within the scope of the Project and will be rejected. For the Category B subproject the process of the state EIAE starts from the notification letter on the expected activities sent to the impacted community local government administrative office.

**Community notification**: The initiator notifies the Head of the community about the intended activity. The Head of the community shall, within five working days of receiving the notice, notify the interested public by posting a notice of Public Consultation (PC) in a newspaper, on the community's website and on announcement boards, and after the notice, no earlier than the 21st and no later than the 25th working

day (calculated from the day of printing of the newspaper) conducts a public consultation in the affected settlement.

**Council decision**: After the first public consultation, within 30 working days, the council decision is held on granting preliminary consent or non-consent to the implementation of the planned activity, which must contain justifications about its reasons.

**Application of EIAE**: The examination starts from the moment the complete set of documents is submitted by the initiator in electronic version to the authorized body with an accompanying letter. In case it is impossible to submit the electronic version, the hard copy of the package can be submitted.

After submitting the documents to "Center of Environmental Impact Assessment and Expertise" SNCO, the examination lasts up to 40 working days for Category B activities. Package subject to examination includes EIA report, the design document of the intended activity, the Council decision of the local self-government body on the preliminary agreement to the activity, documents compiled during the public hearings conducted by the local self-government body (a copy of the publication of the notice, photos or video recordings, if available, recommendations, remarks and opinions, as well as minutes of public hearings with a list of participants, a newspaper announcement. The term of the examination process can be extended by the authorized body for up to 30 working days. The state EIAE requires holding two public hearings.

Some or, perhaps, all of the strategic or conceptual documents to be developed under the TRIP Component 1 will be concept documents, which will be subject to strategic environmental assessment and expertise. These procedures are set out in Chapters 5 and 6 of the Law, including Articles 21-27.

Some infrastructure rehabilitation activities under Component 2 such as road rehabilitation, lightening, water pipeline installation, constructions of wastewater treatment plants, reconstruction or rehabilitation of museums, buildings, zip lines, specially protected areas of nature, in forested soils, in green belts of settlements, within the territories of historical and cultural monuments are subject for EIAE in compliance with the Article 12, Point 4 6; and are classified as Category B.

It shall be stated that the aforementioned legal framework, as well as any other national legal acts related to E&S assessment, do not define any checklists or forms that are mandatory for the prescreening phases.

It should also be noted that the practice of asking for a position/opinion from the authorized body (MoEnv) on categorization or need for expertise of any activity is also used in practice, which can also be applied in the frames of the TRIP if it is difficult or controversial to identify the categorization of any initiative.

#### 5.3. World Bank Environmental and Social Framework

The ESF of the WB (2018) supports green, resilient and inclusive development by strengthening protections for people and the environment and making important advances in areas such as labor, inclusion and non-discrimination, gender, climate change, biodiversity, cultural heritage, community H&S, and stakeholder engagement. The ESF sets up 10 ESSs and promotes integrated E&S risk management. The Project activities shall adhere to the ESF.

Table 3 presents 8 ESSs triggered by TRIP, mainly by activities of Component 2 which include civil works: rehabilitation and construction of infrastructures, small-scale nature-tourism development activities.

Table 3 - ESSs triggered by TRIP

ESS	ESS Description				Applicability for TRIP	
ESS1: Assessment and	ESS1	sets	out	the	Borrower's	Implementation of civil works
Management of E&S Risks and	respor	sibilities	for a	assessin	g, managing	implies E&S risks and impacts

Impacts	and monitoring E&S risks and impacts associated with each stage of the project supported by the Bank through Investment Project Financing (IPF), in order to achieve E&S outcomes consistent with the ESSs.	which should be assessed, mitigated, managed and monitored.  ESS1 is applicable for all cluster-related activities.
ESS2: Labor and Working Conditions	ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of the project by treating workers in the fairly manner and providing safe and healthy working conditions.	The Project contractors should have workforce management policies, Environmental Social Health and Safety (ESHS) policies and Code of Conduct, they should provide safe and healthy working conditions to the workers.  ESS2 is applicable for all kind of worker-management relationships: for direct workers, contracted workers, primary suppliers involved in all activities related to the Project.
ESS3: Resource Efficiency and Pollution Prevention and Management	ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life-cycle.	Before commencement of the civil works the possible pollution to air, water and land should be assessed, prevention and mitigation measures developed to be monitored during the civil works.  ESS3 is applicable for all infrastructure rehabilitation activities for all clusters.
ESS4: Community Health and Safety	ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.	The health, safety, and security risks and impacts on project-affected communities should be considered and addressed avoiding or minimizing such risks and impacts, with particular attention to vulnerable groups.  ESS4 is applicable for all infrastructure rehabilitation activities in all affected communities of all clusters.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	ESS5 stipulates that involuntary resettlement should be avoided. Where involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on displaced persons (and on host	Resettlement impacts should be assessed and possibly avoided. If involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on

	communities receiving displaced persons).	project-affected persons (PAP) will be carefully planned and implemented.  ESS5 is applicable for all infrastructure rehabilitation activities which include impacts on private property, involuntary resettlement and permanent and/or temporary use of private land.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development and it recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support.	The impacts on biodiversity and living natural resources will be carefully assessed and measures to minimize the impact will be developed.  ESS6 is applicable for those infrastructure rehabilitation activities which will be conducted outside residential and agricultural areas, in or around natural environment such as forests, protected areas, and highlands.
ESS8: Cultural Heritage	ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. ESS8 sets out measures designed to protect cultural heritage throughout the project lifecycle.	The impacts on cultural heritage should be assessed and protected throughout the project life-cycle.  ESS8 is applicable for those infrastructure rehabilitation activities which will be conducted in the areas that are protected as cultural heritage and/or near cultural monuments.
ESS10: Stakeholder Engagement and Information Disclosure	ESS10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective SE can improve the E&S sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.	The stakeholders of the Project are identified from the very beginning of the Project. A separate SEP has been prepared for the Project which provides details on how the stakeholders will be identified, be consulted, involved in the discussions and engaged in implementation for E&S sustainability of the Project, its acceptance and significant contribution to its successful implementation.

	ESS10 is applicable for all cluster-
	related activities.

Environmental and Social Commitment Plan: The Environmental and Social Commitment Plan (ESCP) have been prepared. The ESCP outlines the material measures and actions required for the Project to meet the ESSs within a specified timeframe. The ESCP will be a part of the TRIP loan agreement, which will include, as necessary, the obligations to support the implementation of the ESCP.

Associated Facilities: ESS1 applies to all associated facilities (AF) that will be identified during the Project. Associated facilities will meet the requirements of the ESSs, to the extent that the Borrower has control or influence over such Associated Facilities<sup>9</sup>. In this context the term "Associated Facilities" means facilities or activities that are not funded as part of the project and are: (I) directly and significantly related to the project; (II) carried out, or planned to be carried out, contemporaneously with the project; and (III) necessary for the project to be viable and would not have been constructed, expanded or conducted if the project did not exist<sup>10</sup>.

OP 7.50 on International Waterways: The ESF does not replace OP 7.50 on International Waterways, which is triggered by the Project's activities involving the transboundary Aghstev River. The E&S assessment will consider the requirements of OP 7.50 for activities in the Dilijan Cluster on the Aghstev River in line with ESCP. These activities will be limited to the following scope, with the preparation and implementation of relevant instruments, such as ESIAs or ESMPs, informed by E&S screening:

Reducing pollution in the Aghstev River, the main river in Dilijan City, and implementing flood risk mitigation measures, such as: (i) Reinforcing and raising embankment walls; (ii) applying nature-based solutions for riverbank restoration, including replanting native vegetation; (iii) improving drainage systems; (iv) constructing pedestrian bridges to enhance access to the adjacent Dilijan City Park.

#### 5.4. **Gap Analysis between ESF and National Legal Framework**

Armenian legislation and implementation practices have developed over time and have become increasingly aligned with good international practice on E&S sustainability; however, legislation, policy, and institutional systems still need to be strengthened in a number of important areas. Table4 presents the identified gaps between relevant laws and regulations in Armenia and the requirements of the WB' ESSs and required additional measures to address such gaps under the ESMF<sup>11</sup>.

<sup>&</sup>lt;sup>9</sup> The Borrower will be required to demonstrate the extent to which it cannot exercise control or influence over the Associated Facilities by providing details of the relevant considerations, which may include legal, regulatory and institutional factors.

<sup>&</sup>lt;sup>10</sup> For facilities or activities to be Associated Facilities, they must meet all three criteria.

 $<sup>^{11}</sup>$  WB. 2024. Analysis of Gaps between National Legislation of Armenia and WB's ESF Policy.

Table 4 - Assessment of the relevant laws and regulations in Armenia against the requirements of the WB' ESSs

ESS requirements	Analysis	Gap Filling Measures				
ESS1: Assessment and Management of E&S Risks and Impacts						
E&S assessment and management of risks and impacts, including mitigation hierarchy	The EIAE Law (updated in 2023) is generally in line with ESS1. However, development of Environmental Management Plans and Monitoring Programs are mandated only for those activities for which the law requires state EIAE. For other activities no environmental management tool is introduced by the law. The EIAE Law does not cover the identification and management of social risks and impacts.	The identification and management of social risks and impacts should be implemented for each subcomponent and subprojects under Component 2 in accordance with mitigation hierarchy in accordance with ESS requirements.				
Project Area of Influence including AF	The EIAE Law does not refer to AF.	In case AF is identified, the ESS1 requirements will be applied.				
Institutional responsibility and enforcement capacity	The EIAE Law is not clear on the use of monitoring data for the adaptive management of projects.	Monthly E&S monitoring of civil works will be used for their adaptive management.				
Measures to protect vulnerable groups	National legislation does not require the identification or management of impacts on disadvantaged and vulnerable groups.	The ESS1 and ESS10 requirements will be applied.				
ESS2: Labor and Working Condi	ESS2: Labor and Working Conditions.					
Terms and conditions of employment	Armenia has in place a comprehensive Labor Code (2004). Armenia has also ratified core labor conventions of the International Labor Organization (ILO). However, enforcement of the Labor Code has been lagging, mainly due to the capacity of the Health and Labor Inspection Body (HLIB) to enforce the laws, as well as the number and pace of legislative changes in the past decade.	National legislation will be applied.				

ESS requirements	Analysis	Gap Filling Measures
	National legislation is aligned with international good practice and ESS2, requirements.	
OHS	While the Labor Code includes main provisions concerning OHS, there are certain gaps with ESS2 requirements as well as areas that require further strengthening. The Labor Code requires employers to provide safe and healthy work environments, conduct OHS risk assessments and plans, provide safety training to employees, and provide personal protective equipment (PPE), sanitary and rest facilities. The OHS standards are also regulated by specific decrees, and acts. The Criminal Code provides penalties for violations of OHS laws and regulations. The Labor Code requires employers to establish procedures for monitoring compliance with OHS requirements, to approve internal OHS acts and regulations, and to appoint a dedicated safety expert. It also requires employers to inform and consult employees on OHS issues and provides for the establishment of H&S committees. While the Code requires employers to inform workers about any dangerous work situation and to suspend the works in such instances, it does not explicitly prohibit retaliating against a worker who reports an unsafe situation; nor does it explicitly provide for workers to leave unsafe work situations. The Labor Code does not include explicit requirements on provision of first aid kits in workplaces, nor is it explicit on responsibility for keeping and maintaining training records. It does not require for the provision of separate washroom or other facilities for men and women.	The ESS2 requirements will be applied.
Child labor and forced labor	Armenia has ratified all key international conventions	The ESS2 requirements will be applied.

ESS requirements	Analysis	Gap Filling Measures
	concerning child labor and the minimum working age for	
	full time employment is 16 years, which is in line with	
	ESS2. National legislation prohibits all of the worst forms	
	of child labor. However, children aged between 14 and 16	
	years can work with the written consent of a parent or	
	legal guardian. The law allows children younger than 14 to	
	work in the entertainment sector, with prescribed	
	limitations and parental or legal guardian consent. The	
	maximum duration of the workweek is 24 hours for	
	children who are 14 to 16, and 36 hours for children who	
	are 16 to 18. Persons younger than 18 may not work	
	overtime; in harmful, strenuous, or dangerous conditions;	
	at night; or on holidays. However, the Labor Code does	
	not explicitly require employers to conduct an appropriate	
	risk assessment when employing a child between the ages	
	of 14 and 18 to ensure that a minor is not exposed to	
	occupational risk, nor that employers monitor how the	
	protective measures for young workers are	
	implemented. <sup>12</sup> The latter may be considered as a gap	
	with ESS2. To bridge this gap in specific projects where	
	workers under the age 18 may be employed, risk	
	assessments should be conducted, and mitigation	
	measures and monitoring for young workers should be	
	implemented.	

<sup>&</sup>lt;sup>12</sup> The Labor Code requires that persons below the age of 18 years undergo medical examination before the commencement of employment. Therefore, a health certificate can be one of the requirements to be included in the list of required employment documents for the conclusion of an employment contract.

ESS requirements	Analysis	Gap Filling Measures
Freedom of association	According to the RoA Constitution, "1. Everyone shall have the right to freedom of association with others, including the right to form and join trade unions for the protection of labor interests. No one may be compelled to join any private association. The procedure for the establishment and operation of associations shall be prescribed by law. The freedom of associations may be restricted only by law, for the purpose of state security, protecting public order, health and morals or the basic rights and freedoms of others.	The RoA legislation will be applied.
Gender discrimination at workplace	Armenia has in place laws on gender discrimination and sexual harassment and abuse, and newly introduced legal amendments to Labor Code prohibit violence and sexual harassment in the workplace. However, sexual harassment of women in the workplace may take place in all regions, while responsiveness of law enforcement is reportedly more limited outside the capital.	The application of ESS2 will be required for establishing worker's GRM, particularly sensitized to Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), by contractors.
Grievance mechanism	Employees who believe that their labor rights are violated can seek remedy through various judicial mechanisms, but the labor legislation does not provide grievance mechanisms at the employer level for the workers to directly raise any workplace concerns and solve individual labor disputes. This represents a gap with the ESS2 requirement for the workers' grievance mechanism. Labor disputes are addressed by court according to the Code on Civil Procedure (2018). The Labor Code does provide a procedure for the resolution of collective disputes as a part of collective bargaining processes.	The ESS2 requirements will be applied and Contractors will have to establish worker's GRM.

ESS requirements	Analysis	Gap Filling Measures			
ESS3: Resource Efficiency and Pollution Prevention and Management					
Efficient use of resources	The main laws providing for efficient use of resources and pollution management are the Water Code (2002), the RoA Law on Fundamentals of National Water Policy (2005), the RA Law on Energy Saving and Renewable Energy (2004), as well as the Subsoil Code (2011), the Law on Waste (2004), and the Law on Atmospheric Air Protection (1994).	The RoA legislation will be applied.			
Waste disposal	The main laws providing for efficient use of resources and pollution management are the Water Code (2002), the Law on Fundamentals of National Water Policy (2005), the Law on Energy Saving and Renewable Energy (2004), as well as the Subsoil Code (2011), the Law on Waste (2004), and the Law on Atmospheric Air Protection (1994). The national regulatory framework for pollution prevention prioritizes public health protection and is based on defining thresholds for permitted concentrations of pollutants to which humans may be exposed. The country lacks waste disposal and wastewater treatment infrastructure, which is a major challenge for pollution management.  The Law of Waste (2004) and the Law on Waste Disposal and Sanitary Cleaning (2011) rule out informal dumping and free burning of waste, prohibit disposal of hazardous waste at municipal landfills, establish ownership of waste and the system of payment for its disposal. Waste separation is suggested for possible reuse and encouraged at the community level, and economic incentives are	The ESS3 requirements will be applied.			

ESS requirements	Analysis	Gap Filling Measures		
	suggested for waste reduction and recycling. The Law on Waste provides incentives for waste reduction and recycling but does not establish waste management hierarchy.			
ESS4: Community and Health Safety				
Infrastructure and equipment design and safety	Emergency preparedness is provided through the Law of RoA on the Protection of Population in Emergency Situations (1998), the Law of RoA on Fire Safety (2001), the Law of RoA on Seismic Protection (2002), and the Law of RoA on Civic Protection (2002). Despite the adopted principle of integrated watershed management, conflicts over water use between communities as well as between communities and industrial water users occur.	The ESS4 requirements will be applied.		
Security personnel	The RoA law on Private Custodian Service Activities defines legal bases for custodians', security personnel's activities, licensing requirements, provides provisions for activities' implementation and reservations for activities implementation, use of force and arms, etc.	The RoA legislation requirements will be applied.		
Community exposure to health issues	The Law on Ensuring Traffic Safety (2005) provides basis for the organization of traffic, including the installation of traffic signs, road marking, and management of traffic around work sites within road corridors. These rules are usually followed on highways and main roads but less so on secondary roads.	The ESS4 requirements will be applied.		
	Enforcement of regulations on handling hazardous materials and hazardous waste is sometimes hindered by low public awareness of the rules and the effects of non-			

ESS requirements	Analysis	Gap Filling Measures
	compliance on human health. For example, the willingness of communities to reuse ACM waste.	
ESS5: Land Acquisition, Restrict	ions on Land Use, and Involuntary Resettlement.	
Requirements to avoid or minimize land acquisition and related adverse impacts	There are some key gaps between the RA Law on Expropriation of Property for the Needs of Society and the State, and ESS5. Incorrect cadastral data present challenges as well, though reforms and efforts to modernize and unify the cadaster are underway.	The ESS5 requirements will be applied to supplement the RoA Law on Expropriation of Property for the Needs of Society and the States.
Eligibility criteria for compensations and livelihoods support	The RoA Law on Expropriation of Property for the Needs of Society and the State does not cover compensation for economic and social impacts and does not include informal land users as eligible for compensation.	The ESS5 requirements will be applied.
Livelihoods restoration	The Law on the Expropriation of Property for the Needs of the Society and the State does not envisage livelihood restoration.	The ESS5 requirements will be applied.
Measures to protect vulnerable groups	The Law on the expropriation of Property for the Needs of the Society and the State does not have provisions for assistance or support to disadvantaged and vulnerable people.	The ESS5 requirements will be applied.
Forced eviction	Article 218 of the RA Civil Code and Article 60 of the RA Constitution refer to property ownership and expropriation of private property but neither clearly defines what "public and state needs" or "overriding public interests" are. Even the 2006 RA Law on Expropriation of Property for the Needs of Society and the State does not fully explicate what the essence of those two key concepts is. The Law, however, identifies	The ESS5 requirements will be applied.

ESS requirements	Analysis	Gap Filling Measures
	the principles and objectives based on which the prevailing public interest is determined, and property is expropriated to the Government. The Law contains provisions for forced eviction of property.	
Grievance mechanism	The Law does not require PC or a grievance mechanism during the land acquisition process.	The ESS5 requirements will be applied.
ESS6: Biodiversity Conservati	on and Sustainable Management of Living Resources.	
Biodiversity conservation	Management of biodiversity and living natural resources is regulated by several laws, the most important being the RoA Law on the Specially Protected Natural Areas (2004), the RoA Law on Flora (1999), the Ra Law on Fauna (2000), and the RoA Law on Hunting and Hunting Economy (2007). The EIAE Law (2023), the RoA Law on Environmental Oversight (2005), and the Forest Code (2005) also have several direct implications for the protection and management of biodiversity.	The RoA legislation will be applied.
Habitats	The laws concentrate on the protection of populations and specimen of wildlife. Whereas protection of their habitats is not given adequate importance. There is no categorization of habitats into transformed, natural, and critical, and no uniform biophysical classification.	The ESS6 requirements will be applied to fill the gaps in in the RoA legislation.
Living natural resources	Article 5 of the Law on Environmental Oversight prohibits overexploitation of natural resources, however, depletion and degradation of living natural resources such as forests, fisheries, pastures, and individual species inhabiting them still occurs. Lack of human resources and technical means for inspection is obvious. The absence of	The ESS6 requirements will be applied.

FSC voquivoments	Analysis	Con Filling Maccures
ESS requirements	Analysis	Gap Filling Measures
	insufficiency-supported thresholds of sustainable	
	resource use and/or methodological guidance for their	
	establishment is key challenges for enforcement.	
ESS8: Cultural Heritage		
Management of adverse	The RoA Law on the Protection and Use of Immovable	The RoA legislation will be applied.
impacts on cultural heritage	Monuments of History and Culture and Historical	
both tangible and intangible	Surroundings (1998) and the RoA Law on Import and	
	Export of Cultural Values (2004) regulate the protection	
	and use of physical cultural resources of Armenia, and the	
	RoA Law on Intangible Cultural Heritage (2009) protects	
	intangible values. Spatial and urban planning procedures	
	include provisions for the preservation of historic	
	monuments and urban heritage. However, coordinated	
	management and enforcement are challenging as part of	
	assets are owned by the Armenian Apostolic Church and	
	private bodies.	
	Article 20 of the law states that a chance-find or an item	
	assessed and proven to have historical, scientific, artistic,	
	or other cultural value, receives a status of a newly	
	identified monument and is taken under temporary	
	protection until being included in the State inventory of	
	monuments as per relevant regulations. Article 20 does	
	not establish a deadline within which a newly identified	
	object shall be formally enlisted as a heritage monument,	
	causing extensive delays. Furthermore, no clear guidelines	
	are in place for the evaluation of candidate monuments.	
	As a result, the State inventory of monuments has not	
	been updated since 2007. Procedural shortfalls leave	
	newly identified assets without due protection for	

ESS requirements	Analysis	Gap Filling Measures
	extended period leading to cases of damage and loss.	
ESS10: Stakeholder Engagemen	t and Information Disclosure	
Engagement with stakeholders, including measures for vulnerable groups	The Constitution, the RoA Law on Urban Development (1998), the EIAE Law (2023) guarantee public notification, access to information, and SE for development projects. Although the legislative framework stipulates the need for proper public notices and consultation meetings, it fails to ensure meaningful consultation meetings at the early stage of projects and ensure for the participation of vulnerable groups.	The ESS10 requirements will be applied.
Information disclosure	The EIAE Law (2023) guarantees public notification and access to information.	The RoA legislation will be applied to the disclosure of E&S management instruments prepared following the requirements of EIAE Law. ESS10 requirements will be applied to E&S management instruments not required by the national legislation and prepared to satisfy requirements of ESS1.
Grievance mechanism	Armenia has recently developed legislation and electronic tools to receive and handle citizens' feedback and complaints. However, there is no requirement for exercising specific grievance mechanism in the frames of projects.	The ESS10 requirements will be applied.

# 6. PROJECT ENVIRONMENTAL SETTING, POTENTIAL E&S RISK AND IMPACT ASSESSMENT, RISKS AND MANAGEMENT PROCEDURES

E&S aspects of subprojects must be considered throughout all stages of the subproject cycle. This includes the initial evaluation of a subproject idea, the execution of physical works, and the ongoing operation phase of the infrastructure that the Project has invested in.

#### 6.1. Brief Environmental and socio-economic baseline

The Project is expected to lead to formation of seven tourism clusters with improved access and quality of infrastructure, enhanced tourism offerings both in terms of depth and breadth, as well as increased capacity for tourism-based local economic development along with sustainable cluster operations and management. The overarching economic benefit will be the investments mobilized around the clusters' touristic potential that are expected to increase the visibility and positive image of the selected settlements and neighboring communities, differentiate them from competing locations (in terms of branding nationally and internationally) and thus helping to attract investment and business development.

Each target region where the project is envisaging intervention contributes uniquely to Armenia's socio-economic landscape and ecological richness, combining economic activities, cultural heritage, and natural diversity.

The Project is designed to rehabilitate and upgrade infrastructure and services across seven prioritized clusters (Areni, Gyumri, Goris, Dilijan, Dvin, Jermuk and Yeghegis) in Armenia under Subcomponent 2.1. These clusters are situated in the urban areas of Gyumri, Goris, Dilijan, and Jermuk, as well as rural locations including Areni, Dvin and Yeghegis, covering the marzes (provinces) of Vayots Dzor, Tavush, Shirak, Syunik, and Ararat in Armenia. The biophysical baseline of target cluster communities in Armenia highlights diverse ecosystems across various climatic regions.

The surrounding landscape of Areni is renowned for its unique geological formations and is part of the "Noravank" Protected Landscape. Areni is culturally significant for its ancient winemaking traditions, historical monuments, and the Areni-1 Cave, an important archaeological site near the settlement. Areni in Vayots Dzor is a Prime Butterfly Area with rare species and rich biodiversity, including Bezoar goats and Armenian mouflons

Dilijan is located near the Dilijan National Park (NP), which covers an area of about 240 square kilometers. The NP is known for its forested landscape, rich biodiversity, mineral water springs, and natural and cultural monuments. The Aghstev River flows through Dilijan, is a transboundary river that ultimately merges with the Kura River, which continues downstream to the Caspian Sea. The Project's interventions on the Aghstev River will have a limited scope, focusing on reducing pollution of the river and mitigating flood risks.

Dvin, in Ararat Valley, has an arid climate with unique desert vegetation and fauna. Dvin holds the status of a designated Cultural Reserve-Museum, recognized for its rich historical and cultural significance as one of Armenia's ancient capitals and a key archaeological site.

Gyumri is renowned for its rich historical and cultural heritage, with many administrative, private, and public buildings preserved within the "Kumayri" Historical and Cultural Reserve-Museum, which features 19th-century structures. The district is a designated legally protected area, highlighting its importance in preserving Armenia's architectural and cultural legacy. Gyumri is Armenia's coldest city with steppe ecosystem and rare species.

Goris is renowned for its picturesque surroundings, parts of which are protected within the "Zangezur Biosphere" Complex to conserve unique biodiversity and ecosystems. The town is culturally significant for its historic "Old Town" a legally protected area distinguished by traditional stone architecture, as well as nearby landmarks of ancient cave dwellings. However, Goris, with a temperate climate, faces deforestation and erosion challenges. The Goris River flows through the town but is not a transboundary river, and no activities are planned for it under the proposed

project, as river-related activities were already carried out under the previous World Bank-financed (WB) Local Economy and Infrastructure Development (LEID) Project.

Yeghegis settlement is a designated historical and cultural monument and renowned for its medieval churches, structures and ancient cemetery. Yeghegis supports a variety of mammals, birds, and insects in its mountainous terrain.

Jermuk, a major tourist and mineral water hub, is rich in alpine biodiversity, including the Caucasian leopard. Jermuk is renowned for its picturesque landscape, featuring forests, and abundant mineral springs. The town holds cultural significance as a historic spa destination, known for its natural healing resources.

The Project will also upgrade and rehabilitate basic and existing infrastructure within municipal and rural settings in the proposed clusters. The interventions in Gyumri, Dilijan, Jermuk, and Goris will occur in urban settings, mostly focusing on the central parts of these cities. These areas, while urban, are not densely populated, allowing for infrastructure and tourism-related enhancements without major disruptions to large residential populations. In Gyumri and Goris, the Project will involve improvements in the city centers, where public spaces, roads, and facilities are widely used by a large number of people. In Jermuk, the interventions will focus on tourist sites that are located away from residential areas, minimizing the impact on residents. In Dilijan, the interventions will primarily affect public spaces and infrastructure, with only small-scale and temporary impacts on residential areas. In contrast, the interventions in Areni, Dvin, and Yegheghis will take place in rural settings, where the population density is significantly lower. These areas are characterized by more open spaces and agricultural land, with smaller number of households within Project impact area. Additionally, small-scale infrastructure activities, such as developing hiking trails in Areni and Goris and camping sites in Areni to promote nature-based tourism, are expected to be implemented within the state-owned protective landscapes surrounding these settlements. None of the activities will be implemented in conflict affected/disputed territories.

In terms of vulnerability and population characteristics, the clusters vary significantly. Gyumri has a diverse demographic, including a large number of economically disadvantaged residents and individuals still recovering from the long-term impacts of the 1988 Spitak earthquake. The population in Gyumri faces socio-economic challenges, such as high unemployment and poverty rates, particularly in peripheral areas. Many residents rely on small-scale commerce, crafts, and services, with an increasing focus on tourism and cultural heritage as key avenues for economic development. Populations in Jermuk, Goris, and Dilijan are primarily involved in tourism, hospitality, and small-scale agriculture. These communities face challenges such as seasonal economic fluctuations and limited employment opportunities outside the tourism sector. In Areni, Dvin, and Yeghegis, the population primarily consists of rural families engaged in agriculture. Many residents in Areni are small-scale farmers or involved in tourism-related activities facing seasonal income fluctuations. Meanwhile, residents in Dvin and Yeghegis encounter challenges related to rural isolation, limited infrastructure, and constrained economic diversity, which contribute to socioeconomic vulnerabilities, particularly among youth and disadvantaged groups".

The investments in each cluster are envisaged to integrate heritage conservation (wherever applicable) and basic infrastructure upgrading is expected to increase the livability and resilience of the local population and visitors. Road rehabilitation and other transport infrastructure can boost economic activity in underutilized areas triggering market exchange mechanisms, stimulating real estate development, as well as increasing accessibility of jobs and labor productivity, in addition, investments in heritage preservation and cultural interpretation will contribute to intangible benefits such as revealing the "sense of place" and celebrating authenticity through positive local identity and related social capital, as well revival of traditional artisanship and craftsmanship skills channeled into community resource mobilization for other development challenges. Diversification of the tourist offerings will contribute to the cluster's sustainability and provide an enabling environment for private investments.

## **6.2.** Brief Overview of Project Activities

The Project aims to enhance tourism development in Armenia by focusing on sustainable economic growth, cultural heritage preservation, and environmental protection. Key activities include:

- 1. Infrastructure Development: Improving tourism-related infrastructure, such as roads, accommodation facilities, and visitor centers, to boost accessibility and comfort for tourists.
- 2. Cultural Heritage Conservation: Preserving historical and cultural landmarks, including ancient ruins, medieval monuments, and traditional urban districts, to protect Armenia's rich heritage while promoting it as a key attraction.
- 3. Capacity Building and Training: Providing training for local communities and tourism operators to improve service quality, enhance local livelihoods, and create employment opportunities in the tourism sector.
- 4. Promotion of Eco-Tourism: Supporting nature-based tourism activities like hiking and mountain biking while ensuring the protection of Armenia's diverse ecosystems, NPs, and endemic species.
- 5. Wine and Gastronomy Tourism: Leveraging Armenia's winemaking traditions and culinary heritage to attract niche markets, particularly in clusters like Areni and Dilijan, which are renowned for wine production and local cuisine.
- 6. Community Engagement: Encouraging community-based tourism initiatives that involve locals in tourism planning and operations, helping prevent rural depopulation and promoting equitable economic benefits.
- 7. Marketing and International Promotion: Developing targeted campaigns to market Armenia as a unique tourist destination, focusing on its blend of natural beauty, cultural richness, and historical significance.

## 6.3. Potential Environmental Impacts of Activities

Both the E&S risk of the Project is rated as substantial, with the following ESSs deemed relevant: ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8, and ESS10. The environmental impacts are categorized into two phases: construction and operational.

#### **Construction Phase**

The Project will involve multiple small subprojects that will be prepared and implemented during the course of the Project; therefor appropriate E&S assessment of subprojects must be done. The following impacts are likely to occur during the construction works implementation.

**Noise, Vibration, and Emissions:** Noise and dust propagation and vibration are typical for worksites where construction vehicles and machinery are operated. Emissions of inorganic dust from earth works and from loading of trucks, and emission of harmful substances and dust from combustion of diesel used by transportation means and machinery occur during construction works.

**Soil Erosion**: Polluting soil and water bodies with construction waste; triggering or amplifying soil erosion by improperly performed earth works and/or borrowing; deteriorating landscape and its aesthetic value by failing to reinstate and harmonize construction site upon completion of works.

**Generation of Non-Hazardous Construction and Hazardous Waste:** Construction and rehabilitation/upgrade of infrastructures will generate construction waste. This may also include limited volumes of ACM waste. Rehabilitation of old building roofs and water supply and sewer network may have ACM roofs, pipes and lead containing paints. Handling such types of hazardous waste would be a challenge, especially because of minimal public awareness of the health hazards associated with the exposure to ACM. Replacement of such roofs will cause health hazards to workers and in case of improper disposal may generate public health risks for a wider set of population.

Risk of improper solid waste management during the operation of the infrastructure: While tourism can drive economic growth, inadequate handling of solid waste can lead to environmental pollution and health risks. Accumulation of waste can detract from the aesthetic appeal of tourist destinations, creating unsightly conditions and unpleasant odors. Over time, poor waste management practices can harm local ecosystems, negatively impact visitor experiences, and undermine the sustainability of tourism in the region.

**Water pollution:** There are typically three sources of pollution from construction activities that can impact water sources, particularly the Aghstev River under the Dilijan cluster: silt pollution; the release of hydrocarbons or chemicals (glue, cement, paint, etc.); and the release of other site waste into the water such as litter or building materials. In case of oil and lubricant leakage from machinery and stockpiled construction materials, oil products and

chemicals can penetrate the ground water or run off to water recipients. The same results are likely from improper servicing of vehicles and machinery. Liquid construction waste from concrete batching on site may become a heavy pollutant of soil and water if released without pre-treatment.

Soil Erosions: Earthworks carry most risks to the landscapes and may cause erosion.

**Worksite Accidents:** Physical works to be undertaken under the Project do not imply exposure to especially hazardous environment, explosives, radioactive or toxic substances. However, OHS risks are present at any worksite and may materialize in incidents if works are not properly managed. OHS threats associated with TRIP implementation are conventional and relate to

- insufficient OHS risk assessment prior to commencement of works;
- inadequate planning and organization of worksite and poor housekeeping;
- lack of warning signage, demarcation, and protective fencing/barricading individual locations at worksite;
- working at height, on scaffolds without maintaining safety norms and requirements, operation of machinery in a poor technical condition or negligence of machinery operation guidelines;
- lack of workers' safety gear or its misuse may also cause accidents with trauma or casualties.

## 6.4. Proposed Mitigation Measures of Environmental Impacts

At a minimum, a standalone site-specific ESMPs, including Monitoring Programs, will be developed for each subproject under the clusters. ESMPs will include a Waste Management Plan (WMP), CHMP, Biodiversity Management Plan (BMP), if deemed necessary, as part of the site-specific ESMP in accordance with the ESCP.

**Noise, Vibration, and Emissions.** Noise propagation from the operation of construction machinery will be managed by ensuring good working condition of the equipment, prohibition of engine idling, and disallowing operation beyond working hours (especially in proximity to settlements). Dust emissions will be managed by watering worksites during conduct of dust-generating activities and washing tires of construction vehicles and machinery as required. Also, transportation of construction materials and waste will be allowed under covered trucks only. Quality of fuel used for the operation of construction vehicles and machinery will be monitored and adherence to the established standards will be ensured.

**Traffic management.** Works contractors will also be requested to periodically update, and implement traffic management plans. Speed limits will be established for movement of construction vehicles within and outside settlements. All vehicles will be kept in good working condition by regular checkups and timely servicing.

**Worksite safety management.** If contractors choose to use security services, the ATDF will be assessed prior to engaging security personnel and mitigation measures will be put in place to safeguard project workers, sites, assets, and activities. Assessment and risk management related to security will be detailed in site-specific ESMPs. ATDF will undertake background check to screen service providers for any past violation of mandate and abuse of power. Performance of security personnel will be closely monitored.

**Tree and vegetation protection**. Excessive clearing or unnecessary damaging of vegetation will be prohibited. This would include restriction of vehicle movement to the designated routes, as opposed to free crossing of terrain in and around worksites. Vegetation clearance in the Project impact zone (e.g., developing hiking trails and campsites), including clearing of right-of-way, will be preceded by inventory of trees belonging to both – wild growing and or cultural species. The need for extracting trees of Red List species will be identified and avoided and the use of fruit-bearing trees by local residents will be explored. This information will be used to make due payments established for the removal of specimen of Red Listed species from the nature and for considering due compensation for economic impact on communities.

If any works are to be undertaken in the territory of "Hay Antar" SNCO (Armforest), within or in immediate proximity to designated protected areas potentially linked to the "Noravank" Protected Landscape and the" Zangezur Biosphere" Complex in the Areni and Goris clusters respectively, the ATDF will have to prepare an EIA report through the Design Consultant and pass state expertise to obtain permission for the activity. E&S screening will also determine if the development of a BMP is required, as part of site-specific ESMP.

If Project interventions require undertaking works near the candidate Emerald Sites (Aparan and Dilijan clusters), a focused assessment of possible impacts on the candidate Emerald Site will be undertaken if required. Under any circumstances, no activities negatively affecting critical or natural habitats will be supported from the Project.

E&S screening and assessment will guide the design and ESMP in implementing replanting or revegetation activities using native species.

**Hazardous and non-hazardous waste management:** Hazardous and non-hazardous waste from construction works will be stored separately at worksites. Construction contractors with support of a technical supervisor and PT will examine options for the final disposal of non-hazardous construction waste early in the contract life. If local government allocated sites on the land owned by the municipally, a formal communication will be obtained for this arrangement. Unauthorized disposal of waste will be strictly prohibited.

The OHS specialists of the technical supervisor will provide training on safe handling of ACM related waste to the contractor's team. Safety requirements will include wearing of full protective gear – special clothing, boots, gloves and hoods; wearing of respirators and protective goggles; watering of surfaces to be operated during handing of ACM; minimizing fragmentation of ACM structures to avoid unnecessary generation of dust; packaging and marking ACM; providing safe on-site storage for ACM waste; and using covered or closed trucks for transportation to the sites of final disposal; ensure safe disposal of ACM waste on-site, and implement a concrete layer.

Managing Construction Runoff. In order to minimize pollution of land and surface and ground water, priority will be given to servicing construction vehicles and machinery in service centers. If servicing is to be provided at the construction site, the location most remote from natural water bodies will be selected. Sites for storage of oil and lubricants and servicing of vehicles and machinery will have impermeable flooring and be confined so to prevent release of operation and accidental spills. If work camps are established, they will be equipped with septic tanks or pit toilets, and relevant servicing will be provided to maintain good sanitary conditions and to avoid pollution of water and ground water. Concrete batching plants must be provided with sedimentation pools of relevant parameters, so that settlement of solid particles can effectively take place prior to waste release.

**Soil protection:** To avoid or minimize these negative impacts, the following practices will be applied:

- Strip and store topsoil separately to apply later for site reinstatement;
- Pile up excavated earth separately from topsoil, in the convenient location clear of vegetation;
- Install warning signage and fencing, if appropriate, around excavations;
- Minimize the time of keeping the excavations open;
- Use excavated material for backfilling to the extent its morphology permitting and volume required;
- Remove excess material the preliminary agreed upon location;
   Reinstate the work site by spreading topsoil and stimulating re-vegetation. See E&S mitigation plan matrix in Appendix 9

## 6.5. Potential Social impacts of the Activities

Labor and Working Conditions. The risk of forced labor and child labor is minimal. However, individual workers may face discrimination based on gender, ethnicity, religion, or other personal characteristics. While incidents of SEA/SH) are uncommon in Armenia's construction industry, the possibility cannot be entirely excluded. Civil works may also involve low-skilled migrant workers, who could be exposed to risks such as exploitation, discrimination and lack of legal protection. The other risks and impacts include:

**Labor Management.** All categories of Project workers may be susceptible to unfair treatment by their employers and poor treatment in the working environment; however, workers employed by construction contractors are known to be most susceptible to such risks.

- Employers may choose to use informal labor and do not sign contracts with workers;
- leave for rest, or be otherwise exploited;
- There may be delays with payment of wages;
- Workers may be requested to work long hours without additional payment, without timely breaks, without adequate housing, catering, sanitary conditions, and rest spaces at worksites.

Poor living conditions at work camps may lead to the spread of infection and occurrence of non-communicable diseases.

#### **Community H&S**

- Nuisance to communities residing in the immediate proximity to works sites, that may include noise beyond working hours, restricted access to roads and private property, health damage to pedestrians and cars from poorly managed work site, and disruption of local traffic. Movement of construction vehicles and machinery around construction sites through local settlements and roads may cause disruption of common traffic patterns and increased occurrence of traffic accidents.
- TRIP implementation is not expected to require a large labor influx; however, concentration of workers at and around worksites may cause various negative impacts on the nearby communities. Whether workers live at work camps or rent space in the houses of local residents, they will come into contact with locals. This may cause tensions due to cultural, ethnic, religious or other differences. Cases of sexual harassment may happen. The same may be observed in the occurrence of sexually transmitted and other communicable diseases. This includes the risk of spreading Human Immunodeficiency Viruses /Acquired Immunodeficiency Syndrome (HIV/AIDS) and infections, especially in the case of nation-wide outbreaks of the latter.
- If contractors choose to use security services for safeguarding worksites and their property located therein, local communities may suffer from abuse of power by security service staff.
- Construction activities may cause direct physical impacts and vibrations that can damage nearby houses, resulting in structural instability and safety hazards.

Land Acquisition, Restrictions on Land Use and Involuntary Resettlement. The land acquisition requirements for the project are anticipated to be minimal overall, though there could be significant impacts within the Gyumri cluster. In particular, the redevelopment of one of Armenia's largest outdoor markets may lead to the temporary or permanent displacement of several dozen street vendors. The current market infrastructure is irregular, with both formal and informal vendors operating along the street pavements. Depending on the rehabilitation plans for the old market and its surrounding areas, resettlement impacts could range from the displacement of fewer than a dozen vendors located near the access road to the market building to the potential displacement of several dozen vendors if the project involves a more extensive transformation of the area.

In other clusters, resettlement impacts are expected to be minimal and temporary, primarily linked to infrastructure improvements such as roads, parking, and water and sewage systems. Since the focus is on rehabilitating existing infrastructure, restrictions on land use are anticipated to be limited. However, there may be disruptions to small businesses during construction, including issues with access, noise, dust, and changes to the local environment.

**Cultural Heritage.** Works at or around cultural heritage sites, such as the Gulbenkian Hospital in Gyumri and the facade of the Gyumri market building, Drinking Hall in Jermuk, as well as archaeological sites in the Dvin and Yeghegis clusters, carry a significant risk of compromising the authenticity, structural integrity, and aesthetic value of historic buildings if not properly managed.

During earth works in such locations predominantly, as well as elsewhere in the country chance finds may be encountered. Chance finds cause delay and disruption in work schedule and may lead to the commercial loss for contractors. However, rushing resumption of works after encountering of a find carries the risk of damaging artifacts due to inadequate handling, packing, and transportation.

#### **SE and Information Disclosure**

• Limited Participation of Vulnerable and Disadvantaged Groups: Vulnerable and disadvantaged groups, such as low-income individuals, people with disabilities, and those in remote or marginalized communities, may face challenges in accessing training programs and other Project's components. This could be due to a lack of information or awareness about the opportunities available, as well as limited capacity (e.g., education or skills) to participate effectively. These barriers risk leaving these groups behind, reducing the overall inclusivity of the Project. Women's participation in the Project may also be limited due to the nature of jobs

created, particularly in the construction sector, where women make up less than 5% of the labor force in Armenia. This presents a significant challenge in ensuring gender equality in the distribution of project benefits

Potential Unequal Distribution of Project Benefits: The risk of unequal access to employment opportunities
could emerge, where more privileged individuals or communities—those with better skills, resources, or
proximity to project sites—may disproportionately benefit from the job opportunities created by the Project.

#### **Operational phase**

- Risk of Overuse of Historic and Cultural Sites: While increased tourism is beneficial, it can put undue pressure on historic and cultural monuments, particularly if the number of visitors exceeds the carrying capacity of these sites. This can result in physical damage to sensitive areas, over-crowding, and deterioration of the visitor experience. In the long term, unchecked visitation may lead to the degradation of these sites, making them less attractive to tourists and impacting the sustainability of tourism in the region.
- Challenges for Vulnerable and Disadvantaged Groups: Certain vulnerable groups, including people
  with disabilities, may face difficulties in accessing the full benefits of the rehabilitated and
  constructed sites.
- Risk of Inadequate Maintenance of Utilities: While robust infrastructure is essential for supporting tourism, insufficient maintenance of utilities such as water supply, electricity, and sewage systems can lead to service disruptions. This can negatively affect visitor experiences and create dissatisfaction among tourists and residents.

## 6.6. Proposed Mitigation Measures of Social Impacts

Labor protection and management. Contractors will be required to produce, agree with employer, adopt, and adhere to the Code of Conduct. Each employee of contractor will read through and sign off the Code confirming commitment to respect requirements of this document. Contractor's personnel will be additionally instructed on behavior outside the worksites where they come in contact with local residents. Contractors will develop and include community communication plan into the ESMPs and implement it throughout the contract life. Requirements to be met by contractors will be made equally mandatory for sub-contractors. Local residents will be informed on the timing and nature of works to be undertaken. The ATDF will be in place to allow PAPs voicing their concerns, submit complains, and ask questions. The ATDF will operate Project GM to ensure timely and due consideration of all entries, their documenting, and their timely closure.

Project LMP will be respected at all workplaces related to TRIP implementation, including ATDF, consultant and construction companies. Contractors will be required to develop their own LMP in line with the Project LMP and strictly adhere to it. Contractors will conclude formal work agreements with all personnel and manage workers in agreement with the Labor Code of Armenia and LMP. Forced labor, child labor, any form of discrimination and abuse will be prohibited at worksites. Contractors will be responsible for giving fair wages to their employees and timely pay them, including for overtime; allowing break during the working day and between shifts; providing decent dormitories for workers if they stay at work camps, as well as adequate sanitation, catering, and resting spaces.

Contractors will be required to develop, adopt, and operate GM for their personnel, including special channels for redressing grievances related to sexual exploitation, abuse, and gender-based violence.

Involuntary resettlement planning and management. Both temporary and permanent impacts will be addressed through mitigation and compensation measures. The ATDF has prepared a draft RF, which sets out the principles and procedures to be followed in developing Resettlement Plans (RPs) for project activities that involve land acquisition or cause economic or physical displacement. The RF aims to minimize displacement impacts and ensure compliance with national legislation and the WB's ESSs. It outlines key steps for RPs, including conducting inventories, engaging stakeholders, and setting up grievance mechanisms, designing compensation strategies, and establishing monitoring processes. The framework emphasizes the inclusion of vulnerable groups and ensures fair compensation and livelihood restoration for those affected by the project. Once the project's footprint is defined through individual

investments, site-specific RPs will be developed in accordance with the RF to properly manage any resettlement impacts.

If deteriorating old rural residential houses are located in the vicinity of the construction sites, special markers will be installed on the cracking walls, allowing monitoring aggravation of structural integrity of buildings in the relatively short period of construction activity. This information will be used for resolving possible disputes over the claims of local residents on vibration generated from construction sites affecting their houses and calling for compensation by the Project proponent. If attribution of damage to construction works is established, owners will be compensated based on the principles set forth in the RF of TRIP.

#### **Cultural Heritage Management**

- Designs of works in and around cultural heritage sites will be submitted for review and consent to the MoESCS to ensure that Project interventions do not affect adversely structural integrity of historic buildings, do not compromise their heritage value, or negatively revise their aesthetic appearance.
- Designs of works in and around religious buildings, property and/or user rights to which are held by the Apostolic Church of Armenia, will be submitted for review and consent to the Church.
- If works in or around a cultural heritage site poses a risk of physical damage to a heritage building or its individual elements, an adequate protective cover will be provided. Also, if works on a buildings with historically/culturally valuable exhibits or other items placed in its interior pose a risk to safety and/or security of such items, a plan for their removal from the site and temporary safe-storage will be developed upfront (to be included as part of ESF documentation) and implemented prior to mobilization of works contractor to the site.
- A stand-alone CHMP will be developed for Dvin archaeological site.
- CHMP for the remaining sites will be included as part of the site-specific ESMPs.

#### Chance Find Procedure (aligned with ESS 8)

If a chance find is encountered during earth works, contractor will be obligated to take all activities on hold and immediately inform the ATDF. The ATDF will promptly communicate information to the MoESCS and seek formal guidance on the course of further action from the Ministry. Works will resume upon written notice from the MoESCS certifying that all urgent actions required for excavation and removal of artifacts and/or their on-site conservation are completed.

**Accessible GM:** Inform affected communities of project grievance mechanisms and modalities; ensure grievance submission procedures are accessible (including to the poor and those in remote communities) and provide all beneficiaries and beneficiary communities with the required contact details of the ATDF and other contact persons who support grievance redress. Beneficiary feedback and grievance mechanisms for the TRIP will include a local contact point in each community, a telephone feedback line, and a grievance and redress committee of the ATDF or TC to review grievances that could not be resolved locally.

**Stakeholder Engagement:** Project SEP has been developed which outlines the strategy for various engagement mechanisms, including provisional timelines, assigned responsibilities, and the resources designated for carrying out SEP activities. SEP emphasizes participatory planning, transparent communication, capacity-building workshops, and grievance redress systems to ensure that feedback from all levels is integrated into both the project design and its execution, particularly in relation to E&S risk management. As the project progresses, SE methods and activities will be further enhanced including adoption tailored gender-sensitive strategies and the SEP will be periodically revised to include more detailed plans and customized approaches for engaging with different stakeholder groups.

#### **Operation phase**

**Implement Visitor Management Systems:** Establish limits on daily visitors and use timed entry tickets to distribute attendance evenly throughout the day.

**Invest in Conservation:** Allocate funds for the preservation and restoration of vulnerable areas to maintain their integrity.

**Accessibility Initiatives:** Improve infrastructure to ensure all tourists, including those with disabilities, can access sites and services.

**Enhance Waste Management Infrastructure:** Invest in collection, recycling, and disposal facilities that can handle increased waste from tourism.

**Education Campaigns:** Launch campaigns to educate both locals and tourists about responsible waste disposal and the importance of keeping the environment clean.

**Incentivize Clean Practices:** Encourage businesses and tourists to adopt sustainable practices, such as using reusable items.

**Regular Maintenance Schedule:** Establish a routine maintenance program for utilities to prevent service disruptions.

**Community Feedback Mechanism:** Create channels for residents and visitors to report issues with utilities, ensuring prompt response and resolution.

## 6.7. Environmental and Social Screening and Scoping of Subprojects

Design Consultant, Environmental Specialist, and Social Specialist of ATDF jointly perform E&S screening of subproject proposals (Appendices 2). Screening reports provide information on the main risks and types of mitigation measures to be applied. Environmental screening report concludes by confirmation or denial of subproject eligibility from environmental standpoint and assigning of an environmental category to a subproject. It also defines tools of environmental review and environmental management planning required for a subproject. The screening process serves as the first step in assessing the environmental and social risks associated with subprojects and determining the necessary mitigation measures.

The environmental screening process should ensure the exclusion of investments from TRIP financing that: (i) are unable to meet the requirements set forth in the ESCP of the Project; (ii) do not comply with the requirements of OP 7.50 on international waterways; (iii) have high-risk environmental or social impacts; and (iv) negatively impact any Critical Natural Habitats or Cultural Heritage areas.

Social screening report defines whether a subproject implies any form of involuntary resettlement, identifies a need for developing RPs, points out main social benefits and losses of subproject and identifies measures for social mitigation.

Screening of subprojects suggested for financing under the PPI subcomponent 2.1 includes review of the investment initiatives from the private sector for which provision of public infrastructure is required under Project. Investment initiatives are screened by several criteria on the pass-or-fail basis (*Appendix 3*). The following type of investments are prohibited: investments in the designated protected areas; protection zones in general or individual protection zones of cultural heritage monuments; activities impacting fragile ecosystems, important habitats, and green-fields of outstanding aesthetic value; activities requiring conversion of forests, wetlands, and alpine/sub-alpine meadows; and heavily polluting industries. Also, subprojects under PPI subcomponent are not eligible for the support from TRIP if the private investment requires use of land which is being owned or used formally or informally by anybody other than the investor. Eligible private investment proposals will be prioritized based on their expected economic prospects, positive social externalities, and environment-friendliness. Once an investment proposal is selected for the provision of support in the form of financing matching public infrastructural elements from TRIP proceeds, E&S assessment and management planning for the required public works follows general rules as outlined below.

#### 6.8. Environmental and Social Risk Classification

E&S risk screening will be conducted to determine the level of assessment and planning required for the subproject proportionate to the significance of associated risks and potential impacts. E&S risk screening is a

two-step process that begins with screening against the exclusion criteria followed by screening of site-specific risks. The latter will take into account i) the type, location, sensitivity and scale of the subproject activities being proposed; ii) the nature and magnitude of the potential environment and social risks and impacts; iii) the capacity of the responsible implementing entities to manage such risks and impacts in a manner consistent with the ESSs; and iv) other areas of risk that may be relevant to the delivery of environment and social mitigation measures and outcomes, depending on the specific subproject and the context in which it is being prepared.

The following criteria provide guidance for the ATDF to determine subproject risk classification:

Table9 Risk Classification according to the WB's ESF guidelines

Risk	Description	Instrument(s)
Classification		
High*	Wide range of significant adverse risks and impacts on human or environment health including i) long term, permanent and/or irreversible and impossible to avoid entirely due to the nature of the project; ii) high in magnitude and/or in spatial extent; iii) significant adverse cumulative impacts or trans boundary impacts; and iv) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.)  Some of the significant E&S risks and adverse impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.	Note: High risk subprojects will not be financed under the Project.
Substantial	The Project may not be as complex as High-Risk Projects, its E&S impacts may be smaller (large to medium), and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This depends on whether the risks and potential impacts have the majority or all of the following characteristics: i) mostly temporary, predictable and/or reversible and the nature of the project does not preclude the possibility of avoiding or reversing them; ii) adverse social impacts may give rise to a limited degree of social conflict, harm or risk to human security; iii) medium in magnitude and/or spatial extent; iv) there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents.  Migratory and/or compensatory measures may be designed more readily and be more reliable than those of high-risk sub projects.	ESR or ESIA
Moderate	Potential risks and adverse impacts on human and/or environmental health are not likely to be significant. This is because the Project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics: i) predictable and expected to be temporary and/or reversible; ii) low in magnitude; iii) site-specific, without likelihood of	Site-specific ESMP, ESIA or ESR in some cases (described below)

Risk	Description	Instrument(s)	
Classification			
	impacts beyond the actual footprint of the Project; and iv) low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).  The Project's risks and impacts can be easily mitigated in a predictable manner.		
Low	Potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These Projects, with few or no adverse risks and impacts and issues, do not require further environment and social assessment following the initial screening.	No specific instruments required.	ES

<sup>\*</sup> High risk projects are expected to be screened out during eligibility screening process.

## 6.9. Land Acquisition and Resettlement Screening

The screening process will assess if a subproject requires land acquisition and/or is likely to result in physical and/or economic displacement for people currently using the proposed site. If this is the case, RPs will be developed. Detailed description of the RP structure and development procedural requirements are provided in the RF. The scale and required details and consultations will depend on the scope and risks associated with the land acquisition hence, the RP will guide relevant processes to acquire and compensate for land and assets affected by the project, including temporary restrictions on land use and servitude contracts.

## 6.10. Environmental and Social Risk Assessment and Management Instruments

Subprojects that may have significant, complex, long-term and/or irreversible E&S impacts, as well as impacts that are likely to spread well beyond a subproject site, will be categorized as high risks and be rejected.

Subprojects that are likely to have impacts of small to medium magnitude mitigation of which is possible and feasible within the subproject scope will be classified as moderate risk. However, such subprojects may vary in terms of the associated risks and hence require different effort for verifying available information and planning mitigation measures. Conclusions of the screening procedure will include a decision on what type of ESF documents must be prepared for a subproject.

In rare cases, moderate risk subprojects may cause E&S risks which are not entirely known upfront and require additional in-depth research for their full identification. Carrying out ESIA will be needed to obtain the missing data and/or verify/update existing information, to examine E&S aspects of the proposed works, and to analyze design alternatives. ESSs work undertaken for the preparation of such subprojects will result in the production of an ESIA or ESR report which includes an ESMP.

ESMP will be prepared for low and moderate risk sub projects.

Substantial risk subprojects with multiple expected impacts for which ESS5, ESS6, and ESS8 in addition to ESS1 Environmental Assessment, will be subject to ESR or ESIA. This instrument will include a narrative part with the background information, overview of expected impacts and a set of justified mitigation measures as well as an ESMP prepared in a table format (ESR outline provided in Appendix 4).

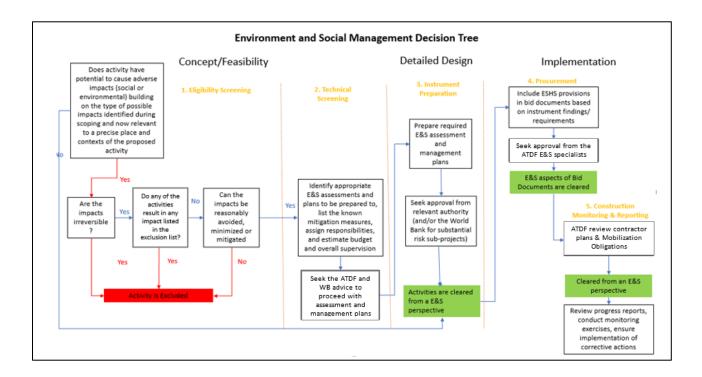
For moderate risk subprojects with small scale impacts which are conventional and well known upfront, filling out of a simplified checklist ESMP will suffice (template provided in *Appendix 5*). This will be a stand-alone ESMP with basic sub-project specific data, readily available conventional mitigation measures, and a monitoring plan (MP) to be filled out – all in table format.

Risk assessment of subprojects includes determining expectance of the resettlement impacts and a need for the preparation of a RP.

The site-specific E&S ESMPs will be prepared and incorporated as part of the respective bidding documents for the respective subproject prior to the carrying out of civil works. Once finalized, the respective instrument will be implemented throughout Project. Subproject instruments will be reviewed and cleared by the WB.

Outlines and contents of the E&S instruments is included in the Appendix.

Figure 1. Decision-Making Process for Managing E&S Risks in Subprojects



#### 6.11. Monitoring, Supervision and Reporting

The TRIP implementation arrangements should include provisions for monitoring compliance with the present ESMF, ESIAs and site-specific ESMPs prepared for all individual subprojects, recording information obtained through ESHS monitoring, and mechanisms for reporting on the outcomes of oversight.

The arrangements for E&S monitoring and reporting are described below:

- The Technical supervision consultant will have E&S specialist in his team to monitor ESHS activities in compliance with the requirements of the ESMP on monthly bases. The E&S specialist of the Supervision consultant will have at least one field visit in a month. The monitoring should be undertaken at the same level of professionalism and diligence as other technical aspects of works.
- TORs of these consultants will be agreed with the WB. TORs will include clearly spelled out tasks of consultant in the fields of managing E&S performance of works contractors, providing professional support and guidance to contractors on the ESHS, and reporting to the employer. Technical supervisors will be mandated to timely identify any ESHS issues that may arise during Project implementation, and support contractors in addressing such issues. The Contractor will report to the Technical supervisor on all aspects of undertaken works, including ESHS. Technical supervisors will verify information received from contractors and use it, along with their own observations made at worksites, to produce monthly progress reports to the ATDF. The environmental specialist of the Supervising company will make monthly visits (at least 1). Technical

supervisors' reports shall include filled out monthly field E&S monitoring checklist (template provided in Attachment 6 to this ESMF). Should contractors fail to take prompt and satisfactory corrective action, technical supervisors issue written notices to works contractors and follow up thereafter. In the event of lasting failure of contractors to implement corrective actions, technical supervisors must escalate the case to the employer (ATDF) and recommend managerial action for addressing the problem. In case of repeated non-conformance to the ESMP requirements, the ATDF management may apply strict measures up to withholding payment to the Contractor and even to the Technical supervision consultant.

- While overall responsibility for E&S compliance under the Project rests with the ATDF, services of an external technical supervisor of works will be used for daily field work.
- The ATDF E&S specialists will be responsible for filing and storing all field environmental monitoring reports obtained from technical supervision. All monitoring information shall be available for the RoA government officials and the WB upon demand.
- ATDF will hold quality control of the supervision company's work and will imply regular field visits (at least 1 in a month) to the construction sites by the E&S specialists with the purpose of monitoring and verifying information provided by the supervisor. The ATDF will review and provide feedback on the supervision company's reports, as well as take timely and effective actions on the issues raised in the supervisor's reports.

The WB provides Project implementation support to the Borrower throughout the Project life, that includes review and approval of TORs and bidding documents to ensure due incorporation of ESHS aspects in these documents, site-specific E&S instruments to be prepared for subprojects, and semiannual implementation progress reports of the ATDF that will include ESHS performance chapter. WB may request and review monthly progress reports from the technical supervisor to the ATDF. The WB team will undertake periodic field visits to the Project sites for stocktaking, quality control, and problem shooting.

The ATDF specialists will use monthly progress reports from supervision consultant for reporting to the WB in ATDF's progress reports. The ATDF specialists will keep monthly reports from technical supervisors on file and make them available to the WB upon request.

## 6.12. Incident reporting

The technical supervisors will be responsible for promptly reporting to the ATDF management on any incident or accident related to the Project that has, or may have, a significant adverse impact on the environment, affected communities, the public, or workers. This also includes incidents leading to death or serious injury to workers or the public; acts of violence, discrimination, or protest; unexpected impacts on cultural heritage or biodiversity; environmental pollution; cases of forced or child labor; displacement without proper legal procedures (forced eviction); allegations of sexual exploitation, abuse (SEA), or sexual harassment (SH); or disease outbreaks. ATDF will notify the WB of any incident within 48 hours of becoming aware of it. An incident investigation will be conducted to determine the incidents immediate, underlying, and root causes. Based on this investigation, ATDF will develop a Corrective Action Plan (CAP), in agreement with the Bank, outlining the necessary measures to address the incident and prevent its recurrence. Submit the review report and CAP to the Bank within 10 days of the initial notice, unless the Bank agrees to a different timeframe in writing.

## 6.13. Contingent Emergency Response Component

The CERC Manual will be prepared before the effectiveness and will include a description of the E&S assessment and management arrangements for the implementation of CERC (Component 4), in accordance with the ESSs. E&S assessment and management for CERC will be done in accordance with the timeframe specified in the CERC Manual.

## 7. INDICATIVE BUDGET FOR IMPLEMENTING ESMF

The successful implementation of ESMF requires adequate financial resources to support key activities such as E&S assessments, monitoring, capacity building, stakeholder engagement, and risk mitigation measures. The estimated budget for E&S mitigation measures (e.g. PPE, site watering, fencing, installation of signs, tree preservation etc.) is \$122,400, (calculated as 3% of the total construction cost over an 18-month period from the Project launch). The total indicative budget for the implementing ESMF is \$203, 500 and covering the following key areas:

- E&S Screening and Risk Assessment
- Environmental Monitoring and Compliance
- Waste Management
- Reporting and Documentation
- E&S mitigation measures implementation.

Additionally, the budget for monitoring and training related to the implementation of the ESMF is incorporated into the SEP budget, with an allocation of \$5,000. Budget for land acquisition and resettlement activities is included in the RF. Budget for events organization including trainings and presentations, as well as service contracts with local liaison persons is included in the SEP budget. The detailed breakdown budget of the ESMF is presented in the Appendix 7 and E&S mitigation plan matrix in Appendix 9.

## 8. IMPLEMENTATION ARRANGEMENTS AND INSTITUTIONAL FRAMEWORK

## 8.1. Implimentation Arrangements

The MoE will provide the overall decision making and strategic leadership of the Project. The TC, under the MoE, serves as the primary government agency with the mandate for tourism development and promotion in the country. In this capacity, the TC will play a critical role of supporting the formulation and identification of investments under the Project and will be the main counterpart in the MoE responsible for coordination and policy support across the Project.

The ATDF<sup>13</sup> will serve as the Project Implementing agency. ATDF will be responsible for the execution of all project activities and fiduciary responsibilities, including procurement and financial management, E&S risks screening, assessment, supervision and monitoring, and all related responsibilities regarding technical assessment, design, and civil works, including works supervision, monitoring, and evaluation (M&E), and reporting.

A High-level PSC will be established to provide overall oversight and inter-agency coordination of project implementation. The PSC will be chaired by the Deputy Prime Minister (DPM) and will comprise of all the relevant stakeholders and institutions, including representation from relevant line ministries, government agencies, and local and regional bodies, as may be needed. The main purpose of the PSC is for strategic discussions regarding the Project, high-level decision making, and facilitating inter-agency cooperation given the multi-sectorial nature of the project. It is expected that the existing PSC under LEIDP and its general functions will be carried over into TRIP, and the composition and representation of the PSC will be elaborated in the POM.

ESMF implementation requires involvement of several actors with their roles and responsibilities, as follows:

- PSC: Provides oversight and strategic direction for the TRIP
- Project working group: Manages the operations of the Project, ensuring the timely and effective implementation of its components, including ESMF.
- TC: Is responsible for coordination in relations with state agencies including national and local government authorities, drafting and circulating government decisions on eminent domain and financial management of RP as necessary.
- ATDF: The ATDF will have a dedicated team comprised of the required experts and specialists including one Environmental and one Social Specialists for successful implementation of the TRIP as agreed with the WB. E&S specialists of ATDF will manage and oversee ESHS applications of Project-financed activities and manage performance of hired consultants and works contractors.
- Design Consultant(s): During the design phase, the consultant is responsible for obtaining all necessary permissions from local and state authorities, including those related to water use, waste removal, and applications of state EIAE of proposed subproject design. In addition, the consultant is required to have E&S specialists who will assess E&S risks associated with the subproject design and develop a site-specific ESMP (to be defined under the TOR) if needed.
- Technical Supervising Consultant(s): Technical supervision consultants provide field monitoring and reporting for E&S compliance and supplement ATDF's capacity. The Environmental specialist of the Technical supervision company will monitor ESHS activities in compliance with the requirements of the ESMPs on a monthly basis. These consultants must be licensed under Armenian law and will oversee construction while ensuring the Project meets ESHS and the requirements set under the ESMPs. They will identify and escalate

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<sup>&</sup>lt;sup>13</sup>13 The ATDF was established based on the restructuring of the Social Investment Fund in the frames of the territorial development policy of the 2014-2025 Strategic Program on Prospective Development of the RoA. Since 1996 the ATDF has carried out extensive activities in rehabilitation of community infrastructure and has implemented 1130 projects. The ATDF has implemented development projects in all the regions of the country, namely newly constructed and rehabilitated schools, community centers, water supply and irrigation pipelines, health centers, tourism infrastructures, etc.

ESHS issues to the ATDF and take corrective actions where necessary. Consultants are required to have E&S, and OHS specialists to oversee construction workers and provide training as needed.

- **Construction Contractor(s):** The Construction contractors are tasked with obtaining all necessary permits and ensuring implementation mitigation measures and compliance with the ESMP during construction.
- **WB:** Provides ongoing implementation support, including reviewing and approving E&S instruments. It also conducts periodic field visits to monitor progress and ensure compliance of Project with ESSs.
- Local community and civil society organizations: These stakeholders may assist in the oversight of E&S compliance during construction; cooperation with NGOs will contribute to smoother communication with the residents and organization of more inclusive public consultations.

#### 8.2. Institutional Framework

## Ministry of Economy

The Ministry of Economy (MoE) of the RA is a central body of executive authority that develops the Government's economic policy in the spheres under its jurisdiction. The Ministry is responsible for implementing and assessing the results of economic policy. The TC is a state agency affiliated to the MoE of the RoA. It develops and implements the policy of the Government in the field of tourism.

#### Ministry of Territorial Administration and Infrastructures

The main mandate of the Ministry of Territorial Administration and Infrastructures (MTAI) is the development and implementation of territorial policy of the RoA; elaboration of the State policy for community service provision; ensuring parity in territorial development; oversight on the implementation of social-economic development programs performed by the governors; and quality assurance of the performance of territorial bodies (Governors) of the government. MTAI also monitors community budget performance; handles complaints by the citizens regarding the activities of territorial and local self-government bodies; liaises with mass media within the frames of the Public Information Policy of the Ministry; and works out State policy for maintaining the National Archive.

#### Ministry of Education, Science, Culture and Sport

The Ministry of Education, Science, Culture and Sport (MoESCS) maintains cultural heritage, promotes and develops contemporary arts. It develops legislation, targeted programs, strategies, concepts, and short-term development cultural programs within the scope of its mandate; cooperates with foreign governmental and international organizations as well as the territorial administration and local governments, creative unions, and NGOs related to culture and art. There are two standalone agencies operating under the MoESCS related to culture:

#### Agency for Protection of Cultural Heritage,

The Agency for Protection of Cultural Heritage protects property rights over the physical cultural resources by preventing illegal export and import and illegal transfer of ownership and leads international cultural cooperation and exchange.

#### **Historical and Cultural Heritage Protection Agency**

The Historical and Cultural Heritage Protection Agency is responsible for the conservation and sustainable use of the historic and cultural heritage. Development of new tourist products, introduction of means for diversifying visitor experience and investments aimed at increased visits to heritage sites should be conducted in collaboration with MoESCS.

#### Ministry of Environment

At the national level, the MoEnv has the mandate for environmental protection, the sustainable use and regeneration of natural resources and the improvement of the environment. These functions are performed by the core body of the Ministry as well as subordinated agencies including:

 Environmental Impacts Expertise Center SNCO - EIEC SNCO is responsible for EIAE and environmental permitting.

- Hydrometeorology and Monitoring Center SNCO Hydrometeorology and Monitoring Center (HMC)
   SNCO is responsible for monitoring water flow, water balance and water level fluctuations, research of environmental pollution and weather forecasting air as well as surface water quality monitoring.
- "Hayantar" SNCO The main objective of activities of "Hayantar" (ArmForest) SNCO is ensuring sustainable management of forest lands through implementation of actions planned by forest building projects; aimed at increasing productivity of forests; and protection of biodiversity.
- Dilijan National Park SNCO Dilijan NP SNCO was established on 21.02.02 (It was established on the base of "Dilijan" state reserve, set up by N P-341 decree of ArmSSR Council of Ministers, by N 165 decree of the RoA Government). It occupies area of 33765 hectares. The DNP is located in the RA Tavoush Province in northern Armenia, on slopes of Pambak, Areguni, Miapor, Gugarats mountain ranges, at altitudes of 1070-2400 m above sea level. The flora of Dilijan NP includes 902 species of vascular plants Caucasian mesophilic beech and oak forests, unique plane grove, 172 vertebrate animals, natural and historical-architectural monuments.
- Environmental Protection and Mining Inspection Body SNCO Environmental Protection and Mining Inspection Body (EPMIB) performs the enforcement of laws and regulations pertaining to air and water pollution, land use, biodiversity conservation and forest protection; exercises supervision and/or other functions prescribed by laws. The Inspection Body may apply sanctions in the field of environmental protection, as well as regarding the use and reproduction of subsoil and mineral resources. According to the RoA legislation, environmental supervision in the entire country is carried out by the EPMIB operating under the RoA Government.

#### Regional Governor's Administration

The governor of the RoA carries out state administration in the region, implements the government's territorial policy, and coordinates the activities of the territorial services of the state executive bodies through the Governor's administration. The Governor's Administration (marzpetaran) carries out its activities in accordance with the legislation of the RoA and other legal acts. Marzpetarans will be informed of the activities to be carried out in their region, might be consulted with during respective CDPs preparation and might support the Project to solve some problems related to implementation of subprojects in their regions.

#### **Local Self-Governance Bodies**

Local self-governance bodies (LSGB) support the Project team in field studies, organizing PC meetings in the communities. They will assist in the resolution of complaints and grievances and participate in other issues as required. Local authorities can also provide community lands for temporal use or permanent acquisition for the Project activities including access roads, construction camps, pipelines installation, etc.

#### **Apostolic Church of Armenia**

RoA is a secular State and the Church is not part of the national governance system. However the Church owns/has user rights to some physical historic and cultural heritage assets currently used for service and worshipping. Therefore, concepts and designs of the Clusters including activities on or around the physical assets within the discretion of the Church will be shared, discussed and agreed with the Church.

#### **Destination Management Offices**

DMOs fulfill a range of defined functions, among them coordinating tourism stakeholders in a specific region or a tourism destination. Basic functions of DMOs also include the development of a tourism concept or strategy and marketing plans or the facilitation of that process, as well as conducting sector-specific studies and analyses of collected or acquired data to base decisions on. A DMO also brings together all stakeholders to focus on a common goal, the entire destination's development and positioning it on the market for the benefit of all stakeholders including the local population. Another key function of a DMO is quality assurance. A DMO is constantly seeking to improve the quality of products and services provided in the destination by assessing relevant needs, delivering respective trainings and advice and, if feasible, introducing and managing quality standard systems.

# 9. STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

## 8.1 Stakeholder Engagement and Information Disclosure

The Armenian laws regulating PC and coordination, as well as information availability to the public are listed below:

- Fundamentals of the RoA legislation on Nature Protection ensure citizen's right to request complete information concerning the environmental situation and obtain it on time.
- The Law on EIAE calls for mandatory disclosure of information on planned projects/programs, includes information on their environmental implications, and requires solicitation of public feedback on the disclosed documentation.
- The Law on freedom of information ensures accessibility and transparency of information, as well as defines procedures for requesting and issuing of information by various types of legal bodies.

Participatory approach to framing E&S management under TRIP Project as well as risk and impact mitigation is essential to ensure the quality and realness of E&S documents. Present draft ESMF will be disclosed through the ATDF's web site and made available in print version at the regional administrations in Armenian and English languages. Consultation on it will be undertaken with relevant government and non-government institutions. The draft ESIAs and ESMPs shall be sent to the WB for review and approval. After the approval is received from the Bank the ATDF will disclose the ESIA or ESMP in the affected community. The draft ESMP will be posted on ATDF's and the affected community's websites with an announcement on PC meeting held in the community in 10 days after posting of the announcement. After the PC the PT will finalize the draft ESMP by attaching the minutes of the PC and the required documents obtained from the community: letters on waste disposal site, agreement of the community on project implementation on community lands, and construction permit at a later stage. The updated ESMP will be sent to the Bank for review, will be revised if required to seek final approval and disclosed on ATDF website.

Detailed record of PC process will be kept. Minutes of all meetings held will be produced to include the agenda, questions raised, list of participants, date and location. Personal data will be available for internal use only.

Public consultations will continue during the construction phase led by the construction and supervision contractors, and records of E&S issues raised and complaints received during consultations, field visits, informal discussions, formal letters, etc., will be followed up. The records will be kept in the ATDF office and be available for the WB upon request.

The SEP has also been prepared for the TRIP in compliance with ESS10 requirements. It identifies all possible stakeholders and defines the activities for their engagement.

#### 8.2 Grievance Mechanism

A GM will be maintained throughout the course of the Project. The GM will ensure that citizens can submit inquiries and grievances, and have their grievances redressed in a timely and effective manner without directly addressing the court.

The GM is described in detail in the SEP prepared for the TRIP. It provides a transparent and credible process for fair, effective and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions.

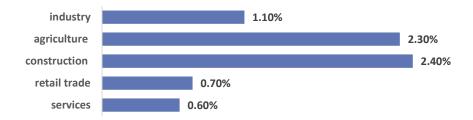
## 10. APPENDICES

## **Appendix 1**

## Key Socio-Economic Characteristics of the Selected Marzes and Clusters<sup>14</sup>

#### Vayots Dzor Marz and Areni and Yeghegis Clusters

Vayots Dzor Marz is situated in the Southern part of the Republic. The marz borders Azerbaijan from the East and West along the state border. From the North - Gegharkunik marz, from the South - Syunik marz, from the North-West - Ararat marz. Vayots dzor marz is surrounded with high mountains, water-separately mountain ranges, that being original natural banks between it and neighboring territories, turn that into a geographical single whole. Vayots dzor marz is the least populated marz of RA. It also has a sparse rural population. In 2022 the share of economy main branches of the RA Vayots Dzor marz in total volume of correspondent branches of the country comprised:



In total volume of marz economy the prevailing is agriculture. The agricultural farms mainly deal with cattle breading. Poultry farming, viticulture, fruit growing and vegetable growing also have a certain share in the volume of the gross agricultural product. The production of drinks (in particular, Jermuk mineral water) and wine are mainly developed in the industry field.

**Areni** is a village and the center of the Areni community of the Vayots Dzor Province in Armenia. Areni is best known for its wine production, with the majority of wine produced locally. It is located about 110 km away from the capital city of Yerevan in the valley of the Arpa River, on its left bank.

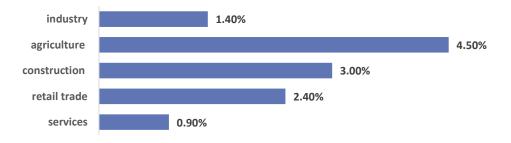
A cave with an area of about 400 m² near the village Areni is a site of unique archaeological findings from different eras. In January 2011 archaeologists announced the discovery of the earliest known winery, the Areni-1 winery, seven months after the world's oldest leather shoe, the Areni-1 shoe, was discovered in the same cave. The weather in the area is characterized as follows: Winters are moderately cold and relatively short, while springs are warm, lengthy, and humid. Summers are characterized by hot, dry weather that lasts for an extended period. Autumns are warm with fewer cloudy days. The population is engaged in horticulture, field farming, poultry farming and animal husbandry. One of the priority directions of the community's development is viticulture and winemaking, as well as fruit growing, due to which the population's employment is relatively high in the community, which significantly contributes to the prevention of emigration. There are 2 wine factories in the village of Areni, where the famous "Areni" wine is produced. According to the 2011 census, the population of Areni is 1772.

Yeghegis is a village in the Yeghegis Municipality of the Vayots Dzor Province in Armenia. It has a rich historical past, with the medieval Zorats Church, the Tsakhats Kar Monastery and the Smbataberd fortress being located in the vicinity of Yeghegis, as well as a Jewish cemetery from the 13th century. It comprises six settlements within the Yeghegis enlarged community: Yeghegis, Arates, Goghtanik, Artabuynk, Shatin, and Hors. Yeghegis offers a blend of cultural exploration and natural beauty. Attractions include ancient churches, monastic complexes, mountain biking and hiking trails, and free ride skiing opportunities. The population of target settlements is 6,431 people.

<sup>&</sup>lt;sup>14</sup> Source of data: <a href="https://armstat.am/en/?nid=111">https://armstat.am/en/?nid=111</a>

#### **Tavush Marz and Dilijan Cluster**

Tavush marz is situated in the north-eastern part of the RoA. In the South-East and South the marz borders with Gegharqunik and Kotayk marzes, in the West it borders with Lori marz and Georgia, in the North and East – Azerbaijan. Tavush marz is extended on the external line of Small Caucasus mountain ranges (Virahayots, Gugarats and Miapor mountains). The marz is comparatively poor with useful minerals. Bentonite clay, limestone, lithographic stone, dolomite, felsites are of marz importance. Aghstev river valley is rich with mineral waters that are bottle filled as well. In 2022 the share of economy main branches of the RoA Tavush marz in total volume of correspondent branches of the country comprised:



Marz is pronounced agricultural districs of the RA. In animal husbandry the main branches are cow and pig breeding and in plant growing the most developed branches are grain and grape growing. Programs are implemented for recovering the orchards. During last year's beekeeping develops too. In recent years, the horticulture has a great development, by which the region has previously enjoyed a great reputation. In recent years, the fruit gardens have been established, dominated by figs and persimmon. The leading branch of the economy is the processing industry. The most prevalent are the food industry and woodworking. From the industrial production in the region, wines, preserves, pumps, stone and wood, as well as textile goods are imported from abroad.

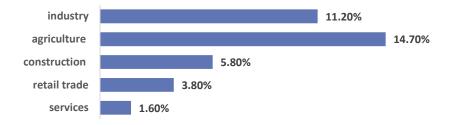
Dilijan is a community in Tavush Marz The enlarged Dilijan community includes the following settlements: Dilijan city, Haghartsin, Teghut, Gosh, Hovk, Aghavnavank and Khachrat villages. The resort town of Dilijan is located in the north-eastern part of the RoA in the valley of the Aghstev River, at an altitude of 1100-1510 meters above sea level, surrounded by the mountains of the Lesser Caucasus. The city is connected with the capital Yerevan (96 km), Vanadzor and Ijevan (35-40 km) by a well-maintained highway. Since 1986, it has been connected to the railway network of the Republic by railway (Dilijan-Yerevan section 144 km). Dilijan's health care resources are very close in their properties, and in some respects surpass the famous health resorts of Borjomi, Kislovodsk, Yesentuki and Pyatigorsk. At present, great efforts are being made to rehabilitate the city's reputation in the field of recreation, health rehabilitation and international tourism development.

Sharambeyan Street in the city center, has been preserved and maintained as the heart of Dilijan's old town, complete with craftsman's workshops, a gallery and a museum. Hiking, mountain biking, and picnicking are popular recreational activities. As of the 2011 census, Dilijan has a population of 17,712. Dilijan is currently the fastest-growing urban settlement in Armenia.

**Dilijan NP:** The forests of Dilijan cover an area of more than 34,000 hectares. For the enrichment of the natural life around Dilijan, the state forest reserve was founded in 1958 to become known as Dilijan NP later in 2002. Woods cover 94% of the park territory and with around 40 types of trees and 18 types of bushes, being mostly oaks, beeches, hornbeams, maples, elms, willows, etc.

#### **Ararat Marz and Dvin Cluster**

The Ararat marz is located in the Southwestern part of the RoA. The marz borders the Armavir marz from the NorthWest, Yerevan city and Kotayk marz from the North, Gegharkunik and Vayots dzor marz from the East, Azerbaijan from the South, and Turkey, across the state border from the South-West. Ararat marz is one of the economically developed marzes of the republic. In 2022 the share of economy main branches of the RA Ararat marz in total volume of correspondent branches of the country comprised.

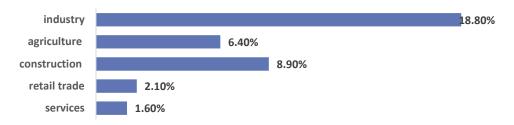


The basis of the economy is agriculture, which mainly specializes in viticulture, fruit growing and vegetable growing. Tourism resources also play a role in the development of the marz's economy.

**Dvin**: One of the historical capitals of Armenia . It was founded in the first half of the 4th century. The ruins of the medieval Dvin capital of Armenia are located in the territories of Verin Dvin, Hnaberd, Verin Artashat, Norashen, Aygestan villages, about 30 km south of Yerevan. The works planned by the project will be carried out in the administrative area of Hnaberd. Hnaberd village is located in Artashat Community of Ararat Marz of the RoA, about 5 km northeast of the Artashat town. Dvin as an old capital and an area of cultural value is attractive to tourists.

#### **Syunik Marz and Goris Cluster**

Syunik marz is situated in the south of the RoA. In the North the marz borders with Vayots Dzor marz, in the South it borders with Iran, from the West and from the East to Azerbaijan. Syunik marz of the RoA lays on the Zangezur nature area, which includes the basin of upper and average flows of the Vorotan, Voghch rivers and the eastern slopes of the Zangezur, which is the highest after the South Caucasus in the Caucasus mountain range. Syunik marz occupying strategic and geographic-political important position, having rich resources of natural raw materials, industrial big capacity and being one of the biggest administrative and economic regions of the republic, at the same time is remained as a one of not enough inhabited and economically developed marzes, which is connected with a big distance from the capital and lack of alternative modes of transport communication. In 2022 the share of economy main branches of the RA Syunik marz in total volume of correspondent branches of the country comprised



The most developed branches of economy are industry and agriculture. The main branches of marz industry are mining industry and production of electric energy. The prevailing part of electrical energy produced in the marz belongs to Vorotan hydro-electric station cascade. The agriculture of the marz is mainly specialized in plant growing (especially grains and potato growing) and livestock breeding (especially breeding of large and small cattle).

**Goris** – Being the second biggest town in Syunik Marz (as of the beginning of 2023 comprised 19.5 ths. person), it is situated in 236 km distance from Yerevan and 65 km from the marz center. The main branch of the economy is industry. Located in the valley of the river Goris (Vararakn) it is 235 km away from the capital Yerevan and 67 km from the regional center Kapan. The town has an average elevation of 1398 meters above sea level.

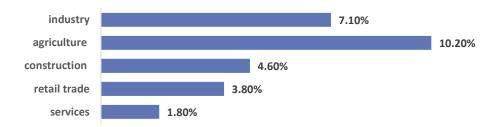
The river Goris is one of the largest left-bank tributaries of the Vorotan River. The length of the Goris River is 29 km, the drainage basin area is 146 km<sup>2</sup>. Throughout its history Goris has accumulated a large number of cultural heritage monuments: worship and defense structures, administrative, private and public buildings. The most valuable part of it is the Old town and the historical core of current the town center, where the unique architecture is harmoniously

related to the surrounding natural and urban landscape. The late 19th and early 20th century constructions in the town are highly ranked among the most valuable urban development history objects in Armenia.

The stone-pyramids of Old Kores located to the east of the modern town, is one of the most attractive sites in Goris. The old town is home to the 4th-century basilica of Surp Hripsimé. The basilica has been renovated during the 16th century. However, it was closed during the Soviet period until its major renovation in 2010. Finally, it was reopened for the public in October 2013.

#### **Shirak Marz and Gyumri Cluster**

Shirak marz is situated in the north-west of the Republic, with Gyumri marz center. In the West it borders with Turkey, in the North it borders with Georgia, in the East – Lori marz and in the South –Aragatsotn marz. The share of economy main branches of the RA Shirak marz in 2022 in total volume of correspondent branches of the country comprised:



The leading branches of industry of Shirak marz are production of food, including beverages and production of other non-metal mineral products. Tufa and pumice of Artik and Ani are well-known. Freight and passenger transportations in the marz are implemented by road transport. Shirak airport and Bavra customs post are located in the marz. The main railway and automobile highway connecting Armenia with Georgia pass through the marz territory. The railway and motor-road networks of Armenia and Turkey are connected here.

*Gyumri* – Shirak Marz center Gyumri town (110.8 ths. inhabitants as of the beginning of 2023) is situated in 118 km distance from Yerevan, the height above sea level is about 1 550 m. Gyumri is an urban municipal community and the second-largest city in Armenia, serving as the administrative center of Shirak Marz (Province) in the northwestern part of the country The city population being reduced to 121,976 as of the 2011 census. Gyumri town is known as the cultural hub of Armenia due to the many artists and craftsman who originated from the city. The city is also in particular notable for the large Kumayri historic district. The area was mentioned as Kumayri in the historic Urartian inscriptions dating back to the 8th century BC.

## **Biophysical Baseline of Target Cluster Communities**

#### Areni

Situated in the Vayots Dzor region, Areni village is positioned on both banks of the lower Arpa River. The village experiences a dry climate, but the majority of the land is irrigated using river water. Winters are moderately cold and relatively short, while springs are warm, lengthy, and humid. Summers are characterized by hot, dry weather that lasts for an extended period. Constant clear weather prevails. Autumns are warm with fewer cloudy days.

Natural habitats include semi desert, calcareous grasslands, and juniper woodlands alternated with cliffs, canyons, and rocky outcrops. Vicinity of Areni community have been considered as a Prime Butterfly Area, where a wide variety of rare butterflies, including Papilio alexanor, Colias chlorocoma, Colias aurorina, Pseudochazara schahrudensis, Tomares romanovi, Callophrys paulae, and a number of others can be observed. Also the area is interesting for bird observations, being inhabited by Egyptian Vulture, White-throated Robin, Eastern Rock Nuthatch, Black-headed Bunting, and number of other species.

Areni community is located in Dareleges floristic region which is the third in Armenia in the number of plant species: 1740. The floristic region is located between 900-3500m of elevation. Steppe, meadow and sparse forest,

sub-alpine and alpine meadows. The number of endemic plants is 38, the number of plant species registered in the Red Book is 98, according to "Convention on Biological Diversity" from the fifth national report of the RA, 2014.

Due to the variety of natural conditions, the fauna of the region is relatively rich. Due to its location, Vayots Dzor is a crossroads of the Mediterranean biogeographical region, Iranian, Asia Minor and Pontos-Caucasian biodiversity regions. 225 of the 460 species of animals registered in the RoA are spread here. Among them are the Bezoar goat, Armenian mountain sheep (mouflon), wild boar, brown bear, fox, wolf, rabbit, among birds - the common quail, partridge, vultures, eagles, and among fish species - the redwood, beglou, and coot. Both poisonous and safe snakes are often found, the most notable of which is the Armenian viper living in the mountains, which is registered in the "Red Book" of animals of Armenia.

## Dilijan

Dilijan town is located in the western part of the valley of Aghstev River, 96km far from Yerevan. The town is located at the elevation of 1250-1500m a.s.l. The main industrial sector is the processing industry with major role of food and mineral water production. The city area is covered with deep woody canyons, steep rocks and forests. The city area with its surroundings makes up Dilijan NP. The climate is specified by mild summer and mild winter. In winter the relative air humidity is maintained constantly. The average annual precipitation is up to 661mm and the average annual air temperature is +8.2°C. The absolute minimal temperature is -23°C, and absolute maximum is +38°C. The average thickness of snow cover in 10 days is 66cm, soil frost depth 80cm.

The main water resource of Dilijan town is Aghstev River. Aghstev river is one of the big tributaries of Kur River and flows into the latter from the right bank. The total river basin area is 1270km², the length is 106km. The average inclination of the river is 16%, the avearge elevation of the basin is 950m, and the river network density coefficient is 0.78km/km². Aghstev River is a typical mountain river. The river has a mixed feeding though snow, rain and ground waters. The annual flow distribution of Aghstev River is characterized by strongly expressed, long lasting spring floods and constant low flows. The rise in water level during the spring floods starts in March and the low flow season starts in mid-July.

The flora is represented by Fagus orientalis Lipsky, Quergus iberica Stev., Carpinus betulus L., C. orientalis Mill type formations. Cereal multi-grass and meadow-steppe groups are found in the field parts. Rose-hip bushes are spread next to the forest flora in the rocky-bush parts. The main medical herbs are Hypericum perforatum L., Leonurus cardiaca L., Thymus kotschyanus Boiss. Et Hohen., Equisetum arvense L., etc.

The vertebrates include forest cat, highbred deer, squirrel, and European Roe Deer. Mammal fauna includes brown bear, wild boar, wolf, fox and marten. Reptiles are wide spread. The forest is reach with birds – tomtits, chaffinches, bullfinches. The feathery predators include owls, eagle owls, and common buzzards. Invertebrates include rainworms, ants, bees, locusts, crickets, grasshoppers, woodlice, large blue butterflies, mosquitos, flies and shrimps.

Due to the geographical position of the region, the irregularity of the relief, different locations of slopes, interaction of floristic regions it is known for its rich landscape- and bio-diversity. In order to preserve this diversity, Dilijan State Park was established as a special nature protection zone.

#### Dvin

The climate in the Ararat Plain is strongly continental. The average annual air temperature varies from -27°C (Aragats) to +11.9°C (Ararat). The spring is short and warm. The temperature in April is +4 to +12°C. The autumn is also warm but the number of rainy and cloudy days is greater. The temperature in October varies between +6° to +14°C. The annual sunshine period is 2,680 hr or 360 hr per month in summer and 60-100 hr per month in winter. The hot and dry weather prevails during 5-6 summer months. Precipitation in summer is 220-235 mm, relative air humidity 30% and sometimes down to 5%. The winter is moderately cold with limited snow cover. It lasts from the beginning of December until the first week of March. The number of days with snowmelt is very high in some years (15-16 days per month). The area is mainly a desert area with specific holophilic plants - Salsola ericoides Bieb; S. denderoides Pall; S. nitraria Pall; Halocnemum strobilum (Pall.) Bieb with some participation of gypsophilous plants - Salsola canan C. Koch; S. tomentosa (Moq.) Spach; S. gemmascens Pall.; Gypsophila aretioides Boiis.; Halanthium rarifolium C. Koch; Cephalorrhynchus takhtadzhianii (Sosn.) Kirp and psamophilious plants - Calligonum polygonoides L.; Achillea tenuifoliaLam.; Salsola tamamschjanae lljin; Stipagrostis plumose (L.) Munro ex T. Anders.; Astragalus paradoxus Bunge. The fauna of the area is typical for the dry, continental semi-desert zone. Meanwhile some animal species occur almost in all landscape zones due to their ecological elasticity. The following animals are

characteristic for this region: wild boar, reed cat, nutria, jackal, hare, bobcat, he-sheep, Beozarian goat, brown bear. The most common among birds are the blue pigeon and partridge. From reptiles and amphibians the Mediterranean turtle, lebetina viper, and from non-vertebrates the grape snail. Araks River is the wild boar's habitat. Hunting of this animal is permitted in this region. The following species registered in the Armenian Red Book occur in the mountainous zone of this region: From mammals - Armenian moufflon (Ovis orientalis ssp. Gmelinii Blyth), Caucasean otter (Lutra lutra L.), manul (Otocolobus manul Pall), small horseshoe-nosed bat Rhinolophus hipposideros Bechstein.

#### **Yeghegis**

Among the representatives of fauna invertebrates comprise about 1900 species. Among the most studied taxonomic groups are mollusks (Mollusca), insects - beetles (Coleoptera), orthowings (Orhtoptera) and butterflies (Lepidoptera-Rhopalocera). The observed area is rich in mammals, various wild animals and birds. Among the representatives of the animal world, in these habitats there are birds specific to the habitats, insects - beetles and butterflies, etc. Wild boar, bear, hare, fox, wolf, greyhound, ibex, deer, partridge, quail, etc. are found in mountainous and subalpine zones. There are frogs, toads, and lizards in the areas near the rivers.

#### Goris

Goris has a temperate climate, with mild winters. The average annual temperature is  $8.4^{\circ}$ C. The amplitude is  $16.9^{\circ}$ C. The absolute minimum temperature is  $-27^{\circ}$ C, and the absolute maximum is  $33^{\circ}$ C. The number of days with temperatures higher than  $25^{\circ}$ C is 59, and the number of days with temperatures below  $-10^{\circ}$ C is 69. The average annual absolute air humidity is 8.6 GPa (gigapascal), and the relative humidity is 69%. It may decrease to 39%, for example, in summer at noon, and for 7-8 days per year it may even go below 30%. Average annual precipitation is 709 mm, and the maximum rate is observed in May, when it is 104 mm. The average annual wind speed is 1.7 m/s. Heavy winds ( $\ge 15$  m/s) in Goris are observed on average 15 days per year, but can sometimes be up to 33 days.

There are no protected areas in Goris, and some natural areas close to the city are in danger. Some are in threat of deforestation, while pastures are affected by overgrazing. This phenomenon reduces the usefulness, productivity, and biodiversity of the land, and is one cause of desertification and erosion, since it occurs when pastures are exposed to intensive grazing or sufficient recovery periods are not respected.

#### Gyumri

Gyumri is located on the north-western part of Armenia, on the left bank of the Akhuryan River, in the central part of the Shirak Highland, at an altitude of 1475-1605. Gyumri city is about 120 km away from the capital Yerevan. The city has a geographically convenient location, which stretches across Cherkese, Jajur and other canyons. The relief is plain, covered with lake alluvial and volcanic-sedimentary formations with a depth of about 350 m. The total area of the city is 4429 hectares. Gyumri annually gets 2500 hours of solar light and heat. There are a large number of full-flowing spring sources with the total combined capacity of approximately 1700 l/s. Shirak Region is the coldest region of Armenia. One of the main factors of climate formation is the northern and north-western air currents that contribute to the formation of cold weather. The area is in a climate zone where the average temperature in January varies from -5° C to -12°C. The winter is cold, stable and with long-lasting snow cover. Sometimes in winter there are strong frosts when the air temperature reaches -41°C. The summer is short, cool and humid with a variable weather. The average summer temperature in July is 16°C. The annual precipitation is 500-550 mm; the thickness of snow cover reaches 61cm, the soil freezing depth up to 110 cm. The average wind speed is 3.0-6.0m/s and the eastern winds dominate. From geomorphological viewpoint the investigated area is located within the boundaries of the eroded weathered slopes and the southern highlands (plateau).

The program area is located in the floristic territory of Shirak Region. The flora is very diverse in Shirak Region; In Shirak Region there are about 40 rare and endangered plant species registered in the Red Book of Armenia. The area vegetation belongs mainly to steppe type; Robinia, Acer, f.oxycarpa and other tree species grow in the river valleys. The mountain steppe black soil lands prevail with the spread of motley grass and gramineous plants. The formation of various gramineous plants is met. At present, the forest vegetation in floristic zone of Shirak Region is absent. The non-forested lands were previously covered with forests, the evidence of which is the presence of shrub scrub. The following types are met in the subproject territory: Populus, Robinia, Acer, Morus, Armeniaca, Crataegus, Pyrus salicifolia, Fraxsinus excelsior, F.oxycarpa, Spiraea crenata, Berberis orientalis, Cotoneaster integerrima, Lonicera iberica, Ephedra procera, Jasminum fruticans, Ulmus, Prunus, Elaeagnus, Salix, Rosa.

Shirak Region also has some rare species of animals and birds. The establishment of "Lake Arpi" NP was of great importance for the conservation of rare plant species, animal species and bird species. In the described area, the Fauna is represented by steppe, high-mountainous widespread animal species. It is represented by the reproduction of domestic animal and birds. From amphibians and reptiles toads, frogs, lizards and many types of snakes are met here. Widespread animal species are found here, for example mammals: Lepus europaeus, Canis lupus and other rodents. There are no ecologically vulnerable or specially protected areas in the project area.

Gyumri city is rich with historical-cultural and archaeological monuments. The churches revealing the architectural character of the city are Holy Savior's Church, Cathedral of the Holy Mother of God, St. Nshan, the Russian chapel, two Orthodox churches located in the military station. The central part of the city, with its historical-architectural and archaeological monuments, as well as the Akhuryan Canyon, as a place of preservation of the natural landscape, is involved in the boundaries of "Kumayri" State Historical Architectural Reserve Museum.

#### Jermuk

Jermuk is situated in the southeastern part of Armenia in the Vayots Dzor Province. It lies within the Armenian Highlands, at elevations between 2,080 and 2,100 meters. The area is characterized by volcanic activity, with a landscape shaped by lava flows, basalt formations, and mineral-rich springs. The geological composition includes tuff, limestone, and other volcanic rocks, providing fertile soil and influencing the mineral content of springs. Jermuk experiences a humid continental climate with mountainous influences, which creates significant seasonal temperature variations. Winters are cold and snowy, with temperatures averaging -10°C in January, while summers are mild, with average temperatures around 20°C in July. Annual precipitation is about 600-800 mm, contributing to river flows and the lush greenery surrounding the town. The Arpa River flows through the region, providing water resources and habitat for local species. The area is famous for its mineral springs, rich in carbonates, which have medicinal and economic importance. Jermuk's mineral water is a crucial resource, renowned for its therapeutic properties. It is used in the local spa and wellness industry and bottled for commercial distribution. Predominantly volcanic soils with high mineral content, contribute to agriculture potential for specific crops. The region's flora includes mountain steppe and alpine vegetation. Forests contain oak, beech, pine, and juniper, which provide a habitat for various animal species and play an essential role in erosion control. Unique plant species like Jermuk thyme thrive due to the mineral-rich soils and specific climate, adding ecological and medicinal value. The forests and river valleys support diverse wildlife, including Armenian mouflon (wild sheep), Caucasian leopard, fox, bear, lynx, and various bird species, like the golden eagle. These species benefit from conservation efforts in the region. Some species are protected under Armenian and international law, given Jermuk's proximity to important ecological zones and its role in regional biodiversity. Known for its resorts and mineral baths, Jermuk is a key tourist destination.

# Appendix 2

# **E&S Screening and Classification of Sub-projects**

# **E&S** impact identification

N	Screening Checklist	Yes	No	Explain
1.	long-term and/or irreversible environmental impacts and/or impacts spreading beyond the sub-project site?			
2.	Is there a need for conducting field surveys, laboratory tests, or other in-depth research for obtaining additional information and/or verifying/updating existing information in order to clarify the nature and scope of expected risks?			
3.	Is sub-project site located in proximity to a designated natural protected area?			
4.	Is sub-project likely to affect natural habitats, or ecosystems that are critical, fragile, or carry distinguished aesthetic/recreational value?			
5.	Will the subproject require the preparation of a standalone BMP?			
6.	Will the subproject involve replanting, vegetation, and nature-based solutions requiring the selection of species?			
7.	Have local communities been involved in formulation of sub-project concept? Did they bring up any environmental issues that may influence implementation of sub-project or result from its implementation?			
8.	Is the information related to the affiliation, ownership and land use status of the sub-project site available and verifiable? (The screening cannot be completed until this is available)			
9.	Will the sub-project reduce other people's access to their economic resources, such as land, pasture, water, public services or other resources that they depend on?			
10	Will the sub-project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?			
11.	Will the sub-project result in the temporary or permanent loss of crops, fruit trees and household infrastructure (such as ancillary facilities, fence, canal, granaries, outside toilets and kitchens, etc.)?			
12.	Will the sub-project require works near or inside of any historical, archaeological or cultural heritage site?			
13.	Will the sub-project require works on the Aghstev River, and is the scope of works aligned with the permitted			

	activities as per the requirements of OP 7.50?				
14.	Will the sub-project will require the management of medical waste?				
measur	wer to questions 7-9 is "Yes", then ESS5 Involuntary Rees should follow ESS5 and the Resettlement <b>Framework CA</b> wer to question 10 is "Yes", then ESS8 <b>Cultural Heritage</b> is handled in accordance with the relevant procedures proving	<b>TEGOR</b> s applic	ization cable and	AND CONCL	USION.
CATEG	DRIZATION AND CONCLUSION				
1. 2.	Sub-project is declined Sub-project is accepted				
Sub-pro	eject preparation requires:				
1.	Completion of the Environmental Management Checklist E	SMP			
	for Small Construction and Rehabilitation Activities				
2.	Conduct of Environmental and Social Review, including Social Management Plan	develo	pment	of an Enviro	nmental and

preparation of an Environmental and Social Management Plan

# Appendix 3

# Eligibility Assessment of Public-Private Infrastructure Investments

Indicator	Significant potential impact	Low potential impact			
Type of Private Business	Industrial facility, power generation, natural resource extraction	Small to medium scale hospitality and tourist service, agro-processing, arts and crafts			
	Check one of the two boxes below				
Need for land take	Parties other than investor own and/or are formally or informally using land required for private investment	No party other than investor owns and/or uses formally or informally land required for private investment			
	Check one of the two boxes below				
Location in or near:	Designated protected areas and wildlife corridors connecting them, forests, wetlands, animal nesting/breeding areas, rest areas for migratory birds, steep slopes, alpine and subalpine zone, greenfields	Urban or rural landscapes transformed from the past anthropogenic impact, industrial sites, brown-fields			
	Check one of the two boxes below				
Use or potential pollution of:	Major rivers and river floodplains, trans-boundary water bodies and their tributaries, lakes, smaller water bodies which have high value for local communities or biodiversity	Small rivers and streams, artificial reservoirs and ponds insignificant for local communities and/or biodiversity			
	Check one of the two boxes below				
Groundwater resources in the investment	Deposits of mineral and/or thermal water; high groundwater table	No known deposits of mineral and/or thermal water; regular groundwater table			
site:	Check on of the two boxes below				
Location in:	Landscapes of outstanding aesthetic value, green-fields, recreational areas	•			
	Check one of the two boxes below				
Risk of natural disasters and geohazards	Severe erosion, landslides, avalanches, floods known to repeatedly occur in/around the site	No natural disasters and geohazards recorded repeatedly in or around the site			

	Check one of the two boxes below				
Investment site carrying:	Historic/cultural monuments, sites of communities' traditional use (religious, burial, ritual)	No cultural resources			
	Check one of the two boxes below				

If any of the indicators is checks as "significant", the private investment is not eligible for support with matching public infrastructure

## **Appendix 4**

## Outline of Environmental and Social Review (ESR) of Sub-project

- Sub-project description
- Description of biophysical and social environment in and around sub-project site
- Expected environmental and social impacts (at the construction and operation phases)
- Measures for mitigating negative environmental and social impacts (at the construction and operation phases)
- Legal and administrative set—up regulating sub-project approval and implementation
- Environmental and Social Impact Mitigation Plan

Activity	Expected impact	Mitigation measure	Cost of mitigation	Responsibility for mitigation	Responsibility for monitoring
CONSTRUCT	ION PHASE				
1.					
n.					
OPERATION	PHASE				
1.					
n.					

• Environmental and Social Monitoring Plan

	What	Where	How	When	Why	Who
Activity	(Is the parameter to be monitored?)	(Is the parameter to be monitored?)	(Is the parameter to be monitored?)	(Define the frequency / or continuous?)	(Is the parameter to be monitored?)	(Is responsible for monitoring?)
CONSTRU	CTION PHASE					
1.						
n.						
OPERATIO	OPERATION PHASE					
1.						
n.						

## Appendix 5 Indicative Outline of ESMP

#### 1. Introduction

#### 1.1 Background of Project Area

This section provides an overview of the geographic, environmental, and socio-economic context of the project area, including its significance to the region and its relevance to the project's objectives.

#### 1.2 Description of Project and its Activities

Here, the project's goals, activities, expected outcomes, and key stakeholders involved in the project will be described.

#### 1.3 Scope of ESMP

This section outlines the boundaries of the ESMP, identifying the areas, processes, and impacts that will be monitored and managed throughout the project lifecycle.

#### 1.4 Objectives of ESMP

This part defines the specific goals of the ESMP, including how it aims to mitigate negative environmental and social impacts, enhance positive effects, and ensure compliance with relevant regulations.

## 2. Project Principles and Procedures

## 2.1 Sub-Project Implementation Modality

Description of how the sub-projects will be implemented, including organizational structure, roles and responsibilities, and coordination mechanisms.

## 2.2 Desk Review

Explanation of the process of reviewing existing documentation, studies, and data to identify key environmental and social issues.

#### 2.3 Consultation Meeting and Field Visit

Details about the consultation meetings with local communities and stakeholders, as well as the field visits to assess the project's potential impacts.

#### 2.4 Documentation and Approval Process

Outline of the process for documenting findings, obtaining approvals, and ensuring transparency throughout the planning and implementation phases.

#### 2.5 Dissemination and Disclosure

A description of how information will be shared with stakeholders and the public, ensuring transparency and accountability.

## 3. Description of Baseline Situation in Project Area

#### 3.1 Physical Environment

- **Climatic and Weather Conditions**: Information on average temperature, rainfall, and seasonal patterns in the project area.
- Accessibility: Details on road networks, transportation infrastructure, and any challenges in reaching the project site.
- **Natural Resources**: Information on local water sources, flood-prone areas, natural disaster risks like landslides.
- Waste Management: Current practices related to solid waste disposal, wastewater management.
- **Infrastructure Development**: Current infrastructure and trends regarding growth or decline in the local infrastructure.
- Health, Sanitation & Safety: Health issues, sanitation facilities, and safety considerations.
- **Drainage sytem:** Current state of the drainage system in the project area, its capacity to handle runoff, and any related issues.
- **Trails and their Characteristics**: Key trails or transportation routes, including pedestrian paths, for accessing the area.
- Chemical Usage: Patterns of chemical fertilizer and pesticide use in the area.

#### 3.2 Biological Environment

- **Flora and Fauna**: Description of the local plant and animal species, especially any rare or endangered ones.
- **Natural Habitat and Community**: Discussion on the ecosystems, local habitats, and any communities dependent on them.
- Forests and Resources: Identification of nearby forests or resources critical to local livelihoods.
- **Ecologically Sensitive Areas**: Identification of wetland areas, wildlife breeding centers, and other protected or sensitive locations.
- Other Issues: Any specific biological concerns related to the project.

#### 3.3 Socio-Economic and Cultural Environment

- **Social and Cultural Setting**: highlighting the community structure, cultural heritage, social dynamics, and potential impacts of the project.
- Commercialization and Cropping Patterns: Description of the local economy, including farming practices and market accessibility.
- **Beneficiary Household Information**: Characteristics of households benefiting from the project and impact on local resources the locals depend on.
- **Vulnerable Households**: Identification of vulnerable groups women, children, disabled or those economically disadvantaged.
- Resettlement and Relocation: Issues around resettlement, relocation of people, if applicable.
- Health Hazards: Information on prevalent diseases, health concerns, and local healthcare access.

4. Environmental and Social (E&S) Impact Assessment and Mitigation Management **Plan** A comprehensive evaluation of potential environmental and social impacts, with a checklist (the Indicative Risk and impact checklist is presented below) to assess risks and a plan for mitigating negative outcomes (indicative Mitigation management plan is presented below).

#### 5. E&S Monitoring and Reporting Mechanism and Plan

This section describes how the environmental and social impacts will be monitored throughout the project, including the frequency of reporting, key indicators, and responsible parties.

#### 6. Capacity Development and Training for Subproject Implementation

Details on how stakeholders will be trained, including supervision staff, and contractors, to effectively implement the ESMP.

### 7. E&S Mitigation and Monitoring Cost

A breakdown of the costs involved in mitigating environmental and social impacts and the budget for monitoring activities.

#### 8. Grievance Redress Mechanism

Explanation of the process for handling complaints or grievances related to the environmental or social impacts of the project.

#### 9. Conclusions and Recommendations

A summary of the findings, key risks, and recommended actions to ensure the success of the ESMP.

#### 10. Appendices

Supporting documents, maps, data, permits and any other relevant information.

### **RISK AND IMPACT CHECKLIST**

ENVIRONMENTA	AL /SOCIAL SCREENING		
	Activity/Issue	Status	Triggered Actions
	A. Building rehabilitation	[] Yes [] No	See Section <b>A</b> below
	B. New construction	[] Yes [] No	See Section <b>A</b> below
	C. Individual wastewater treatment system	[]Yes []No	See Section <b>B</b> below
	<b>D.</b> Historic building(s) and districts	[] Yes [] No	See Section <b>C</b> below
	E. Acquisition of land <sup>15</sup>	[] Yes [] No	See Section <b>D</b> below
Will the site activity	<b>F.</b> Hazardous or toxic materials <sup>16</sup>	[] Yes [] No	See Section <b>E</b> below
include/involve any of the	<b>G.</b> Impacts on forests and/or protected areas	[]Yes []No	See Section <b>F</b> below
following?	H. Handling / management of medical waste	[]Yes []No	See Section <b>G</b> below
	I. Traffic and Pedestrian Safety	[] Yes [] No	See Section <b>H</b> below
	J. Erosion Control	[] Yes [] No	See Section J below
	K. Protection of Water Bodies	[] Yes [] No	See Section K below
	L. Risk of unexploded ordinance (UXO)	[]Yes []No	See Section L below
	M. Social Risk Management	[] Yes [] No	See Section M below

<sup>&</sup>lt;sup>15</sup> Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

16 Toxic / hazardous material includes but is not limited to ACM, toxic paints, noxious solvents, removal of lead paint, etc.

### INDICATIVE MITIGATION MANAGEMENT PLAN

ACTIVITY	PARAMETER		MITIGATION MEASURES (provide costs where applicable)
<b>0</b> . General Conditions	Notification and V Safety	Vorker	(a) The local construction and environment inspectorates and communities have been notified of upcoming activities
			(b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)
			(c) All legally required permits have been acquired for construction and/or rehabilitation
			(d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.
			(e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)
			(f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
<b>A.</b> General Rehabilitation and /or Construction	Air Quality		(a) During interior demolition debris-chutes shall be used above the first floor
Activities			(b) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust
			(c) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site
			(d) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust
			(e) There will be no open burning of construction / waste material at the site
			(f) There will be no excessive idling of construction vehicles at sites
	Noise		(a) Construction noise will be limited to restricted times agreed to in the permit
			(b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible
	Water Quality		(a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.

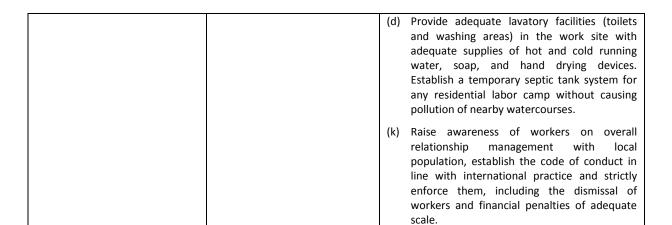
	Waste Management	(b)	Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities.
		(c)	Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.
		(d)	Construction waste will be collected and disposed properly by licensed collectors
		(e)	The records of waste disposal will be maintained as proof for proper management as designed.
		(f)	Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except ACM)
B. Individual wastewater treatment system	Water Quality		<ul> <li>(a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities</li> <li>(b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment</li> <li>(c) Monitoring of new wastewater systems (before/after) will be carried out</li> <li>(d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.</li> </ul>
C. Historic building(s)	Cultural Heritage	(a)	If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notification shall be made and approvals/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national legislation.
		(b)	It shall be ensured that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified to account for such finds.
<b>D</b> . Acquisition of land	Land Acquisition Plan/Framework	(a)	If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank's Task Team Leader shall be immediately consulted.
		(b)	The approved Land Acquisition Plan/Framework (if required by the project)

			will be implemented
E. Hazardous Materials	ACM management	(a)	If ACM is located on the project site, it shall be marked clearly as hazardous material
		(b)	When possible the ACM will be appropriately contained and sealed to minimize exposure
		(c)	The ACM prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust
		(d)	ACM will be handled and disposed by skilled & experienced professionals
		(e)	If ACM is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately. Security measures will be taken against unauthorized removal from the site.
		(f)	The final disposal site will be concreted to provide an additional protective layer and will be coordinated with local authorities.
		(g)	The removed ACM will not be reused.
	Toxic / hazardous waste management	(a)	Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information
		(b)	The containers of hazardous substances shall be placed in an leak-proof container to prevent spillage and leaching
		(c)	The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.
		(d)	Paints with toxic ingredients or solvents or lead-based paints will not be used.
<b>F</b> . Affected forests, wetlands and/or protected areas	Protection measures	(a)	All recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.
		(b)	A survey and an inventory shall be made of large trees in the vicinity of the construction activity, large trees shall be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided.
		(c)	Vegetation to be cleared shall be surveyed for species types, and any species listed in the Red List shall be avoided.
		(d)	Adjacent wetlands and streams shall be protected from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences

		(e) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.
G. Impact on biodiversity	Flora	<ul> <li>(a) Minimize impacts on plants by planning and undertaking bulk of earth works beyond the active period of vegetation (in case if civil works are to be done within or near to the natural landscapes);</li> <li>(b) Strictly control clearance of vegetation along the renovated lines alignment to prevent impacts beyond the designated corridor.</li> <li>(c) Vegetation to be cleared shall be surveyed for species types, and any species listed in the Red List shall be avoided.</li> <li>(d) The long-term maintenance and survival measures for the selected species shall be envisaged and evaluated under the project design.</li> </ul>
	Fauna	<ul> <li>(e) Limit disruption of habitats by confining construction activities to the narrow corridor along the pipeline alignment. Disallow movement of vehicles/machinery, and placement of construction materials/waste carelessly over an excessively broad area around the project site.</li> <li>(f) A schedule of earth works should be developed to prevent the implementation of earth works during hibernation and reproduction of animals.</li> </ul>
H. Disposal of medical waste	Medical waste management	<ul> <li>(a) In compliance with national regulations the contractor will insure that during the rehabilitation of health care facility ("Gulbenkian building") the measures for medical waste handling and disposal are in place; this includes and not limited to:         <ul> <li>Special facilities for segregated healthcare waste (including soiled instruments "sharps", and human tissue or fluids) from other waste disposal; and</li> <li>Appropriate storage facilities for medical waste are in place; and</li> <li>If the activity includes treatment, appropriate disposal options must be in place, including arrangements with a relevant entity licensed for medical waste treatment.</li> </ul> </li> </ul>
I. Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	(a) In compliance with national regulations the contractor will ensure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to:
		<ul> <li>Signposting, warning signs, barriers and traffic diversions: site will be clearly visible, and the public warned of all potential hazards</li> <li>Traffic management system and staff training,</li> </ul>

		l	especially for site access and near-site heavy
			especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes.
		•	Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement
		•	Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public.
		•	Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.
J. Erosion Control		(b) (c) (d)	Slope protection provided through bank compaction, rip-rapping on critical sections, or vegetative stabilization.  Topsoil remove and stored aside for later use in site restoration  Excess material used for restoration of degraded areas
K. Protection of Aghstev River	Turbidity	(h)	Sediment traps set up along rivers and/or gabions along banks to filter out eroded sediments
		(i)	Erosion control measures applied as provided above
	Pollution	(e)	Vehicle and machinery servicing prohibited in the immediate proximity to water body
		(f)	Servicing and fueling of vehicles and machinery limited to an allocated site with non-permeable floor and capacity to contain spills if occurred.
		(g)	Arrangements made with licensed companies, as available, for removal and recycling/deactivation of used oils and sand/gravel saturated with oil products.
		(h)	Prohibit the disposal of construction waste, chemicals, or hazardous materials into the river.
		(i)	Nature-based solutions for flood risk management should use native species and be implemented in agreement with and coordination with local authorities and regulatory bodies.
		(j)	Avoid the introduction of invasive plant species during restoration works.
		(k)	Minimize construction in sensitive areas by selecting appropriate bridge locations.
		(1)	Use construction techniques that limit disturbance to aquatic habitats and

			surrounding landscape.
L.	Risk of unexploded ordinance (UXO)	Hazard to human H&S	Before start of any excavation works, the Contractor will verify that the construction area has been checked and cleared regarding UXO by the appropriate authorities.
M.	Social Risk Management	Public relationship management	<ul><li>(a) Assign local liaison person who is in charge of communication with and receiving requests / complaints from local population.</li></ul>
			(b) Introduce GRM and maintain a GRM log in all affected communities and construction sites.
			(c) Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people.
			(d) Raise local community awareness about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities.
			(e) Scheduled works beyond irrigation season to the extent possible in order to avoid/minimize service disruption. Inform local population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.
			(f) Limit construction activities at night. When necessary, carefully schedule night work and inform affected community beforehand.
			(g) Properly mark and fence work site.
			(h) No temporary storage of construction materials and waste occurs within cultivated land plots or any type of private property.
			<ul> <li>(i) Allocate areas for temporary storage of construction materials and waste so that free movement of traffic and pedestrians is not hindered.</li> </ul>
			<ul><li>(j) Accidental damages by the Contractor are restored/recovered.</li></ul>
		Labor management	(a) To the extent possible, do not locate work camps in close proximity to local communities.
			(b) Locate and operate workers' camps in consultation with neighboring communities.
			(c) Recruit unskilled or semi-skilled workers from local communities to the extent possible including women. Where and when feasible, worker skills training, should be provided to enhance participation of local people.



## **ESMP INDICATIVE MONITORING PLAN**

Activity	What  (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How  (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why  (Is the parameter being monitored?)	Who (Is responsible for monitoring? )	
CONSTRUCT	TION PHASE						
1.							
2.							
n.							
OPERATION	OPERATION PHASE						
1.							
2.							
n.							

## Field Environmental and Social Monitoring Form

Sub-project number and title					
Municipality, community					
Name of supervisor					
Name of works contractor					
Date of site visit					
Status of civil works					
Documents and activities to be examined	Status				Comments
	Yes	Partially	No	N/A	
Contractor holds license for extraction of natural resources					
Contractor holds permit for operating concrete/asphalt plant					
Contractor holds agreement for final disposal of waste					
Contractor holds agreement with service provider for removal of household waste from site					
Work site is fenced and warning signs installed					
Works do not impede pedestrian access and motor traffic, or temporary alternative access is provided					
Working hours are observed					

	1	1	
Construction machinery and equipment is in standard technical condition (no excessive exhaust and noise, no leakage of fuels and lubricants)			
Construction materials and waste are transported under the covered hood			
Construction site is watered in case of excessively dusty works			
Contractor's camp or work base is fenced; sites for temporary storage of waste and for vehicle/equipment servicing are designated			
Contractor's camp is supplied with water and sanitation is provided			
Contractor's camp or work base is equipped with first medical aid and fire-fighting kits			
Workers wear uniforms and protective gear adequate for technological processes (gloves, helmets, respirators, eye-glasses, etc.)			
Servicing and fuelling of vehicles and machinery is undertaken on an impermeable surface in a confined space which can contain operational and emergency spills			

Vehicles and machinery are washed away from natural water bodies in the way preventing direct discharge of runoff into the water bodies		
Construction waste is being disposed exclusively in the designated locations		
Extraction of natural construction material takes place strictly under conditions specified in the license		
Excess material and topsoil generated from soil excavation are stored separately and used for backfilling / site reinstatement as required		
Works taken on hold if chance find encountered and communication made to the State agencies responsible for cultural heritage preservation		
Upon completion of physical activity on site, the site and contractor's camp/base cleared of any remaining left-over from works and harmonized with surrounding landscape		
Grievance redress information available and accessible to project community (billboards, brochures, etc.)		
Grievance log maintained; summary of grievances		
Accidental damages caused by contractor have been restored		
In the event of land acquisition/resettlement impacts, compensation delivered before start of construction works		

## **Indicative Cost for ESMF Implementation**

Activity	Indicative Cost (USD)	Remarks
Stakeholder Consultation and Engagement for ESMF	-	The associated cost is included in the SEP budget.
Local EIAE and positive conclusion obtaining	-	3 of the 5 planned sub-projects already have a positive EIA conclusion, for the next 2 it is not mandatory according to national legislation.
Preparation of E&S instruments for each subproject by the Designer	2000	It includes ESMP document preparation for 5 subproject
Stakeholder engagement and public consultation on site-specific E&S instruments for the Subproject	-	The associated cost is included in the SEP budget.
Consultation and capacity building on site-specific ESMP for each subproject with the contractors procured.	-	The associated cost is included in the SEP budget.
Public consultation PC on the sub- project related E&S documents instruments	-	The associated cost is included in the SEP budget.
E&S mitigation measures for 5 subprojects within 18 months (e.g. PPE, site watering, fencing and site demarcation etc.)	122400	EHS measures accounted 3% of the total construction cost per subproject. The cost of specific measures will be determined and adjusted based on the finalized designs and incorporated into the overall construction cost.
Monthly monitoring by E&S specialists of ATDF	17000	Cost is calculated for 5 subproject within 18 month
Supervision monitoring and reporting	6000	Cost is calculated for 5 subproject within 18 month(Aghavnadzor, Dvin museum, Rehabilitation of waterfall in Jermuk, Dashtadem museum refurbishment, Goris (Sero Khanzadyan House-Museum)
Annual training and capacity building on ESHS for Project Contractors/Consultants staff	-	The associated cost is included in the SEP budget.
Waste transportation to the landfill	56100	The average cost for 5 subproject
Total Cost (USD)	203,500	The cost estimate is based on the procurement plan for the first 18 months after Project effectiveness for five subprojects.

## E&S mitigation plan matrix

<b>Project Phase</b>	E&S Risks/Impacts	Mitigation Measures	Monitoring Frequency	Responsible Entity
Pre- Construction		Conduct land acquisition and resettlement planning per Resettlement Framework (RF). Provide compensation and livelihood restoration where required.	Before construction	ATDF, Local Authorities
	Stakeholder engagement	Implement Stakeholder Engagement Plan (SEP), conduct public consultations, and disclose project information.	Before construction	ATDF, Community Representatives
Construction	Air pollution (dust, emissions from machinery)	Water sprinkling, regular maintenance of vehicles and machinery. Use lowemission construction equipment	Regularly	Contractors
	Water pollution (runoff, spills, sedimentation)	Proper storage of hazardous materials, use silt traps.	Weekly	Contractors
	Soil contamination (oil spills, hazardous waste)	Proper disposal of hazardous waste.	Weekly	Contractors
	Occupational Health and Safety (OHS)	Conduct regular site inspections.	Monthly	Contractors, ATDF
		Install signage, safety barriers, and traffic control measures around construction sites.	Weekly	Contractors
	Waste management	Implement site-specific Waste Management Plan (WMP), ensure proper disposal of construction waste.	Weekly	Contractors, ATDF
	Biodiversity and cultural heritage impacts	Follow Chance Find Procedure for cultural heritage, avoid sensitive ecological areas.	As needed	Contractors, ATDF, Ministry of Culture
Monitoring	Regular E&S	Conduct periodic	Bi-annually	ATDF, WB

<b>Project Phase</b>	E&S Risks/Impacts	Mitigation Measures	Monitoring Frequency	Responsible Entity
and Reporting	•	environmental and social performance assessments.		

Minutes of Public Consultation Meeting on Draft ESMF