ADAPTATION FUND

FULLY DEVELOPED PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Enhancing resilience of communities to climate change in Shirak Marz leveraging best practices of the pilot project implemented in Artik community
Country:	Republic of Armenia
Thematic Focal Area:	
Type of Implementing Entity:	National Implementing Entity
Implementing Entity:	"Environmental Project Implementation Unit" State Agency
Executing Entities:	"Environmental Project Implementation Unit" State Agency

Amount of Financing Requested: **4.472.630** (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ No ☐

Stage of Submission:

☒ This proposal has been submitted before including at a different stage (**concept**, fully-developed proposal)

☐ This is the first submission ever of the proposal at any stage

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

Project/Programme Background and Context:

Country overview

Armenia is a land-locked country within the Caucasus region between Europe and Asia. The majority of the country is at high altitude (greater than 1,000 meters above sea-level), including a freshwater Lake Sevan, with a surface area of 1,279 km^2 and the Seven River Basin with a surface area of 4,721 km^2, spans approximately one sixth of the nation's total land area. As of 2022, Armenia's population was estimated at 2.78 million people[1] and its GDP at $ 19.5 billion[2]. Around one third of the nation's population lives in its capital city, Yerevan[3].

Over the past decade, Armenia has transitioned from an industry-dominated to a service-dominated economy. As of 2016, the service sector constituted 48.8% of the labour force. Agriculture remains a major employer with a labour market share of 35.3% and there remains a relatively high rate of unemployment (18%) as well as net out-migration. GDP is distributed less evenly than employment, with around 52,8% originating in the service sector, 26,64% in the industry and only 11,34% in agriculture. Poverty persists, affecting around 26,5% (2021 data) of the population based on the national poverty line[4].

Climate baseline

Overview

Armenia's climate can be described as highland continental, with large variation between summer highs (June to August) and winter lows (December to February). The country also experiences large climatic contrasts because of its intricate terrain, and the climates range from arid to sub-tropical and to cold, high mountains. Summer highs in Armenia's capital Yerevan average around 30°C–33°C while the average in winter is 1°C–3°C. The more mountainous regions experience lower average temperatures and prolonged periods of snow cover. The average annual precipitation is low at 526 mm. Precipitation intensity is greater in Armenia's high-altitude regions with May and June the wettest months. For Armenia, altitude is the strongest controlling factor determining the spatial distribution of temperatures and precipitation in Armenia. Sub-zero average temperatures are common in Armenia's mountain ranges while its highest average temperatures are experienced in the relatively low-lying western plains. Similarly, Armenia's highest peaks may receive up to 1,000 mm of annual precipitation while precipitation can be as low as 200 mm in the western plains.

Due to the sharply intersected relief and the development of the slope processes, Armenia is characterized by active external processes. High frequency and magnitude of hazardous hydrometeorological phenomena (HHP) are characteristic for Armenia, which trigger droughts, landslides, mudslides, forest fires etc. and inflict significant losses to the population and the economy[5].

Key trends

Temperature - Armenia's NC4 reports that it experienced an average temperature rise of 1.23°C between 1929–2016. This historical rise in temperatures has resulted in the rapid shrinking of the glaciers in Armenia's mountain regions, with spatial extents retreating at around 8 m per year. Trends suggest climate variability is increasing and in 2018, Yerevan experienced a new record July

[1] World Bank data portal - Armenia
[2] World Bank data portal - Armenia
[3] Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC
[4] "Armenia – Country Risk Climate Profile", joint publication by World Bank and Asian Development Bank, 2021
[5] National Action Program of Adaptation to Climate Change and the List of Measures for 2021-2025

temperature, reaching 42°C.

Precipitation - Armenia's NC4 reported a 10% reduction in average annual precipitation volume was documented over the period 1935–2012. The spatial distribution of precipitation changes is irregular: the northeast and central regions have become more arid. However, precipitation has increased in the southern and northwestern regions and in the western region of the lake Sevan basin. Additionally, the number of days with heavy rainfall and hailstorms has increased.

Climate future

Temperature

The model ensemble's[6] estimate of average warming in Armenia under the highest emission pathway is an average temperature increase of 2.8°C by the 2050s and 5.8°C by the 2090s. Ensemble estimates of warming under the lowest emission pathway also present an average temperature increase of 1.2°C by the 2050s and maintain through the end of the century. Both of these temperature increases represent greater rates of increase than the global average. By the 2090s, temperatures are projected to have increased around 35% to 40% higher than the global average. Under all scenarios, except for the lowest emission pathway, the number of summer days is expected to increase, and the number of frost and ice days are expected to fall dramatically by the end of the century.

In the case of Armenia, the rate of warming in maximum temperatures, is 5.8°C by the 2090s, which is notably faster than the warming in monthly average temperature. This points towards an increase in the intensity of temperature extremes and is among the some of the largest margins of warming projected anywhere on Earth. The seasonality of future temperature changes holds some uncertainty on lower emissions pathways. However, projected warming is strongest in the summer months from June to September. The months of July, August, and September are projected to see around 50% faster warming than the winter months from November to April under the highest emissions pathway.

Precipitations

While considerable uncertainty surrounds long-term projections in regional precipitation trends, global trends are evident. The intensity of sub-daily extreme rainfall events appears to be increasing with temperature, a finding supported by evidence from different regions of Asia. However, as this phenomenon is highly dependent on local geographical contexts further research is required to constrain its impact in Armenia. For Armenia, additional uncertainty remains around future changes in average annual precipitation, as well as for changes in seasons. Model ensemble estimates are not statistically significant across all emissions pathways. However, the trend indicated, which is consistent with historical climate behavior and most models, is towards a decline in average monthly precipitation. Under all emissions pathways, an increase in the precipitation associated with a maximum 5-day rainfall event is expected more predominantly in the northern and eastern areas of Armenia. Under all emissions pathways, precipitation reductions are projected in the western regions, and under lower emissions pathways reductions are also expected in the arid northern regions. These changes match global trends, which suggests the intensity of sub-daily extreme rainfall will increase as temperatures increase, a finding supported by evidence from different regions of Asia.

Climate related natural hazards

[6] Climate projections referred are derived from datasets available through the WB's Climate Change Knowledge Portal. These datasets are processed outputs of simulations performed by multiple General Circulation Models (GCM).

Armenia faces significant disaster risk levels and is ranked 101 out of 191 countries by the 2019 Inform Risk Index. This ranking is driven strongly by the exposure component of risk. Armenia has high exposure to natural hazards, including, riverine, flash, and coastal, and very high exposure to tropical cyclones and their associated risks. Drought exposure is also significant. Disaster risk in Armenia is elevated due to its moderate levels of social vulnerability and the country's decent coping capacity. The risks of disasters resulting from these drivers are likely to increase as the severity and frequency of extreme climate event increases. In recent decades the annual number of events designated as hazardous hydro-meteorological phenomena (such as hurricanes, snowstorms, heat waves) has increased.

Heatwaves: Armenia regularly experiences high maximum temperatures, with an average monthly maximum of around 13.2°C and an average August maximum of 27.5°C. The current annual probability of a heat wave (defined as a period of 3 or more days where the daily temperature is above the long-term 95th percentile of daily mean temperature) is around 3%. The model ensemble projects that the annual probability of a heatwave could increase from 5% to 18% (depending on emission scenarios) by the end of the century. The country is also projected to experience a significant increase in the number of very hot days (Tmax > 35°C). However, these increases primarily reflect the continual rise in temperatures against the model baseline period of 1986–2005.

Droughts: two primary types of droughts may affect Armenia, meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region's wider river basins). When low hydrological flows also coincide with imperfect crop choices and land management practices, agricultural drought can also result. At present, Armenia faces a significant annual probability of severe meteorological drought, as defined by a standardized precipitation evaporation index of less than 2.

The 2001 drought highlighted the vulnerability of the rural poor to drought. Agencies working in the region reported more than 25,000 poor households affected, the majority of whom were dependent on local food production which was severely damaged by the drought. The model ensemble projects a dramatic increase in the annual probability of drought increasing from 20% to over 80% (depending on emission scenarios) by the 2090s. Global overview of changes in drought conditions under different warming scenarios supports extreme projections, suggesting that the West Asia region could experience a considerable increase in the frequency of extreme drought. Under 1.5°C of warming what is currently a 1-in-100-year event may return every 20 years, and under 2°C of warming such an event may recur every 10 years or less[7].

Extreme precipitation, flood and landslide: heavy rainfall events are known to trigger landslides and floods in rural areas of Armenia, often affecting poorer and more isolated rural communities. River levels in Armenia are particularly variable, and high flows often hit communities without forewarning, resulting in flood disasters. Flooding can result in damage to subsistence agriculture and increase the incidence of poverty and health issues. Floods also represent a risk to national economic productivity particularly when affecting the capital city, Yerevan. While most climate models project a small increase in the intensity of extreme precipitation events, uncertainty remains in precipitation projections and model ensemble estimates. The general shift in the seasonality of precipitation away from the summer months, combined with the projected loss of many of Armenia's glaciers will likely intensify extreme events and highlight a need for disaster risk reduction measures. However, research and development in the climate modelling arena is needed to support decision makers and planning

[7] Global Changes in Drought Conditions Under Different Levels of Warming, Naumann, G., Alfieri, L., Wyser, K., Mentaschi, L., Betts, R. A., Carrao, H., . . . Feyen, L. (2018).

efforts, specifically more reliable downscaled modelling and additional work will be needed in order to better understand and map rural exposure and vulnerability.

Climate change impacts

Natural resources

Water: uncertainty remains around the precise trajectory of future change in the availability of water resources in Armenia and river flows are expected to reduce dramatically. While vulnerability for basin and watersheds vary, under a "worst-case scenario", average decrease in river flow is estimated at 39% by the end of the century[8]. These changes would have a significant impact on the levels of Armenia's lakes and reservoirs, with implication for society potentially coming from the resulting damage to fish stocks and decline in water levels and water quality. However, caution should be applied as these projections are derived from a single climate scenario; other scenarios provide less consistent trends. More recent analysis of runoff from Caucasus Glaciers suggests a significant increase in the short-term (up to 2022) as melting intensifies, but near total loss of glaciers and glacial meltwater towards the end of the 21st century.

A likely impact of the loss of Armenia's mountain glaciers is an increase in variability of water flows as glaciers typically act to smooth runoff over the year. Water scarcity towards the end of summer (August, September) is likely to increase. Armenia has already experienced declines in annual precipitation and desertification has been documented around the nation, including in the Ararat Valley, an important agricultural production area[9]. More information is needed to understand the potential threat of a broader restructuring of the nation's ecosystems, particularly whether tipping points threaten the viability of current agricultural operations.

Soil and land cover: a key route through which climate change may lead to soil and land degradation is through its impact on soil moisture. With very large increases in the frequency and intensity of drought projected over Armenia, the potential for declines in soil quality are significant. The Caucasus region is among many regions where an expansion of the arid and semi-arid area is projected, with the affected area growing rapidly over the 21st century under higher emissions pathways. Such changes will reduce ecosystem productivity resulting in species range shifts, and potential loss of biodiversity.

Linked to issues of land degradation and drought are potential changes to Armenia's forest cover, Armenia's NC4 estimates a potential loss of 14,000–17,500 ha (around 3%–4%) by 2030 as a result of changes to ecosystems and growing conditions, as well as increased frequency of forest fire, pest and disease outbreaks, and invasive species. Armenia has already begun to enact adaptation and restoration plans to reduce deforestation through its National Forest Policy and Strategy, improved wildfire management policies and specific area action plans such as the City of Yerevan 5-Year Plan (2019–2023) to restore the city's buffer forest layer by 40 hectares. A general trend of species range shifts towards higher altitudes is expected and conversion of lower altitude land cover to arid forest types, steppe, and semi-desert. Armenia's National Strategy and Action Program to Combat Desertification was ratified in 2015 to increasing the effectiveness of land management, raising public awareness on desertification issues and their solutions, as well as international cooperation[10].

Economic Sectors

[8] Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC
[9] Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC
[10] National Strategy and Action Program to Combat Desertification in the Republic of Armenia

Agriculture

Climate change in Armenia is likely to influence food production via direct and indirect effects on crop growth processes. Direct effects include alterations to carbon dioxide availability, precipitation, and temperatures. Indirect effects include through impacts on water resource availability and seasonality, soil organic matter transformation, soil erosion, changes in pest and disease profiles, the arrival of invasive species, and decline in arable areas due to desertification. On an international level, these impacts are expected to damage key staple crop yields, even on lower emissions pathways. Projections estimate 5% and 6% declines in global wheat and maize yields respectively even if the Paris Climate Agreement is met and warming is limited to 1.5°C. Shifts in the optimal and viable spatial ranges of certain crops are also inevitable, though the extent and speed of those shifts remains dependent on the emissions pathway.

In some cases, changing temperature and rainfall patterns may be favorable for crop production. Under all scenarios of future climate change, the agricultural growing season could extend by 10–40 days in Armenia. However, this may also present challenges due to uncertainty and potential declines in future water resources. Armenia is already struggling with land degradation on most agricultural land; climate change could accelerate this degradation as temperatures rise and extreme weather events increase in frequency and severity. Temperature extremes are likely to result in sub-optimal growing conditions for many of Armenia's highest grossing crops, typically grains and vegetables. The increase in the number of very hot days (>35°C), even in the order of 5 days as projected for the low emissions pathway, is likely to damage yields for almost all crops grown in lowland areas of Armenia as well as for a majority of crops grown in intermediate and upland areas[11]. Studies have suggested pressure will be amplified by a potential doubling of the average water requirement of Armenia's crops as temperatures rise. As the glacier supply depletes, and its regulating effect on flows reduces, effective water storage and management infrastructure will grow in importance.

Armenia implemented sustainable agricultural development strategies to increase the unused arable land in rotation by approximately 10,000 hectares per annum in an effort to combat projected yield reductions[12]. Projections show that by the 2070s, potato crop yields will decrease by 21%, with the highest level of reduction expected in Shirak and Syunik marzes. The largest decline in the grape yields will be recorded in the Ararat Valley – by 20%[13]. At the same time the area of high productivity land is projected to shrink, with a 17% increase in less productive desert and meadow-steppe land. Agriculture, Forestry and Fisheries make up Armenia's lowest paid sector yet continue to employ over 30% of the population. These high levels of vulnerability, and risks in both slow and rapid onset hazards emphasize the serious risks climate change represents in Armenia, particularly under higher emissions pathways.

A further, and perhaps lesser appreciated influence of climate change on agricultural production is through its impact on the health and productivity of the labor force. Labor productivity during peak months has already dropped by 10% as a result of warming, and a decline of up to 20% might be expected by the 2050s under the highest emissions pathway. In combination, it is highly likely that the above processes will have a considerable impact on national food consumption patterns both through direct impacts on internal agricultural operations, and through impacts on the global supply chain. Without adaptation, the economic environment for smallholder agricultural operations is likely

[11] Building resilience to climate change in South Caucasus agriculture. World Bank
[12] Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020–2030
[13] Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC

to become increasingly hostile[14].

Urban and Energy

Research has established a reasonably well constrained relationship between heat stress and labor productivity, household consumption patterns, and (by proxy) household living standards. In general terms, the impact of an increase in temperature on these indicators depends on whether the temperature rise moves the ambient temperature closer to, or further away from, the optimum temperature range. The optimum range can vary depending on local conditions and adaptations. In Armenia, a general decline in productivity is expected due to high temperatures that are offset by a reduction in the frequency of extreme low temperatures. This trend can be measured in the change to the annual heating and cooling degree days. The full model ensemble projects an increase in the annual cooling requirement of around 1,000°C (degree days), versus a decline in the heating requirement of around 2,000°C (degree days). This points towards a potential net energy saving. Armenia's energy policy is focused on ensuring independence and increased security of the energy sector and promotion of the sustainable development of the energy sector based on efficient use of local primary (renewable) energy resources, further development of the nuclear energy sector, diversification of energy supply sources and introduction of energy efficient and advanced technologies. In the medium term, meeting increases in electricity demand, energy system reliability, and affordability of electricity services are important challenge to be addressed[15]. The country has begun to increasingly invest in the development of renewable energy sources and, more specifically, in recent years, electricity generation at photovoltaic (PV) solar plants, with a longer-term interest in further development of wind and nuclear energy.

The effects of temperature rise and heat stress in urban areas are increasingly compounded by the phenomenon of the Urban Heat Island (UHI) effect. Dark surfaces, residential and industrial sources of heat, an absence of vegetation, and air pollution can push temperatures higher than those of the rural surroundings, commonly anywhere in the range of 0.1°C–3°C in global mega-cities. As well as impacting on human health (see Communities) the temperature peaks that will result from combined UHI and climate change, as well as future urban expansion, are likely to damage the productivity of the service sector economy, both through direct impacts on labor productivity, but also through the additional costs of adaptation. The Armenian economy has great dependence on activity in its capital city, Yerevan, where around half of the nation's industrial production takes place. While the economy of the city is strong, and poverty rates comparatively low, the health risks of high temperatures require consideration. The 2018 heatwave, during which a new temperature record was set in Yerevan of 42°C, illustrated the strain that extreme climate events can place on the energy system, with technical faults and high demand putting strain on the energy system. Research suggests that on average, a one degree increase in ambient temperature can result in a 0.5%–8.5% increase in electricity demand.

Heating requirements continue to be an important part of Armenian energy needs. Individual heat boilers are primarily used for heating, of which 50% use natural gas. Natural gas is followed by wood use for heating, with an estimated 35% of Armenian households using wood for heating. This is primarily driven by affordability. As the country's deforestation rates are likely to continue, the use of biomass for heating is likely to continue to the trend, which is expected to adversely affect the poorest households due to a decline in firewood availability and price increase.

[14] Environmental and socio-economic vulnerability of agricultural sector in Armenia, Melkonyan, A. (2014), Science of The Total Environment

[15] Armenia Power Sector Policy Note, World Bank (2016).

Regional context

Shirak province (marz) administrative district where the project is envisaged to be implemented is located in the north-west of the Republic of Armenia bordering Turkey in the west and Georgia in the north. "Arpi lake" national park is located in this marz. The climate of the marz is mountainous with cool summers and severe and long winters. Annual precipitation is 500-600 mm. The absolute minimum temperature in Armenia was recorded in this area which was -46˚C.

Shirak marz in known for its reserves of tufa, pumice, and limestone mines, especially Artik region which is located in the southern part of the marz. The region is located on the volcanic plateau and foothills and is known for its favorable conditions for grain crop and livestock development. For years exploited stone pits have had a negative impact on the environment. Previously, more than 60% of the total volume of construction stone products of the country was produced in Artik and its adjacent communities. Many mines were closed due to reduction of construction stone consumption volumes; however, no conservation and reclamation works of these closed mines have been carried out thus causing many environmental problems. Hundreds of hectares of agricultural and natural landscapes were degraded and lost its natural way of restoration due to the exploitation of mines. Dust through strong winds and solid remnants through snowmelt and rainfall spread over great distances polluting natural agro landscapes. As a result, there is a decrease in the yield of agricultural crops, crop quality, and adaptation level of natural landscapes to climate change.

Another problem is increasing the frequency of severe floods in the last 20 years, which is due to the spring temperatures that are not typical for the region. If until 1980s the air temperature reached 20-250C within one and a half months, now it is rising quickly and unevenly. As a result, this accelerates snowmelt causing the emergence of strong floods. The negative impact of such climate change also lies in the fact that industrial waste of the mines is dumped into two storm canals passing through Artik city territory significantly reducing their capacity. During intense spring snow melts and heavy rains, flood waters overflow residential and public buildings, lands, gardens, streets, and yards. This phenomenon is repeated every year. The flood that occurred in June 2016 caused more than 210,000 USD damage to Artik city infrastructures and population. The elimination of the consequences of such floods cannot be done only by means of the city budget. The budget of the city and adjacent communities does not allow implementing procedures to eliminate negative impact of repeated floods and other issues created by the closed stone pits to the environment.

International partnership and reporting framework

Armenia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993, the Kyoto Protocol in 2002 and the Paris Agreement in 2017. The country's position under the Convention and the Paris Agreement is set out in the "Intended Nationally Determined Contributions" (INDC), approved by the Government of Armenia (GoA) and submitted to the UNFCCC on 22 September 2015. With the ratification of the Paris Agreement, the INDC of Armenia became its NDC for the period of 2015 – 2050. In its updated in 2021 NDC, the Republic of Armenia intends to adhere to a ten-year NDC implementation period (2021-2030), including up-front information on the emission reductions to be achieved by 2030 and on adaptation measures to be undertaken as part of the NDC. Armenia's NDC establishes the country's strong commitment to climate change adaptation measures and identifies its efforts in national greenhouse gas mitigation efforts. In Armenia, key sectors identified for adaptation action include natural ecosystems, human health, water resources management, agriculture, forestry, and fisheries, energy, human settlements, infrastructure, and tourism. Country has also delivered its Fourth National Communication on Climate Change (in 2020) and its Third Biennial Report (in 2021) under the UNFCCC.

National strategies

In accordance with the "Strategy of the main directions ensuring economic development in agricultural sector of the Republic of Armenia for 2020-2030" and Government Programme for 2021 – 2026 the core of the agricultural policy will be the increase of agrarian efficiency, increase of the food security level, introduction of modern technologies, increase of exportation volumes, growth of profitability of all entities engaged in the entire value chain of agriculture - small households, farming cooperatives, processors, and exporters. More specifically, the Government has prioritized cooperation between education, scientific, research , and industrial sectors, supporting the introduction of new technologies and expanding non-agricultural activities in rural communities.

National Adaptation Planning

On 13 May 2021, the Government of the Republic of Armenia approved the "National Action Program of Adaptation to Climate Change and the List of Measures for 2021-2025" (NAP). The general objective of the NAP is to promote the reduction and management of climate risks in Armenia. This will occur by addressing the impacts of climate change, by taking full advantage of emerging opportunities, by reducing socio-economic vulnerabilities, and avoiding losses and damages due to climate change. The process will be further supplemented by building mechanisms that enable adaptation of population as well as natural, productive and infrastructure systems. The NAP process aims to ensure coordinated deployment of sectoral and regional adaptation measures. It also unifies the strategic sector and regional investment plans in climate change adaptation.

The NAP includes a series of complementary documents, that create an information baseline for moving forward, and a set of implementable, concrete measures, identified by multiple stakeholders, that are essential to reducing current and projected climate impacts in the most vulnerable national development sectors. Among them, Sector and Marz Adaptation Plans should be mentioned. The sector adaptation plans (hereinafter - SAPs) and marz adaptation plans (hereinafter - MAPs) provide the foundation for operationalizing adaptation planning within the existing governance structures. Individual SAPs and MAPs outline the sectoral and regional responses to the challenges presented by climate change and help prioritize adaptation activities across the country. To date, SAPs for Agricultural and Water sectors and MAPs for Tavush and Shirak regions have been developed and adopted.

Sectorial NAPs (SAPs)

As per Agricultural SAP, the following 8 groups of priority measures are proposed to increase climate resilience of the sector:

1. Expansion of the list of insurable crops and risks, introduction of new insurance products;
2. Implementation of advanced irrigation technologies and organization of efficient agriculture;
3. Support to entities engaged in seed breeding and seed production in the conditions of climate change;
4. Support for the introduction of nursery certification system in RA;
5. Application of measures to mitigate the negative impact of hazardous hydrometeorological phenomena (HHMP);
6. Promotion and development of resource-saving agriculture;
7. Implementation of measures aimed at development of fodder production, improvement of fodder quality and increase of production volumes;

8. Capacity building of structures, agricultural farms and relevant specialists involved in agricultural sector;

As per Water SAP, the following 3 groups of priority measures are proposed to increase climate resilience of the sector:

1. Knowledge & adaptation capacities building for population (with specific focus at women and remote communities) and CSOs;
2. Coordination & enforcement of planning policies;
3. Investments in sustainable & reliable water services and assets;

Regional (marz) NAPs (MAPs)

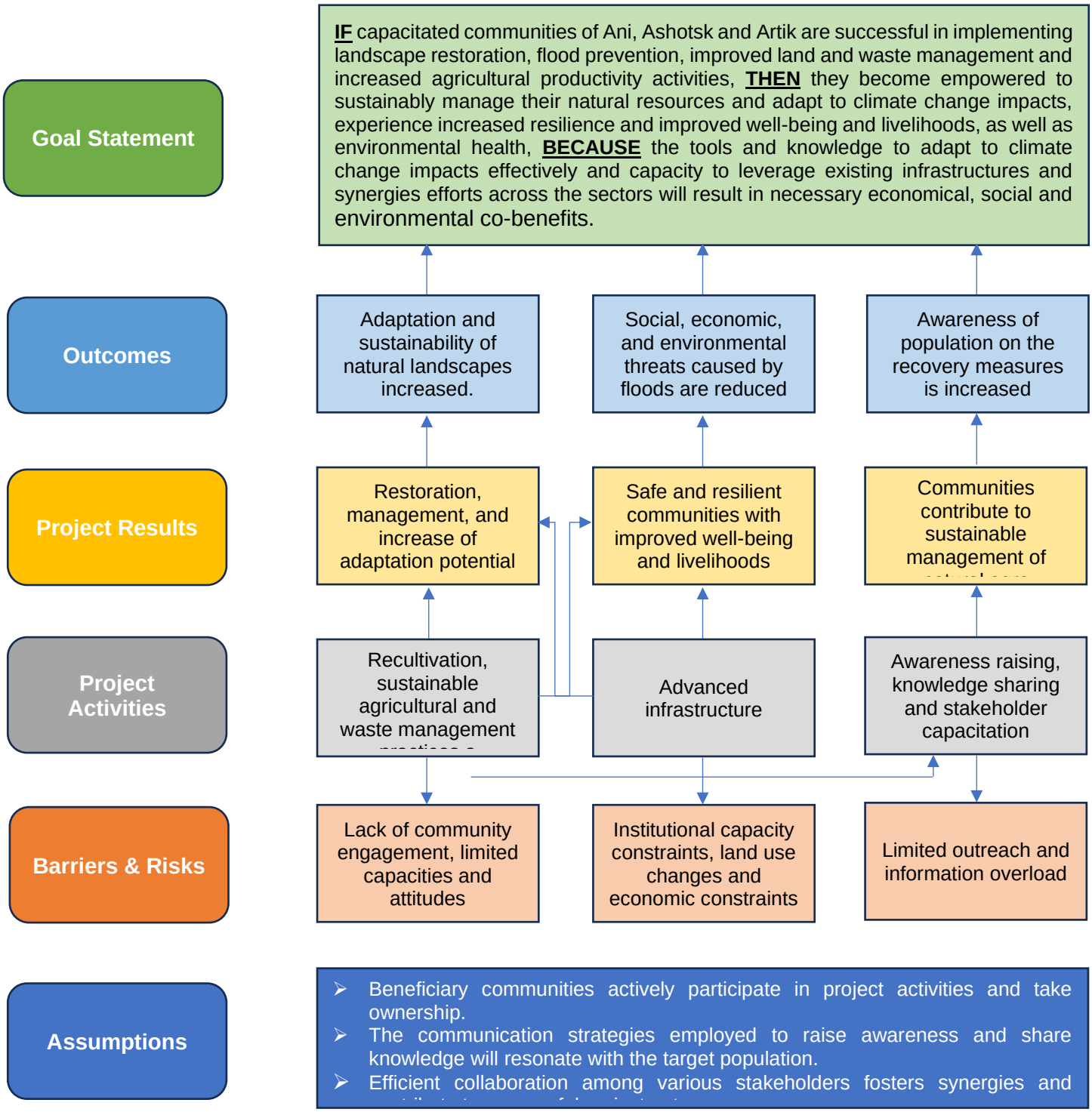
As it has already been mentioned, the Marz Adaptation Plans for two regions of Armenia (Tavush and Shirak) has been developed and adopted so far decompressing priority measures to be implemented in the targeted sector taking into account regional specificities.

Project/Programme Objectives:

The objectives of proposed Project are the following:

- Increase adaptation level of natural and agricultural landscapes;
- Prevent floods and eliminate their consequences,
- Restore the natural landscape of the area affected by climate change and anthropogenic impacts, at the same time to demonstrate the possibilities of adaptation level increase of degraded natural landscapes,
- Improve the adaptation potential of community producers, institutions, and other relevant stakeholders regarding climate change under current climate change conditions;
- Replicate and scaleup good practices achieved during implementation of the pilot project "Artik city closed stone pit waste and flood management pilot project";

TOC Diagram of the Project:



TOC description of the Project:

At the heart of this project is a transformative vision to enhance the resilience and well-being of vulnerable communities in the Ani, Ashotsk and Artik regions of Armenia, in the face of increasing climate change impacts. The Project's Theory of Change (TOC) outlines a strategic pathway that connects its interventions to the desired outcomes, leveraging a holistic approach that integrates

restoration, climate-resilient agriculture, flood prevention, and awareness-building initiatives.

The "if-then-because" logic driving the TOC envisions a series of interrelated steps that culminate in lasting change. **IF** capacitated communities of Ani, Ashotsk and Artik are successful in implementing landscape restoration, flood prevention, improved land and waste management and increased agricultural productivity activities, **THEN** they become empowered to sustainably manage their natural resources and adapt to climate change impacts, experience increased resilience and improved well-being and livelihoods, as well as environmental health, **BECAUSE** the tools and knowledge to adapt to climate change impacts effectively and capacity to leverage existing infrastructures and synergies efforts across the sectors will result in necessary economic, social and environmental co-benefits.

The Project recognizes the central role of communities in this process. By engaging local communities and enhancing their capacity through tailored interventions, the Project aims to empower them to sustainably manage their natural resources. This engagement, combined with targeted knowledge-sharing, will equip communities with the tools to adapt to climate change impacts effectively. If communities are actively involved and empowered, then they will contribute to enhanced well-being because they will diversify their livelihoods, mitigate risks, and secure essential resources.

Furthermore, the project's alignment with National Adaptation Plan, Sectorial Adaptation Plans (for water and agriculture sectors) and Marz Adaptation Plans and their focus on fostering collaboration among stakeholders are integral to achieving sustainable outcomes. The synergy between Project activities and broader policies will lead to cohesive resource allocation and increased project impact. If the Project leverages existing structures and promotes collaboration, then it will contribute to the achievement of broader development goals, amplifying the benefits of its interventions.

The implementation of concrete measures, including improved land management practices, increased agricultural productivity, enhanced waste management, and reduced flood risks, will result in direct positive changes for communities. This transformation will be visible through increased crop yields, better health outcomes, and reduced property damage. If communities experience these improvements, then their social well-being, livelihoods, and environmental health will significantly benefit, enhancing the sustainability of their ecosystems.

As the project journey progresses, its aim is not just to generate short-term impacts but to lay the groundwork for long-term resilience. Through effective interventions, if the project establishes self-sustaining ecosystems of resilience through effective interventions, then communities will not only adapt but thrive economically, socially, and environmentally in the face of evolving conditions. The key "because" factor lies in the strengthened local capacities, improved resource management, and adaptive practices that communities will have cultivated, creating a legacy of sustainability.

The TOC underscores the importance of understanding and addressing potential risks and barriers that might impede the desired outcomes. Through community engagement, adaptive management, and strategic planning, the project aims to mitigate these challenges to ensure its success.

In summary, the Theory of Change for this project paints a compelling picture of how concerted efforts in restoration, climate-resilient agriculture, flood prevention, and awareness-building will converge to build resilient communities. This journey involves empowering communities, fostering collaboration, aligning with national strategies, and creating lasting change that goes beyond adaptation to create thriving ecosystems of resilience. Through these steps, the project seeks to foster a future where vulnerable communities in Armenia are not just surviving but thriving in the face of a changing climate.

Component 1: Restoration, Management, and Increase of Adaptation Potential of Natural and Agricultural Landscapes

This component focuses on restoring and enhancing the resilience of natural landscapes that are degraded due to climate change and anthropogenic factors, particularly in areas adjacent to former mining sites. The rationale is to improve soil health, biodiversity, and land use efficiency, which are crucial for the adaptive capacity of local ecosystems and communities. By restoring these landscapes, the project aims to reduce vulnerabilities associated with land degradation and climate change impacts such as soil erosion and loss of productive land.

Proposed activities under the Component 1:

- **Recultivation of soil cover (10 ha of forest cover)**: this activity aims to recultivate degraded soils near Ani community by creating forest cover, which will stabilize the soil and enhance biodiversity.
- **Sustainability of forest groves**: this activity involves maintaining forest groves established during a previous project to ensure their long-term sustainability and contribution to ecosystem resilience.
- **Creation of perennial plant sowing areas (900 ha)**: perennial plants will be sown to reduce rangeland degradation and improve the adaptability of arable lands, contributing to sustainable land management.
- **Rehabilitation of natural-landscapes (45 ha hay meadows and 570 ha pastures)**: this activity focuses on increasing crop yields and improving the quality of natural-landscapes in selected communities.
- **Waste management program**: A program will build up on the achievements of the pilot phase of the Project and will introduce integrated waste management systems in communities, contributing to environmental health and sustainability.
- **Mapping of degraded lands**: the project will map degraded lands in the Shirak region to guide future restoration efforts.

This component addresses the degradation of natural landscapes, which exacerbates the impacts of climate change, such as soil erosion, loss of biodiversity, and increased vulnerability to extreme weather events. By focusing on soil recultivation, forest management, and sustainable agriculture, the component ensures that the land is more resilient to climatic changes. Activities such as planting perennial crops and rehabilitating pastures also contribute to water retention and soil fertility, which are essential for food security and agricultural sustainability in the face of climate variability.

Component 2: Prevention and management of floods

The second component is dedicated to preventing and managing floods, which are increasingly frequent and intense due to climate change. This component focuses on maintaining and improving infrastructure developed in earlier projects to ensure its effectiveness in flood control and minimizing damage to communities and ecosystems.

Proposed activities under the Component 2:

- **Maintenance of flood prevention infrastructure**: infrastructure built during the pilot project will be maintained to ensure it continues to function effectively.

- **Road infrastructure improvement**: two small bridges will be constructed, and existing roads will be renovated to divert heavy-duty vehicles away from communities vulnerable to flooding.

Floods are one of the most significant threats posed by climate change, particularly in areas where heavy precipitation is becoming more frequent. This component addresses these risks by maintaining and upgrading flood prevention infrastructure. By diverting traffic away from flood-prone areas, the project reduces the physical and economic damage that floods can cause, thereby enhancing community resilience to climate-related hazards. Proper road and infrastructure management are essential to prevent further degradation of flood-affected regions and ensure the safety of residents.

Component 3: Raising awareness and knowledge level of population for the management of stone pit wastes and floods

This component focuses on raising awareness and building the capacity of local populations, municipalities, and environmental organizations in managing stone pit waste and flood risks. The rationale is to ensure that the communities are well-informed and equipped to address environmental challenges posed by climate change, especially those related to flood management and sustainable waste practices.

Proposed activities under the Component 3:

- **Awareness campaigns on landscape restoration**: educational efforts will be launched to inform communities about effective recovery methods for degraded landscapes and the importance of land management in climate adaptation.
- **Flood risk awareness campaigns**: communities will be educated on flood risks, prevention strategies, and adaptive measures to enhance preparedness.
- **Community engagement on sustainable land management**: sustainable thinking and landscape adaptation will be promoted through community engagement and educational activities.
- **NGO and media involvement**: local media and environmental NGOs will be involved in disseminating information and raising awareness about climate change impacts and management practices.

The rationale for this component lies in the critical need for local populations and institutions to understand and manage climate risks effectively. Raising awareness about floods and sustainable waste management is essential for long-term adaptation because these risks affect both the environment and human health. By educating communities on these issues and promoting sustainable practices, the project empowers local stakeholders to take proactive measures in mitigating climate change impacts, ultimately contributing to increased resilience at the local level.

Project/Programme Components and Financing

N	Project/Program Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
1.	**Component 1:** Restoration, management, and increase of adaptation potential of natural and agricultural landscapes of	Output 1.1 Soil cover of mine adjacent to Ani community is recultivated *(10 ha of forest cover will be created)*;	**Outcome 1:** Adaptation and sustainability of natural landscapes of the area affected by climate	**216.320**

	the area affected by climate change and anthropogenic factors.	<u>Output 1.2</u> Forest grove established with support of previous project is taken care of and became sustainable; <u>Output 1.3</u> Sowing areas of perennial plants are created reducing rangeland degradation and enhancing the adaptability of degraded arable lands in Ani, Ashotsk and Artik *(900 ha of perennial sowing area established)*; <u>Output 1.4</u> Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani, Ashotsk and Artik communities *(45 ha hay meadows and 570 ha pastures)*; <u>Output 1.5</u> Waste collection practices are introduced in Ani, Ashotsk and Artik communities *(garbage tracks, bins and collection) and* pilot program for integrated management of household waste in the village of Vardakar is implemented; <u>Output 1.6</u> Mapping of all degraded lands in Shirak region is implemented; <u>Output 1.7</u> Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities); <u>Output 1.8</u> Demonstration sites for intensive orchards in all	change and anthropogenic factors increased.	**180.000** **700.000** **360.000** **220.000** **25.000** **250.000**

		beneficiary communities are constructed (10 ha in each community); Output 1.9 Architecture and design work for all components are carried out; Output 1.10 Index insurance piloted in beneficiary municipalities		**900.000** **85.000** **25,000**
Subtotal for the Component 1.				**2.961.320**
2.	**Component 2:** Prevention and management of floods	Output 2.1 Infrastructure constructed during the pilot project is maintained Output 2.1 Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities;	**Outcome 2:** Social, economic, and environmental threats caused by floods as a result of climate change is reduced	**800,000**
Subtotal for the Component 2.				**800.000**
3.	**Component 3:** Raising awareness and knowledge level of population for the management of stone pit wastes and floods	Output 3.1 The level of knowledge on effective recovery methods of degraded natural and agro landscapes will be increased Output 3.2 The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased Output 3.3 Increasing of the knowledge level of the population on the	**Outcome 3:** Raising awareness and knowledge level of population on the recovery of agro landscapes and flood risk reduction	**300,000**

		occurrence and prevention possibilities of floods <u>Output 3.4</u> Promoting the importance of the sustainable thinking, learning and dissemination of information related to the landscape adaptation to climate change in communities <u>Output 3.5</u> The involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change will be increased		
Subtotal for the Component 3.				**300.000**
<u>Total: Project Components</u>				**4.061.320**
	Project/Programme Execution cost			60.920
	Total Project/Programme Cost			4.122.240
	Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			350.390
	Amount of Financing Requested			**4.472.630**

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	01 September 2025
Mid-term Review (if planned)	01 September 2027
Project/Programme Closing	01 September 2029
Terminal Evaluation	10 December 2029

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

The project will improve resilience of highly exposed communities of Shirak region (Artik, Ani and Ashotsk municipalities) of Armenia to hydrometeorological threats that are increasing in frequency and intensity as a result of climate change.

Component 1:

Restoration, management, and increase of adaptation potential of natural and agricultural landscapes of the area affected by climate change and anthropogenic factors.

Number of beneficiaries – 15,000 (minimum 30% women)

This pivotal component of the project is dedicated to restoring, managing, and increasing the adaptation potential of the natural landscapes in the Ani, Ashotsk and Artik regions, which have been impacted by the dual forces of climate change and anthropogenic activities. The component encompasses a diverse array of activities, all working in harmony to rejuvenate ecosystems, strengthen their capacity to withstand climate stressors, and empower local communities.

Through dedicated efforts, the project will recultivate soil covers in areas adjacent to communities, creating 10 hectares of new forest cover. This act of reforestation is not just an environmental endeavor but a means to build resilience against climatic changes. Additionally, the establishment and sustainable management of a forest grove, supported by previous initiatives, will be nurtured to fruition, providing a lasting resource for communities.

The project extends its restoration focus beyond forests to include the creation of sowing areas for perennial plants. Covering 900 hectares in communities such as Ani, Ashotsk and Artik, this initiative aims to combat rangeland degradation, fostering adaptable agricultural practices that thrive amidst climate challenges.

Agricultural productivity will be further enhanced through the establishment of 45 hectares of hay meadows and 570 hectares of pastures. This effort directly contributes to increased crop yields and improved crop quality, ensuring both food security and economic stability for the beneficiary communities.

The project takes a comprehensive approach to waste management as well, introducing waste collection practices in communities and piloting integrated waste management solutions in Vardakar village. By addressing waste, the project safeguards both environmental health and community well-being.

Furthermore, the creation of demonstration sites for intensive orchards in beneficiary communities adds a practical dimension to the component. These orchards showcase the potential for sustainable agricultural practices, contributing to the overall goal of enhanced adaptation potential.

In the current phase of the Concept Note, preliminary plans for land restoration and the establishment of orchard demonstration sites within the Ani, Ashotsk and Artik regions are outlined. These initiatives are integral to the Project's objective of enhancing climate resilience and sustainable agricultural practices.

Land restoration typology: the typology of areas targeted for land restoration, whether they fall within protected zones, public lands, or privately owned territories, will be determined through a comprehensive assessment that takes into account the geographical, ecological and legal contexts specific to the Ani, Ashotsk and Artik regions. This detailed assessment is critical for ensuring that land restoration efforts are aligned with both the national environmental policies and local land use regulations, while also reflecting the needs and priorities of the local communities. Given the complex interplay between ecological conditions, legal land ownership structures and local community interests, it is essential that this assessment be conducted during the inception stage of the project.

Carrying out the assessment during this phase will allow for a more accurate and thorough understanding of the current on-ground realities, which may have evolved since the initial project design. This approach will ensure that restoration activities are context-specific and fully informed by the latest data on land conditions, ownership status and community requirements. Moreover, the involvement of stakeholders at the inception stage provides an opportunity to secure local buy-in, ensure adherence to land-use policies and build the foundations for successful implementation, which are essential for long-term sustainability.

Orchard demonstration sites: The selection of specific locations for the demonstration sites of intensive orchards will be a pivotal step in showcasing innovative and sustainable agricultural practices that can transform local communities. These sites will be chosen based on carefully considered criteria, including their potential to serve as exemplary models of climate-resilient agriculture, their accessibility to local farmers, and their capacity to generate lasting impacts aligned with the project's overarching goals. The demonstration sites will be established either on lands that are part of existing community initiatives or on new sites identified through an inclusive and participatory stakeholder engagement process.

While initial site identification has been explored during the project's design phase, a thorough, context-sensitive selection process is best conducted during the inception stage of the project. This allows for real-time assessment of current land conditions, community preferences, and evolving opportunities that may not have been fully captured during the proposal development stage. Moreover, this timing ensures that all necessary land ownership statuses can be confirmed and that any legal permissions required are acquired with active involvement from local authorities and stakeholders. By undertaking this process at the project's inception, the initiative guarantees that the orchard sites are optimally positioned to maximize impact, benefit local communities, and align seamlessly with sustainable development goals. This methodical approach will enhance community engagement, ensure environmental appropriateness, and set a solid foundation for long-term agricultural resilience in the region.

Through the upcoming detailed planning and design phase, EPIU will gather more precise information about the land typology and specific locations for our project activities. This will ensure that our project interventions are well-informed, context-specific, and tailored to the unique characteristics of the targeted regions."

In alignment with the project's broader aims, financial support from private financiers is leveraged to implement high-value agriculture models across 100 hectares of degraded land. This not only diversifies local livelihoods but also injects economic resilience into the community.

Lastly, the architectural and design groundwork for all components is meticulously carried out, ensuring a cohesive and effective implementation. The piloting of index insurance in beneficiary municipalities adds an innovative dimension, further enhancing the resilience of communities against climate-induced challenges.

In light of the existing agricultural insurance pilots in Armenia, co-financed by MDBs, bilateral assistance providers and the Central Bank of Armenia, the Project recognizes the importance of enhancing the utilization of these services among farmers. The current insurance covers specific crops such as apricots, grapes, apples, peaches, and grains, with eligibility criteria requiring a minimum area of 0.5 acres, presence of a hail station in the community, and age specifications for apricot and grape orchards. Risks covered include hail, fire, and spring frostbite, while uninsured risks comprise winter frostbite, pests, diseases, and other specified conditions.

Outputs 1.1 -1.9

- Soil cover of mine adjacent to Ani community is recultivated *(10 ha of forest cover will be created)*;
- Forest grove established with support of previous project is taken care of and became sustainable;
- Sowing areas of perennial plants are created reducing rangeland degradation in Ani, Ashotsk and Artik communities *(900 ha of perennial sowing area established)*;
- Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani, Ashotsk and Artik communities *(45 ha hay meadows and arable lands 570 ha pastures)*;
- Waste collection practices are introduced in Ani, Ashotsk and Artik communities *(garbage tracks, bins and collection) and* pilot program for integrated management of household waste in the village of Vardakar is implemented;
- Mapping of all degraded lands in Shirak region is implemented;
- Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities);
- Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community);
- Architecture and design work for all components are carried out;
- Index insurance piloted in beneficiary municipalities

The outputs under Component 1 are architected to build climate resilience by addressing critical environmental challenges and supporting sustainable land use practices in the Ani, Ashotsk, and Artik communities. These outputs contribute to enhanced resilience by restoring ecosystems, promoting sustainable agricultural practices, and implementing climate-adaptive infrastructure. By focusing on soil recultivation, forest sustainability, and agricultural improvements, the project addresses the vulnerability of degraded lands, ensuring they are better equipped to absorb climate shocks, such as droughts, floods, and temperature variability.

The creation of forest cover, combined with the sustainable management of existing groves, plays a pivotal role in carbon sequestration, reducing land degradation, and improving water retention. These forest restoration efforts help to stabilize soil and mitigate the impacts of climate-related hazards, such as landslides and flooding, which are becoming more frequent due to changing precipitation patterns. In tandem, the sowing of perennial plants and the rehabilitation of natural-landscapes enhance land productivity and reduce rangeland degradation. By improving soil health and agricultural yields, the project ensures that local communities can sustain their livelihoods despite increasingly erratic climate conditions, which are particularly harmful to traditional farming methods.

Moreover, the introduction of waste collection systems and the mapping of degraded lands establish the foundation for more sustainable resource management in the target regions. Effective waste management reduces environmental pollution, supports healthier ecosystems, and indirectly mitigates the impacts of climate change by decreasing greenhouse gas emissions from unmanaged waste. The project's focus on high-value agriculture models and the introduction of climate-resilient crops further demonstrates a long-term commitment to economic and environmental sustainability. The construction of demonstration sites for intensive orchards and the piloting of index insurance in beneficiary municipalities serve as innovative approaches to building adaptive capacity at the local level, providing both practical solutions and financial security against climate risks.

Together, these outputs contribute to a holistic, sustainable framework that aligns with the Adaptation Fund's goal of reducing vulnerability to climate change while promoting environmental, social, and economic resilience. The activities embedded within these outputs address immediate adaptation needs and lay the groundwork for long-term resilience by fostering ecosystem restoration, sustainable land use, and community-driven climate adaptation solutions.

Component 2:

Prevention and management of floods.

Number of beneficiaries – 15,000 (minimum 50% women)

At the heart of this project's holistic approach lies Component 2, which focuses on the essential task of preventing and effectively managing floods in the vulnerable areas of the Ani, Ashotsk, and Artik regions. This component recognizes the pressing need to mitigate the social, economic, and environmental threats posed by floods due to climate change, ensuring the safety and resilience of local communities.

Central to this component is the maintenance of previously constructed infrastructure, ensuring that the flood prevention measures initiated during the pilot phase continue to function effectively. These measures are a testament to the project's commitment to creating lasting change.

In a strategic move to divert heavy-duty vehicles away from flood-prone areas, the component advances road infrastructure. This enhancement not only safeguards communities but also fosters sustainable development by preserving vital roadways.

The envisioned outcome of this component is a reduction in the multifaceted threats posed by floods. Socially, communities will experience improved safety and reduced vulnerabilities, while economic stability will be bolstered as a result of safeguarded infrastructure and livelihoods. From an environmental perspective, the project aims to minimize the environmental damage caused by floods, ensuring the health of ecosystems.

By proactively addressing the flood-related challenges through carefully designed infrastructure and preventive measures, this component aligns seamlessly with the broader project goal of building resilient communities. Through the synergy of effective flood management and innovative road infrastructure improvements, Component 2 serves as a cornerstone of the project's commitment to enhancing community well-being and environmental sustainability.

Outputs 2.1 – 2.2

- Infrastructure constructed during the pilot project is maintained
- Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities;

The outputs under Outcome 2 focus on enhancing the resilience of critical infrastructure, particularly in areas that are vulnerable to climate-related hazards such as flooding, landslides, and heavy precipitation events. By maintaining and advancing infrastructure, these outputs contribute to both immediate and long-term climate resilience by mitigating the risks associated with the increasing intensity and frequency of extreme weather events.

The maintenance of infrastructure constructed during the pilot project is essential to ensuring that flood prevention measures remain effective over time. Well-maintained flood control systems are crucial in areas that are prone to flash flooding and heavy rainfall, as they prevent water from overwhelming communities, agricultural lands and vital ecosystems. Maintaining this infrastructure is not only a cost-effective approach to safeguarding existing investments but also a critical measure to reduce the potential for catastrophic damage in future climate scenarios. By prioritizing maintenance, the project strengthens the adaptive capacity of local communities to manage flood risks, thereby reducing both economic losses and human vulnerability.

The advancement of road infrastructure, including the construction of two small bridges and the renovation of existing roads, addresses a key vulnerability in the region: the risk posed by heavy-duty vehicles passing through areas adjacent to the mines. Diverting traffic away from these communities will reduce the wear and tear on roads and other infrastructure, helping to prevent erosion and flooding caused by vehicle-induced damage. This not only extends the lifespan of infrastructure but also enhances community safety and access during extreme weather events. Improved road infrastructure also plays a significant role in ensuring the resilience of supply chains and economic activities in the region, further contributing to long-term climate adaptation by supporting sustainable economic development.

Overall, these outputs under Outcome 2 are designed to create durable, climate-resilient infrastructure that can withstand and adapt to the projected impacts of climate change. By maintaining critical flood prevention measures and enhancing road networks, the project mitigates immediate risks while laying the foundation for a safer, more resilient environment for both

Component 3:

Raising awareness and knowledge level of population for the management of stone pit wastes and floods.

Number of beneficiaries – 2,000 (minimum 50% women)

Aiming to empower communities with the information and understanding needed to navigate the challenges of managing stone pit wastes and floods, Component 3 plays a crucial role in promoting informed decision-making and fostering sustainable practices.

For Component 3 of the project, the capacity-building needs of regional governments and municipalities are critical to implementing and sustaining effective management strategies for stone pit waste, flood management, recovery methods for degraded natural and agricultural landscapes. This component aims to empower communities and local authorities with the necessary information and understanding to address these environmental challenges effectively. These capacity advancement activities will provide local governments with the tools to make informed decisions and implement sustainable practices. The project also emphasizes the importance of sustainable thinking and landscape adaptation to climate change, aiming to instill a stewardship mindset and proactive engagement in these governing bodies.

Central to this component is the goal of increasing the awareness and knowledge levels of the

local population. Through strategic efforts, the project seeks to elevate understanding of effective recovery methods for degraded natural and agro landscapes. By equipping communities with insights into the significance of adapting to climate change impacts, the project aims to build a foundation for long-term resilience.

The dissemination of information about the occurrence and prevention of floods is a pivotal aspect of this component. By educating communities about flood risks and mitigation strategies, the project seeks to empower them to make informed choices that enhance their safety and preparedness.

In parallel, the component strives to promote the importance of sustainable thinking related to landscape adaptation to climate change. Through engaging educational campaigns, it aims to instill a mindset of stewardship and proactive engagement in communities.

Crucially, local media and environmental non-governmental organizations (NGOs) are invited to join the endeavor, amplifying the outreach and effectiveness of awareness campaigns. Their involvement is instrumental in ensuring that the project's messages resonate widely.

The overarching goal of Component 3 is to raise the awareness and knowledge levels of the population. This outcome translates into increased community engagement, the adoption of climate-resilient practices, and the enhancement of local adaptive capacity. By enhancing awareness about the management of stone pit wastes and floods, the project contributes to the overall well-being of communities, fortifying them against environmental challenges and fostering a sustainable future.

Outputs 3.1 -3.5

- The level of knowledge on effective recovery methods of degraded natural and agro landscapes will be increased, including for regional governments and municipalities;
- The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased;
- Increasing of the knowledge level of the population on the occurrence and prevention possibilities of floods;
- Promoting the importance of the sustainable thinking related to the landscape adaptation to climate change in communities;
- The involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change will be increased;

The outputs under Outcome 3 are critical in building the knowledge and capacity of regional governments, local communities, and key stakeholders to effectively adapt to the impacts of climate change. By raising awareness and promoting sustainable thinking on climate resilience, these outputs ensure that local populations, governments and NGOs are better equipped to implement and sustain adaptation strategies in the long term.

The focus on increasing knowledge on effective recovery methods for degraded natural and natural-landscapes among regional governments and municipalities ensures that local authorities are empowered to make climate-informed decisions. This knowledge transfer is vital for ensuring that landscape restoration and management are conducted in ways that enhance ecological resilience and prevent further degradation. By equipping local governments with the necessary

tools and understanding, the project fosters a sustainable framework that can be replicated and scaled across other regions facing similar climate challenges.

At the community level, raising awareness about climate adaptation and flood prevention is essential for empowering local populations to take proactive measures to protect their livelihoods and resources. By increasing the local population's understanding of climate risks and available adaptation strategies, the project contributes to reducing vulnerabilities and minimizing losses from extreme weather events such as floods. This focus on community education ensures that adaptive measures are integrated into everyday practices, reinforcing resilience at the grassroots level.

Moreover, the project promotes sustainable thinking in landscape adaptation by encouraging communities to adopt long-term, environmentally responsible approaches to managing their natural resources. This shift in mindset is crucial for ensuring that climate-resilient practices are sustained and embedded in local decision-making processes, ensuring the longevity of the project's impact.

Additionally, by increasing the involvement of local media and environmental NGOs, the project expands its reach and impact. Media organizations play a pivotal role in disseminating information, raising public awareness, and shaping community narratives around climate action, while NGOs can act as crucial intermediaries in mobilizing communities and supporting implementation. By engaging these stakeholders, the project ensures a wide-reaching, community-led approach to climate adaptation, strengthening local adaptive capacities and ensuring sustained commitment to climate resilience.

Operational arrangements:

To ensure effective project implementation, a robust governance structure will be established, comprising key stakeholders and dedicated entities responsible for decision-making, coordination, and oversight. This structure is designed to promote transparency, accountability, and the successful execution of project activities. The governance structure includes:

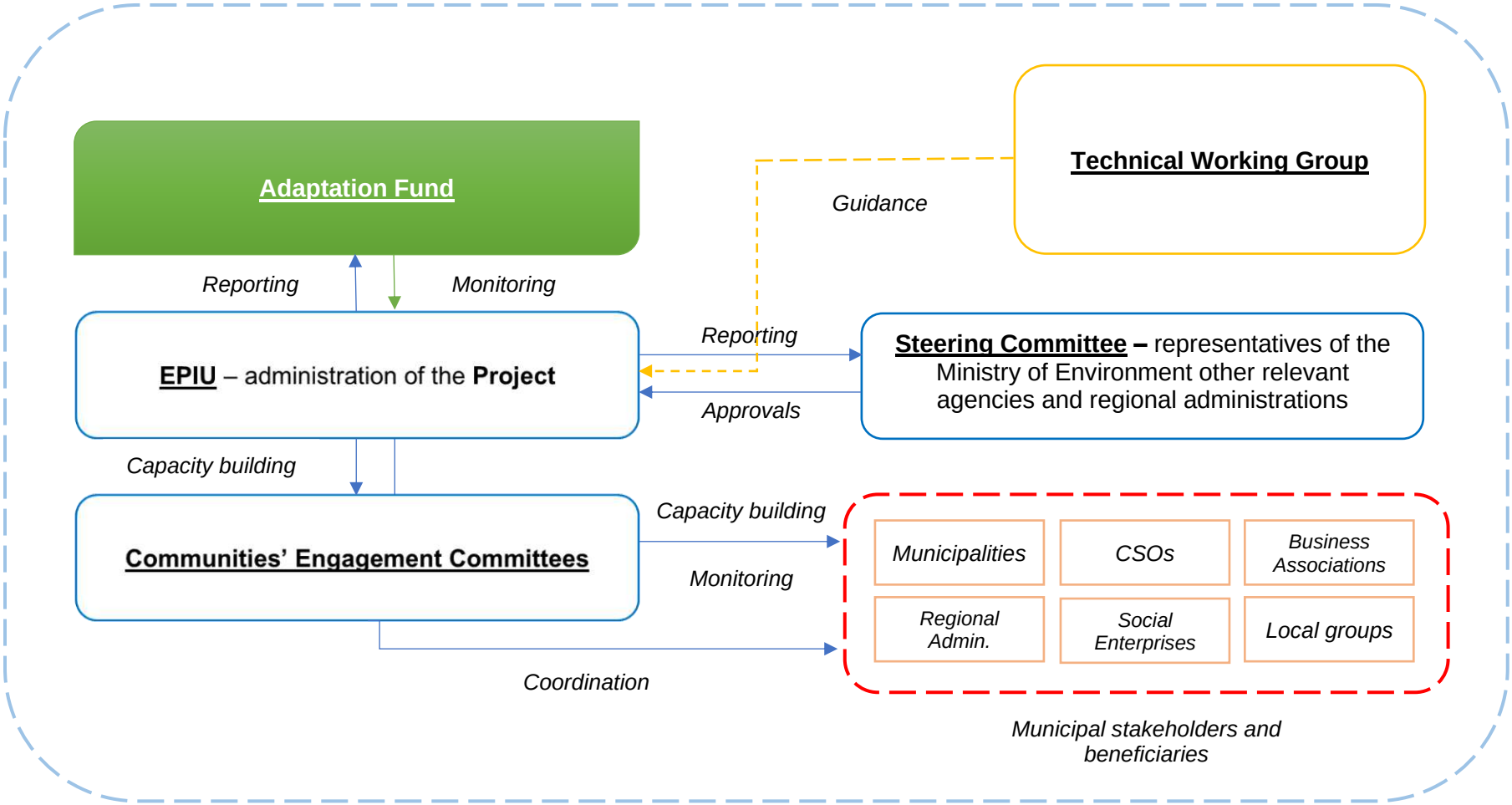
1. **Project Steering Committee (PSC):** The Project Steering Committee will serve as the highest decision-making body, providing strategic guidance, approving major project decisions, and ensuring alignment with national priorities. The committee will include representatives from relevant government ministries, project partners, community representatives, and the implementing entity.
2. **Project Advisory Committee (PAC)** will be established to provide valuable insights, guidance, and recommendations throughout the project's lifecycle. Comprised of key stakeholders representing a range of sectors and interests, the PAC will play a pivotal role in enhancing the project's strategic direction, ensuring alignment with broader goals, and optimizing outcomes.
3. **Project Management Unit (PMU):** The EPIU will serve the function of the Project Management Unit and carry out day-to-day management and execution of project activities. EPIU Director will assign technical experts, project managers, and administrative staff overseeing various components. The EPIU will report to the Project Steering Committee and ensure that activities are implemented according to the approved work plan.
4. **Technical Working Groups (TWGs):** Where necessary, Technical Working Groups will be formed to provide specialized expertise and guidance in specific areas, such as restoration, agriculture, flood

management, and awareness campaigns. These groups will comprise experts from relevant fields, government agencies, NGOs, and academia, collaborating closely with the PMU.

5. **Community Engagement Committee:** At the communities' level, engagement committee will be established to facilitate local participation, ownership, and decision-making. This committee will ensure that community voices are heard, priorities are addressed, and project benefits reach the most vulnerable.
6. **Gender and Social Inclusion Focal Points:** Gender and social inclusion focal points will be designated (from EPIU responsible staff members) to mainstream gender considerations and promote social equity throughout the project. They will ensure that project interventions are responsive to the needs and priorities of all community members.

Through this governance structure, the project will foster collaboration, streamline communication, ensure compliance with policies and regulations, and facilitate effective resource allocation. By involving diverse stakeholders, technical experts, and community representatives, the governance structure will contribute to the project's success in enhancing resilience, promoting sustainable development, and empowering vulnerable communities.

Organigram of the Project implementation:



B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The Project aims to address the critical challenges posed by climate change in Armenia, with a focus on enhancing the resilience and adaptive capacity of vulnerable communities. The project is centered around three core components: restoration of natural landscapes, disaster risk reduction, knowledge sharing and capacity building. Each of these components is carefully designed to provide substantial economic, social, and environmental benefits, especially for marginalized and vulnerable groups within the target communities.

This project aligns with the Environmental and Social Policy and Gender Policy of the Adaptation Fund, ensuring that gender considerations, equal access, and the active participation of women and marginalized groups are prioritized. In addition, the project incorporates robust environmental and social risk management strategies, ensuring that potential negative impacts are mitigated, and long-term sustainability is achieved.

Through its focus on climate-resilient infrastructure, sustainable agricultural practices, and community-driven capacity building, the Artik Project will significantly contribute to the socio-economic development of the region while protecting and restoring the natural environment. The project's holistic approach ensures that it not only addresses immediate climate adaptation needs but also lays the foundation for sustainable development, inclusivity, and resilience in the face of future climate challenges.

Economic, social and environmental benefits

The project provides a comprehensive approach to addressing climate change impacts on vulnerable communities by delivering economic, social, and environmental benefits across three components, with special attention to marginalized and vulnerable groups, including gender considerations. Each component contributes uniquely to these objectives, outlined below.

Component 1: Restoration, management and increase of adaptation potential of natural landscapes

> *Output 1.1: Soil cover of mine adjacent to Ani community is recultivated (10 ha of forest cover will be created).*

Economic benefits: the recultivation of soil cover and the creation of forest areas will improve the productivity of the land, generating long-term economic returns from sustainable forestry, potential agroforestry, and eco-tourism activities. It will also reduce maintenance costs from environmental degradation.

Social benefits: this output will provide direct employment opportunities in forestry activities, engaging local community members, including marginalized groups, and providing training in sustainable land management. Women will be actively involved in managing the forest restoration efforts through targeted capacity-building programs;

Environmental benefits: restoring around 10 ha of forest cover will enhance biodiversity, stabilize soil, and reduce erosion. Forests also play a crucial role in carbon sequestration, which contributes to climate mitigation efforts.

Mitigation of negative impacts: the project will ensure that forestation is done sustainably, without displacing local communities or reducing access to necessary land for agricultural purposes.

Output 1.2: Forest grove established with support of previous project is taken care of and became sustainable.

Economic benefits: ensuring the sustainability of previously established forest groves will create long-term economic returns from timber, non-timber forest products, and potential carbon credits. It also contributes to the economic sustainability of local farmers who rely on these ecosystems.

Social benefits: local communities, particularly those involved in managing the forest, will benefit from continued employment and skill-building in forest management.

Environmental benefits: sustainable management of the forest grove will help maintain biodiversity, improve ecosystem services such as water regulation, and further reduce carbon emissions through continued forest growth.

Mitigation of negative impacts: continuous monitoring and adaptive management will ensure the forest is resilient to climate change impacts and other anthropogenic pressures.

Output 1.3: Sowing areas of perennial plants are created, reducing rangeland degradation and enhancing the adaptability of degraded arable lands in Ani and Ashotsk communities (900 ha of perennial sowing area established).

Economic benefits: the establishment of perennial plant sowing areas will reduce land degradation and improve the long-term productivity of rangelands, benefiting local pastoralists and increasing the resilience of livestock-based livelihoods.

Social benefits: local farmers and herders will gain from increased food security through improved grazing lands, with targeted capacity-building programs for managing perennial sowing areas.

Environmental benefits: perennial plants help reduce soil erosion, improve soil fertility, and increase biodiversity. These plants also act as carbon sinks, contributing to climate mitigation.

Mitigation of negative impacts: the project will ensure that perennial plant species chosen are compatible with local ecosystems and do not negatively impact local water resources or biodiversity.

Output 1.4: Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani and Ashotsk communities (45 ha hay meadows and 570 ha pastures).

Economic benefits: increased crop yields and quality will provide a direct boost to local economies, increasing farmers' incomes and ensuring food security for the communities. Higher-quality crops may also create opportunities for export or sale to new markets.

Social benefits: improved agricultural productivity directly benefits local households by providing food and income stability. Vulnerable groups, particularly women farmers, will benefit from increased involvement in decision-making and capacity-building programs.

Environmental benefits: sustainable agricultural practices will reduce the risk of soil degradation and water overuse, improving long-term agricultural productivity while conserving local ecosystems.

Mitigation of negative impacts: the project will use environmentally friendly fertilizers and irrigation techniques to ensure the balance between increasing crop yields and protecting the environment.

Output 1.5: Waste collection practices are introduced in Ani and Ashotsk communities (garbage trucks, bins, and collection), and a pilot program for integrated management of household waste in the village of Vardakar is implemented.

Economic benefits: the introduction of organized waste collection systems will create jobs related to waste management and recycling. The pilot project in Vardakar may act as a model for expanding waste management services to other regions, potentially generating further economic growth through service fees.

Social benefits: improved waste management will enhance community health and sanitation, reducing exposure to waste-related diseases and improving living conditions for all community members.

Environmental benefits: reducing waste accumulation and implementing recycling practices will decrease pollution and improve environmental quality, contributing to cleaner water sources and less contamination of local ecosystems.

Mitigation of negative impacts: the project will implement strict waste management protocols to ensure that any waste collected is properly processed or recycled, minimizing environmental harm.

Output 1.6: Mapping of all degraded lands in Shirak region is implemented.

Economic benefits: mapping degraded lands will provide critical data that can be used to prioritize land restoration activities, maximizing economic returns from the most degraded yet potentially valuable areas.

Social benefits: this will support the equitable distribution of land restoration efforts, ensuring that marginalized and vulnerable communities also benefit from land improvements and their associated economic gains.

Environmental benefits: mapping provides the foundation for targeted restoration efforts, ensuring that key ecosystems are rehabilitated, biodiversity is restored, and land degradation is halted.

Mitigation of negative impacts: the project will ensure that mapping is followed by community consultations to ensure that local needs are considered in restoration activities.

Output 1.7: Infrastructure for piloting high-value agriculture models (including new types of climate-resilient crops) at 100 ha of degraded land is implemented, with commercial lending from a private financier engaged (construction of the facilities).

Economic benefits: high-value agricultural models will create economic opportunities for local farmers, allowing them to diversify their income sources by growing climate-resilient crops that fetch higher market prices.

Social benefits: vulnerable farmers, including women and indigenous groups, will receive targeted support to participate in the new agricultural models, enhancing social inclusion.

Environmental benefits: climate-resilient crops reduce the reliance on water and other inputs, promoting sustainability in agricultural practices and reducing the risk of crop failure due to climate variability.

Mitigation of negative impacts: the project will ensure that infrastructure development does not result in the loss of natural habitats or cause significant changes to local land use patterns.

Output 1.8: Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community).

Economic benefits: intensive orchards will provide a stable source of income for farmers, as orchard products such as fruits and nuts have high market demand both locally and internationally.

Social benefits: these demonstration sites will provide educational opportunities for farmers, allowing them to learn best practices in orchard management. Vulnerable groups, including women, will be actively involved in the development of these orchards.

Environmental benefits: the development of intensive orchards promotes sustainable agriculture and contributes to carbon sequestration, improving overall environmental health.

Mitigation of negative impacts: care will be taken to ensure that the orchards are established using sustainable water and soil management practices to avoid environmental degradation.

Output 1.9: Architecture and design work for all components are carried out.

Economic Benefits: Ensures efficient use of resources by integrating well-planned, cost-effective designs that minimize construction and operational costs. Supports long-term economic sustainability by aligning infrastructure with community needs and climate resilience goals.

Social Benefits: Facilitates community engagement by incorporating input into the design phase, ensuring infrastructure meets the specific needs of vulnerable groups, including women and marginalized communities.

Environmental Benefits: Promotes environmentally sustainable designs that minimize ecological disruption and integrate climate-adaptive features, such as water-efficient systems and energy-saving technologies.

Mitigation of Negative Impacts: Designs are guided by environmental assessments to ensure minimal disruption to ecosystems and adherence to sustainable practices during construction and implementation.

Output 1.10: Index insurance piloted in beneficiary municipalities.

Economic Benefits: Provides financial protection against climate-induced crop failures, reducing risks for farmers and enhancing their financial stability. Encourages investment in sustainable farming practices and climate-resilient agriculture.

Social Benefits: Vulnerable groups, particularly small-scale farmers, benefit from financial security, ensuring continuity of livelihoods even during adverse climatic conditions.

Environmental Benefits: Encourages sustainable land and agricultural management practices by reducing economic risks associated with adopting innovative, climate-resilient methods.

Mitigation of Negative Impacts: Awareness-raising programs will be implemented to ensure farmers understand the benefits of sustainable practices alongside insurance mechanisms, ensuring informed participation without environmental or economic drawbacks.

Component 2: Prevention and Management of Floods

Output 2.1: Maintenance of infrastructure constructed during the pilot project.

Economic benefits: the maintenance of flood prevention infrastructure (such as drainage systems, flood barriers, and channels) will reduce long-term costs related to flood damage repair for households and businesses. It protects agricultural lands, which are critical for the livelihoods of local farmers, ensuring continued productivity and economic stability.

Social benefits: vulnerable communities, especially those living in flood-prone areas, will benefit from enhanced safety and protection from floods. By reducing flood risks, this output will also protect critical infrastructure such as schools, roads, and health facilities, which are essential for community well-being.

Environmental benefits: proper maintenance of flood prevention infrastructure will mitigate the risk of soil erosion and waterlogging, preserving agricultural land and natural habitats. This output contributes to the long-term sustainability of ecosystems by controlling water flow and preventing damage to riverbanks and surrounding ecosystems.

Mitigation of negative impacts: the project will ensure that maintenance activities do not disrupt local ecosystems. Additionally, ongoing community consultations will ensure that the infrastructure remains effective and well-maintained without adverse social or environmental impacts. Regular monitoring and environmental assessments will be carried out to ensure that flood management infrastructure does not interfere with natural water courses or cause unintended ecological disruptions.

Output 2.2: Road infrastructure advanced to divert heavy-duty vehicles, including two small bridges and renovation of roads.

Economic benefits: improving road infrastructure will enhance connectivity between communities, improving access to markets, health services, and education facilities. The construction of new bridges and the renovation of roads will also increase the efficiency of transportation, reducing travel times and costs for local businesses and farmers who depend on the roads to transport goods. Improved infrastructure will also protect local businesses and residential areas from damage caused by heavy-duty vehicle traffic during flood seasons.

Social benefits: by diverting heavy-duty vehicles from residential areas, this output will improve public safety and reduce traffic-related accidents, particularly benefiting vulnerable groups such as children and the elderly. Improved roads and bridges will also ensure safer access to essential services, such as hospitals and schools, especially during periods of heavy rainfall or flooding.

Environmental benefits: diverting heavy vehicles from residential areas will reduce emissions and improve air quality in these zones. Additionally, the renovation of roads with eco-friendly materials and designs will ensure that the roads are resilient to climate impacts (such as heavy rainfall) while minimizing their environmental footprint. The new infrastructure will also prevent soil erosion and degradation caused by heavy vehicle traffic.

Mitigation of negative impacts: the construction and renovation of roads will be carried out with minimal disruption to local ecosystems and communities. Environmental assessments will guide the planning and construction to ensure that the natural landscape and habitats are preserved. Any short-

term environmental impacts from construction activities, such as noise, dust, and waste, will be managed through mitigation measures, including dust control and safe waste disposal.

Component 3: Awareness raising and capacity building

Output 3.1: The level of knowledge on effective recovery methods of degraded landscapes will be increased

Economic benefits: improved decision-making on land restoration will enhance economic returns from rehabilitated lands;

Social benefits: communities will be empowered to manage their lands sustainably, reducing vulnerability to environmental shocks;

Environmental benefits: increased knowledge will promote the recovery of degraded lands and enhance biodiversity;

Output 3.2: The knowledge level on natural and agro landscape adaptation to climate change will be increased

Economic benefits: enhanced climate adaptation will ensure the long-term productivity of agricultural lands;

Social benefits: vulnerable populations will be equipped with the skills to adapt to climate impacts;

Environmental benefits: the promotion of climate-smart agriculture will reduce environmental degradation;

Output 3.3: Increasing knowledge on flood occurrence and prevention possibilities

Economic benefits: reduced costs from flood damages through informed planning and preparation;

Social benefits: communities, including vulnerable groups, will be better prepared for floods;

Environmental benefits: improved flood management will protect ecosystems and reduce soil erosion;

Output 3.4: Promoting sustainable thinking related to landscape adaptation to climate change in communities

Economic benefits: adoption of sustainable land management will increase economic resilience;

Social benefits: communities will be empowered to take proactive steps in managing their environment;

Environmental benefits: promoting sustainability will reduce environmental degradation and support ecosystem restoration;

Output 3.5: Involvement of local media and environmental NGOs in climate change mitigation

Economic benefits: better-informed communities will make more economically viable decisions regarding land use;

Social benefits: NGOs and local media will raise awareness on climate risks, benefiting all community members;

Environmental benefits: media involvement will promote environmental awareness and community engagement in sustainable practices;

Risk mitigation and gender considerations

The project will provide women and men regardless of their background, age, class, ability or gender equality with an equal opportunity to strengthen their agency, build their resilience, address their differentiated vulnerabilities and increase their capability to adapt to climate change impacts and interlinked challenges.

The project promotes equal access to resources and aims to avoid gender biases by ensuring that women participate in the management and use of the restored landscapes.

Additionally, a grievance redress mechanism (GRM) will be established to address community concerns during the implementation.

The project is designed in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund. It includes environmental assessments and risk management plans that identify potential risks (e.g., soil erosion, water resources) and mitigation measures (e.g., sustainable farming practices, erosion control methods).

This comprehensive approach will ensure that the program delivers economic, social, and environmental benefits to the targeted vulnerable populations, particularly women and marginalized groups, while avoiding or minimizing any negative impacts.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

The cost-effectiveness of the proposed project is based on its ability to implement sustainable, long-term interventions that maximize environmental, social, and economic benefits while minimizing costs through strategic design and innovative approaches. The project achieves this by building on lessons learned from the pilot stage, focusing on replicable and scalable solutions that reduce the financial burden on public resources.

Key interventions such as soil recultivation and the establishment of forests in degraded areas provide long-term benefits, including carbon sequestration, biodiversity conservation, and reduced soil erosion. While these interventions involve higher upfront costs compared to alternatives like grassland restoration, they offer substantial cost savings over time due to lower maintenance needs and the ability to generate economic returns through ecosystem services. Similarly, the introduction of climate-resilient agricultural practices and waste management solutions in target communities significantly reduces operational costs and enhances productivity, leading to higher profitability and improved livelihoods.

The project's emphasis on utilizing locally sourced materials and labor, coupled with the engagement of private sector partners, further enhances its cost-effectiveness. The involvement of a private financier for high-value agricultural models ensures a shared risk model, lowering the financial burden on public or donor funding. This approach allows the project to generate economic returns while simultaneously contributing to environmental restoration.

In addition, the project's training and capacity-building components ensure that local communities and authorities are equipped with the skills necessary to sustain project outcomes, reducing the need for expensive external consultants and fostering local ownership. By involving local stakeholders in decision-making and leveraging community-led implementation efforts, the project minimizes costs while ensuring that its interventions are aligned with local needs and capacities.

Benefits from proposed interventions, alternatives and reasons for not adopting

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
Output 1.1 - Soil cover of mine adjacent to Ani community is recultivated (10 ha of forest cover will be created)	Usage of grassland / meadow restoration practices	Both forest creation and grassland are considered as effective recultivation options of abandoned mine sites. Grassland restoration usually requires lower initial investments, since grasses are faster growing and require less care. However, they require periodic maintenance and usage of large amount of water over time. Forests offer substantial long-term benefits, including carbon sequestration, biodiversity, and potential economic returns from ecosystem services, such as eco-tourism. Moreover, once established, forests may require less frequent maintenance than other ecosystems.	While grasslands offer short-term cost-effectiveness, ease of establishment, and quick soil stabilization, forests provide greater long-term benefits in terms of biodiversity, carbon sequestration, soil stability, and the potential for economic returns through ecosystem services. Although forests have higher initial costs due to the need for tree planting and longer periods of maintenance, they become highly self-sustaining in the long term. Once established, a forest requires less frequent intervention and provides a robust, long-term solution to soil stability.	Forests provide long-term soil stability through deep-rooted trees, which help bind soil and prevent erosion. Forest ecosystems also support biodiversity. A forest provides habitat for a wide range of species. It can also enhance local ecosystem services such as water filtration and air purification. Moreover, forests are more resilient to climate change. They can better withstand extreme weather due to the diversity of species and complex root systems. Forests can also help remediate contaminated soils by absorbing heavy metals and stabilizing the soil, preventing further contamination spread.
Output 1.2 - Forest grove established with support of previous project is taken care of and became sustainable	No specific actions to take care of the forest grove.	In the initial stages of establishment, forests require long-term investment, as there is a need for ongoing maintenance, such as protection against pests, diseases, and	Taking care of a forest grove established by a previous project is significantly more cost-effective than neglecting it. The international practice shows that	A well-maintained forest helps to stabilize soil and prevent erosion. It also contributes to increase of biodiversity and long-term

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
		fire hazards, watering etc. If no maintenance activities are taken it can lead to high mortality rates of planted trees, poor growth and increased costs in future for replanting and restoring the area.	without maintenance, young trees can experience mortality rates of 30-70% within the first few years, which will result in wasted investments. In addition, if maintenance is not properly performed, replanting of trees will be required, which will require higher costs compared to maintenance costs (replanting costs can be up to 10 times more than routine maintenance costs). Mature forests provide significant carbon sequestration benefits. A well-maintained forest can sequester about 1 ton of CO2 per year for every 1,000 trees. This is around 20 tons of CO2 sequestered over 20 years, having a market value in carbon credit trading systems (USD 15-50 per ton on average), of USD 300 to USD 1,000 for 1,000 trees.	ecosystem resilience. Properly maintained forests provide numerous ecosystem services, including carbon sequestration, habitat provision, water filtration, and improved air quality. The maintenance can enhance the aesthetic and recreational value of the area, promoting ecotourism and community engagement. The forest can serve as an educational resource, raising awareness about environmental conservation and the importance of maintaining healthy ecosystems.
Output 1.3 - Sowing areas of perennial plants are created reducing rangeland degradation and enhancing the adaptability of degraded arable lands in Ani, Ashotsk and Artik	Cultivation of annual crops	Annual fodder crops require annual soil cultivation, higher costs, irrigation and fertilization are necessary to obtain a high yield, as well as result in less biomass than perennial crops.	Perennial fodder crops require lower operating costs. These crops can yield 2-3 harvests per year with comparatively larger volumes of biomass obtained compared to traditional annual crops. Also, they use	Cultivation of perennial crops contributes to the reduction of the soil degradation and erosion, fostering more sustainable agricultural practices. It is a cost-effective way

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
communities (900 ha of perennial sowing area established)			natural water efficiently and can grow even in drought conditions, contributing to the improvement of soils structure and the accumulation of organic nitrogen compounds in soil. Finally perennial fodder crops are about 1.5-2 times more profitable than annual fodder crops, offering farmers a higher return of investments.	of obtaining feed and high volumes of biomass. Moreover, perennial crops are resistant to the effects of extreme weather conditions, ensuring consistent production even during droughts. The stable yield contributes to enhanced food security for livestock, leading to increased income for farmers. This practice contributes to long-term sustainable land management practices, promoting soil health, improving water retention, and supporting biodiversity.
Output 1.4 - Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani, Ashotsk and Artik communities (45 ha hay meadows and 570 ha pastures)	Farmers continue using existing practices without the introduction of climate-adaptive techniques or additional support.	Reactive approaches will leave agricultural systems highly vulnerable to climate shocks, leading to declining yields and worsening quality over time. Lower adaptation potential. Low level of crop yield. Longer rehabilitation periods.	Support ecosystem services and biodiversity, which help maintain crop health and yield without ongoing financial inputs. Rehabilitation can increase crop yields by 10-20% due to improved soil health and reduced erosion. Due to high-quality forage, milk production can increase by 10-15% in dairy cattle.	Soil health improvement, water conservation, and reduced chemical use will lead to long-term environmental benefits, while stable yields will improve profitability and economic stability for rural communities.
Output 1.5 - Waste	No waste collection	Neglecting waste	Waste collection and	Proper and timely

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
collection practices are introduced in Ani, Ashotsk and Artik communities (garbage tracks, bins and collection) and pilot program for integrated management of household waste in the village of Vardakar is implemented	and waste management practices are introduced in the target communities	management will result in environmental pollution. It also contains public health related risks. Missed opportunities of recycling and reusing valuable materials. Increased greenhouse gas emissions.	proper management prevents pollution of land, water and air, thus reducing costs necessary for environmental clean-up and restoration. Proper waste collection, sorting and recycling significantly reduces the amount of waste sent to landfills, extending the duration of their operation and reducing the need of establishing new ones that are costly to establish and maintain.	collection of household waste and reduction of pollution of community areas and the environment Reduction of potential health hazards and infection risks of population, improvement of living conditions for all community members. Waste sorting, recycling and/or reuse, that create jobs at various stages of the process. Integrated waste management encourages recycling and reuse, turning waste materials into valuable resources, contributing to generation of additional income for the society and communities.
<u>Output 1.6</u> - Mapping of all degraded lands in Shirak region is implemented	Limited assessments are done based on small-scale surveys, focusing only on visibly degraded areas without a detailed analysis of underlying soil health, erosion levels, or other factors.	High risk of natural disasters, such as flooding, landslides etc. High risk of losing biodiversity. Incomplete understanding of the extent and distribution of land degradation. Without comprehensive	Mapping helps to accurately identify areas affected by degradation and conduct targeted interventions, thus improving efficiency of any restoration and rehabilitation activities. Mapping helps allocate limited resources (labor, materials, funds) more	Prioritization of restoration activities based on urgency and potential impact. Targeted restoration interventions ensuring efficient use of resources. Establishment of comprehensive dataset that

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
		mapping, any restoration or rehabilitation initiatives will lack a solid foundation, making it difficult to prioritize interventions and track progress over time.	efficiently to areas where they will have the greatest impact. Mapping allows to identify areas where restoration could improve land fertility and support sustainable agricultural practices, resulting in increase of incomes of farmers.	supports informed decision making by public, local and private institutions and development of effective land management strategies. Identification, mapping and detailed assessment of degraded areas promotes implementation of corrective actions by farmers and land managers, contributing to improvement of soil health and increased agricultural productivity. Mapping creates a baseline for monitoring land conditions over time. It allows for continuous assessment of land degradation trends and can serve as an early warning system for authorities. It will support the equitable distribution of land restoration efforts, ensuring that marginalized and vulnerable communities also benefit from land improvements and their associated economic gains.

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
<u>Output 1.7</u> - Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities)	Small-scale trials are conducted on individual farmer plots using basic, low-cost methods.	Without comprehensive infrastructure, efforts may not yield significant results, and the potential of the land may remain untapped. This would limit: • learning opportunities and reduce the impact of the intervention. • the scope to fragmented areas with minimal infrastructure, such as basic irrigation systems and temporary shelters, without robust facilities.	Engaging a private financier reduces the financial burden on public or donor funds, enabling a shared risk model and ensuring that resources are used efficiently. By piloting high-value crops with the right infrastructure, the intervention can generate significant economic returns, both in terms of yields and quality, making it a viable model for replication. Private sector involvement ensures that the infrastructure is managed with a profit-oriented mindset, enhancing the sustainability of the initiative beyond the project period.	The pilot will turn 100 ha of degraded land into productive, high-value agricultural land, contributing to improved land use and economic returns. The establishment of new agricultural models and infrastructure will create jobs and stimulate economic activity in the region, benefiting local communities. The pilot will provide a tested model that can be replicated across other degraded lands in Armenia, serving as a blueprint for large-scale land restoration and climate adaptation initiatives.
<u>Output 1.8</u> - Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community)	Conducting training on establishment and management of high-density (intensive) orchards	Conducting training increases the level of awareness and knowledge of the participants to a certain extent, but it does not always become a basis for the practical application and implementation of these practices in everyday life. Famers will be reluctant to change their agricultural practices only based	Demonstration sites provide practical examples and insights into effective orchard management. Establishment of intensive orchards with drip irrigation system and anti-hail nets, contributes to reduced water usage, reduction of crop loss, improvement of quality of harvested yield and productivity of the orchard.	Construction of demonstration sites in beneficiary communities promoting sustainable agriculture practices, through: - reduced water usage, thanks to application of drip irrigation systems, - improved soil quality, due to introduction of green, climate-

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
		on lessons. They do it, if there is a practical successful example in their community. The creation of demonstration sites for intensive orchards will have a more targeted impact on farmers to put these into practice.	This activity can demonstrate cost-effectiveness of establishing intensive orchards. Demonstration of sustainable agricultural practices and integrated pest management techniques in the orchards significantly reduce operating costs (chemical fertilizers and pesticides).	smart agricultural practices, - increased crop yield and quality, - reduced usage of pesticides and chemical fertilizers due to implementation of integrated pest management techniques. The demonstration sites will provide an opportunity for farmers to learn and implement best orchard management practices.
Output 1.9 - Architecture and design work for all components are carried out	There is no alternative, as it is required by the RA legislation	Neglecting implementation of this task will lead to fines and illegal actions	Architectural and construction design can propose the best and most effective options for solving the problem, leading to cost reduction, increasing the comfort of further operation and extending the life cycle.	Required by the RA legislation and proposes correct architectural solutions. Also increases the stability of the structure and duration of operation.
Output 1.10 - Index insurance piloted in beneficiary municipalities	Application of traditional crop insurance	Traditional insurance is applied when losses occur. It is based on assessment of losses and is time consuming and costly. Because of these costs, this insurance has high premiums.	As payouts of index insurance is based on predefined indices and there is no need to visit farms and assess losses, it has lower administrative costs than traditional insurance. Payouts are provided automatically, based on objective data, which is faster compared to	Piloting of index insurance in beneficiary municipalities, improving financial security and resilience and promoting sustainable practices and food security. Over time this will contribute to the long-term

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
			traditional insurance. It protects farmers from the financial risks associated with climate-induced crop failures and ensures financial savings which could be used for further development of production capacities.	economic and social stability of the region.
<u>Output 2.1</u> - Infrastructure constructed during the pilot project is maintained	The infrastructure constructed during the pilot project is left without regular maintenance or upkeep, leading to gradual degradation.	The infrastructure will quickly degrade, losing its functionality and reducing the impact of the initial investment. Reactive maintenance is often more expensive than regular upkeep, leading to increased long-term costs and inefficient use of resources.	Regular maintenance prevents major breakdowns and costly repairs, ensuring the longevity of the infrastructure and minimizing downtime. Without maintenance, rehabilitation of constructed infrastructure can be 3 to 10 times more expensive than regular, minor repairs. Maintenance extends use lifespan of the infrastructure, ensuring effective operation of supply chains, access to market and contributing to additional economic benefits and incomes for population of communities and community budgets	A structured maintenance will ensure that the infrastructure continues to operate at high efficiency and for an extended period, contributing to the long-term sustainability of the project's outcomes.
<u>Output 2.2</u> - Road infrastructure (two small bridges and renovation of existing road) is	Discussions with mine operators and drivers of heavy-duty vehicles asking to change	Changing the transportation route not only brings additional expenses for drivers and	Road infrastructure renovation provides labor opportunities for people of surrounding	Better logistics and easier access to markets and services will reduce travel times and

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities	their route	operators but could impact on soil structure of the new route resulting in new environmental challenges and potential social issues for neighbor communities. In addition, provision of detailed explanation about environmental impact of current practices does not guarantee that drivers and operators will decide to reroute if they don't see economic benefits.	communities. Purchase of renovation materials, construction equipment, etc. brings positive economic effects as well. In the long-term perspective better logistics, improved access to markets, educational facilities, health services have positive economic impact on communities.	costs for local businesses and farmers. Improved infrastructure will also protect local businesses and residential areas from damage caused by heavy-duty vehicle traffic, especially during flood seasons. Diverting heavy-duty vehicles from residential areas minimizes the risks associated with traffic accidents. Reducing emissions and dust in residential areas will lead to improved air quality. Additionally, improved infrastructure will help prevent soil erosion and degradation, while also reducing the potential for flooding.
<u>Output 3.1</u> - The level of knowledge on effective recovery methods of regional governments and municipalities on degraded natural and agro landscapes will be increased	Outsourcing recovery efforts to external consultants or service providers	Without building capacities of local and regional authorities, communities will not be able to maintain and conduct recovery measures independently. This also will reduce the local ownership over recovery actions, leading to	Improving knowledge and skills of regional and local authorities ensures their active participation in and contribution to climate change adaptation, nature degradation prevention and recovery activities. Recovery of natural-	Enhanced capacity of regional and local authorities to make informed decisions about and take action towards recovery of degraded natural and agricultural landscapes and selection of appropriate

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
		lower commitment to maintaining and upholding restoration efforts.	landscapes can restore soil fertility and reduce erosion, leading to higher agricultural productivity.	recovery methods.
Output 3.2 - The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased	Government-led adaptation measures without involvement of community population	Insufficient knowledge among population, resulting in resistance or not-acceptance from locals of climate adaptation practices	Enhanced knowledge encourages the adoption of climate smart agriculture practices that contributes to more efficient use of resources (water, fertilizers, etc.) Enhanced knowledge helps population to effectively prepare and respond climate-related challenges and risks, such as droughts, floods, etc.	People with relevant knowledge will use sustainable land management practices, reducing soil erosion, deforestation, land degradation etc. With relevant knowledge people can choose using climate-resilient crops and practices, leading to more stable yield and income.
Output 3.3 - Increasing the knowledge level of the population on the occurrence and prevention possibilities of floods	Rely on emergency response system	Inadequate skills and knowledge among population and increased vulnerability that could cause loss of life, property damage and personal injury.	Increasing the knowledge of population can support implementation of proactive measures to be prepared for potential flooding events and reduce the costs associated with flood recovery (renovation and repairing of property, rebuilding of infrastructure, etc.)	Educated society with relevant knowledge on flood prevention techniques. With educated and knowledgeable population, communities will be able to implement prevention measures (such as reforestation), thus reducing the likelihood of severe damage.
Output 3.4 - Promoting the importance of the sustainable thinking, learning and dissemination of information related	Promotion only among limited number of direct beneficiaries	This will involve only limited number of people not bringing the necessary knowledge to the general public.	Sustainable practices can contribute to reduction of costs related to land degradation and water scarcity, helping communities avoid	Sustainable thinking and learning encourage adoption of sustainable agricultural and land management

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
to the landscape adaptation to climate change in communities			the financial burdens of environmental damage and restoration	practices, which enhance the resilience of natural and agro landscapes. Dissemination of learning and knowledge on the landscape adaptation to climate change help communities to implement proactive measures to mitigate the adverse effects of climate change. Dissemination of information empowers population with the knowledge needed to make informed decisions about land use, resource management, and climate adaptation.
Output 3.5 - The involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change will be increased	No active cooperation with media and NGOs	Media and NGOs play a key role in the process of mitigating the negative effects of climate change. Their increased involvement will help in raising awareness, educating the public, advocating for policy changes, facilitating community actions.	Involvement of the media and NGOs is a cost-effective way to disseminate information about climate change risks, adaptation measures, and best practices. Increased involvement of media and NGOs helps educate people on sustainable practices, resulting in long-term cost savings by preventing environmental degradation, soil erosion, or ineffective	Collaboration with the media and NGOs on climate change mitigation efforts can reduce emission and pollution, resulting in better air and water quality and promotion of clean energy solutions. Knowledge on best practices for climate resilience, disaster recovery, and environmental protection will be easily disseminated by media and NGOs, helping

Output	Alternative measure	Reason for not adopting	Cost effectiveness rationale	Benefits from proposed intervention
			land-use practices.	population to adopt more sustainable practices and minimize damages caused by natural disasters.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

Proposed Project is architected around key national development strategies and aligned with relevant sectorial policies, frameworks and strategies at the national and sub-national levels. More specifically, the alignment is demonstrated through:

- The project is highly relevant to Armenia's revised NDC for 2021-2030 through the focus on mitigating land degradation, desertification, and the adverse effects of climate change on agriculture aligns with the country's commitments under its revised NDCs. The NDC includes prioritization of sustainable land use, water resource management, and the adoption of climate-resilient agricultural practices. By addressing the specific vulnerabilities of different soil and land zones and acknowledging the projected shifts in ecosystems due to climate change, the project directly contributes to the objectives set in the NDCs. Furthermore, the emphasis on adapting agricultural practices to reduce vulnerability to natural hazards such as droughts, hailstorms, and erosion is in line with the adaptation strategies outlined in the revised NDCs. By implementing measures to increase the resilience of the agricultural sector, Armenia not only works towards securing its food supply and livelihoods of its rural population but also contributes to its broader climate goals.
- **National Adaptation Plan (NAP[16]), Sectorial Adaptation Plans (SAPs for Water and Agriculture), and Marz Adaptation Plans (MAPs)**: The project is aligned with the triangular adaptation building framework comprised of NAP, SAPs and MAPs (these two are largely discussed with stakeholders but not finally approved) that provides a roadmap for adapting to climate change, identifying priorities, and integrating adaptation into national planning processes. The Project is aligning its objectives, activities, and outcomes with the priorities and goals outlined in the NAP, SAPs and MAPs;

  Armenia's National Adaptation Plan (NAP) illuminates the critical climate vulnerabilities the nation faces, including land degradation, unsustainable agricultural practices, and the increasing frequency of floods and droughts. To combat these challenges, the plan outlines a series of necessary legal acts for enactment. However, while sectorial adaptation plans offer a detailed vision for financing and infrastructure needs in the agricultural and water sectors, these plans are yet to receive approval. These plans are pivotal in addressing the key challenges and barriers specific to these sectors. Furthermore, the Marz (regional) adaptation plans provide a tailored approach to region-specific

[16] https://unfccc.int/sites/default/files/resource/NAP_Armenia.pdf

needs, outlining action plans to tackle localized issues effectively.

Despite these efforts, the overall framework of Armenia's NAP remains somewhat vague. This ambiguity is anticipated to be addressed through the NAP-2 process, recently announced by the Green Climate Fund (GCF). This initiative is aimed at advancing the NAP framework, ensuring a more robust and effective approach to climate adaptation. Integral to this process is the development of the NAP Financing Strategy. This strategy is crucial as it aims to comprehensively plan and coordinate the adaptation process, address existing gaps, and facilitate private sector engagement. The emphasis on a coherent financing strategy underscores the importance of a well-structured approach to climate adaptation, ensuring that both public and private resources are utilized effectively to meet Armenia's climate resilience goals.

- **National Development Plans:** The Project is aligned with the country's national development plans (e.g. Government Strategy for 2022-2026), which outlines the government's overall development objectives and strategies. By aligning with this document, the Project can contribute to the achievement of broader national development goals and ensure coherence in resource allocation;

  Armenia's national development plans are a comprehensive effort to enhance the resilience of the country's regions to climate change, while also removing barriers to the growth of the agricultural sector through the implementation of targeted strategies. Central to these plans is the government's commitment to agricultural advancement, which includes a multi-faceted approach to improving infrastructure, technology, and resource management in the sector. This includes a significant push to expand intensive gardens by 1,000 hectares annually and to fully insure agricultural plants within the next five years, with a substantial subsidy for insurance fees. Additionally, the government plans to increase accessibility to financial resources through continued subsidization of agricultural loan interest rates and to encourage the adoption of modern irrigation systems by reimbursing irrigation water fees for lands up to 3 hectares.

  The infrastructure and technological aspects of agriculture are also receiving focused attention. The government aims to update the agricultural machinery inventory with at least 500 new units each year and to subsidize the production of high-value and organic plants. This effort is supplemented by support for greenhouse economies and the promotion of modern data analysis in agricultural enterprises. The aim is to create a more efficient, sustainable, and technologically advanced agricultural sector that can adapt to the challenges posed by climate change.

  In addition to these measures, the plans place a strong emphasis on animal husbandry and food processing. This includes the introduction of a system for numbering and recording animals, improving pedigree, and providing resources for building modern livestock facilities. The government also intends to continue supporting the leasing of agro-food equipment, which will aid in dairy production and processing, and promote the construction of slaughterhouses. To bolster the agricultural market, efforts are being made to foster local seed breeding and to finance the creation of wholesale markets, logistics centers, and collective warehouses. The overall strategy is rounded off with plans to improve food safety legislation and promote the effective use of agricultural lands, underscoring the government's comprehensive approach to fostering a robust, sustainable, and climate-resilient agricultural sector.

- **Sectoral Strategies and Plans:** The Project is aligned with the "Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020-2030", other relevant sectoral strategies and plans, such as that forestry, water resources, and disaster risk

reduction. This alignment ensures that the project contributes to the resilience and sustainability of key sectors;

The strategy is acutely relevant to the country's agricultural development needs, particularly in addressing land degradation and promoting high-value agriculture. The strategy's emphasis on expanding intensive gardens by 1,000 hectares annually reflects a concerted effort to counteract land degradation. By increasing arable land dedicated to high-yield, high-value crops, the strategy aims to enhance soil quality and productivity. This expansion is critical in a country where agriculture accounts for a significant portion of the economy and employs a large segment of the population. The move towards high-value agriculture, which includes the cultivation of organic and specialty crops, represents a shift from traditional, lower-value farming practices. This shift is expected to increase the profitability of the agricultural sector and offer new opportunities for farmers.

The strategy's focus on modernizing agricultural practices and infrastructure is also pivotal in addressing land degradation. Initiatives like the full insurance of agricultural plants and subsidizing up to 70% of seed acquisition for spring and autumn sowing are designed to reduce the risks associated with farming, encouraging investment in better farming practices. Furthermore, the plan to introduce modern systems of drip and/or rain irrigation in land parcels of up to 3 hectares, with full reimbursement of the fee for irrigation water for a term of 5 years, indicates a move towards more sustainable water management practices. Efficient irrigation is crucial in a country like Armenia, where water resources are limited and the impacts of climate change are intensifying issues like drought and irregular rainfall patterns.

Additionally, the government's commitment to updating its agricultural machinery inventory with at least 500 units each year, and supporting the establishment of greenhouse economies, aligns with the needs for sustainable agricultural development. These initiatives not only enhance productivity but also promote environmentally friendly practices that are vital for mitigating land degradation. By investing in technology and infrastructure, Armenia is positioning its agricultural sector to be more resilient, efficient, and capable of producing high-value products, which are increasingly in demand both domestically and in international markets. This holistic approach, combining land management, technological advancement, and market-oriented policies, is essential for a sustainable and prosperous agricultural future in Armenia.

- National Communication N4 to UNFCCC: The Project considers the climate vulnerabilities and adaptation priorities outlined in the country's National Communications N4 to the United Nations Framework Convention on Climate Change (UNFCCC). These communications provide an overview of the country's climate change vulnerabilities, adaptation efforts, and capacity-building needs;

Armenia's agricultural sector faces significant vulnerabilities due to natural hazards and climate change, with these impacts varying across different land zones and crops. The country is particularly susceptible to land degradation and desertification, affecting approximately 80% of its territory. This degradation is a result of both natural factors, like water and wind erosion, droughts, and landslides, and anthropogenic activities. Climate change further exacerbates these issues by contributing to the vulnerability of organic carbon reserves in soils.

Key projections for the next 100 years indicate a worrying trend for Armenian agriculture. Soil moisture levels are expected to decrease by 10-30%, impacting the moisture provision for various crops by 7-13%. This will lead to a shortage of water for irrigation, increasing soil water deficits by 25-30%. The productivity of irrigated land could reduce by about 24%, and there will be a notable

degradation of lands and natural pastures. Pasture area and productivity might decrease by 4-10% by 2030, with a corresponding decline in fodder production volumes. Crop yields are also projected to drop by 8-14%. Hazardous hydrometeorological phenomena like hailstorms, frosts, heat waves, and droughts will significantly impact agricultural crop yields.

The terrestrial ecosystems are also expected to undergo significant shifts. Vertical shifts of up to 250-300 meters in the existing boundaries of main natural ecosystems are anticipated, with a reduction in the surface area of the alpine zone by about 22% and an expansion of sub-alpine tall-grass and wetlands. Forest ecosystems might expand into current meadow areas, and semi-desert vegetation is likely to be preserved with an expansion of the phryganoid zone. A new desert zone is projected to emerge, expanding the desert and semi-desert area by about 33%.

Soil ecosystems will also be affected, with changes in natural vegetation leading to structural shifts in lands and increased vulnerability to landslides. Erosion is a significant concern, with various soil zones showing differing levels of erosion, indicating that if current land use practices continue alongside these climate change forecasts, the area of eroded soils is expected to expand. Overall, these vulnerabilities underline the urgent need for adaptive strategies in Armenia's agricultural sector to mitigate the impacts of climate change and natural hazards.

Demonstrating alignment with national and sub-national sustainable development strategies enhances the Project's credibility, fosters collaboration with government agencies and stakeholders, and increases the likelihood of sustained support for the Project's implementation and its long-term benefits to the country's development goals.

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

General compliance with Adaptation Fund Guidelines

The project is fully aligned with the Adaptation Fund's Environmental and Social Policy (ESP) and meets relevant national technical standards in Armenia. The project proposal includes a Gender Assessment and GAP, which will advise Gender equality related activities. Furthermore, the EPIU will be guided by its Gender policy and Grievance mechanisms developed in consultation with AF.

This includes a commitment to assess and mitigate environmental and social risks by utilizing the Fund's risk classification system (Categories A, B, and C).

- **Category A**: Activities that may have significant adverse environmental or social impacts that are diverse, irreversible, or unprecedented. All category A projects require a full ESIA and other special studies (RAP, biodiversity management study, etc.) with in-depth climate adaptation assessment and consideration of the aspects related to climate change adaptation (climate resilience) and mitigation. The project does not foresee activities falling under Category A, as it has been designed to avoid such high-level risks.
- **Category B**: Activities that may have potential adverse environmental or social impacts that are typically site-specific and largely reversible. Many of the project components, such as reforestation and infrastructure development, fall under **Category B**. A full **Environmental and Social Impact Assessment (ESIA), and Environmental Management Plan and Climate adaptation and mitigation plan** will be conducted for these activities to identify risks and ensure the development of appropriate mitigation strategies.

- **Category C**: Activities that are likely to have minimal or no adverse environmental or social impacts. Activities such as capacity building, community training, and awareness-raising fall under **Category C** and will not require an extensive environmental or social impact assessment but will still be monitored for any unforeseen risks, a partial ESIA or a simple ESMP will be sufficient based on project specifics.

The overall Category of the Project is classified as **Category B,** taking into consideration that several components of the Project may have potential adverse environmental or social impacts. It is worth mentioning that only projects registered as B or C will be funded.

A **Grievance Redress Mechanism (GRM)** will be established to ensure that community concerns related to environmental or social risks are addressed transparently and efficiently. Additionally, **monitoring** and **evaluation** will be ongoing to ensure compliance with national environmental laws and **Adaptation Fund** guidelines.

General overview of compliance with Armenian National Laws and Standards

The project is committed to meeting all relevant national technical standards in Armenia, with particular emphasis on environmental, social, and construction-related regulations. These standards ensure that the project operates within Armenia's legal framework and contributes to sustainable development goals. Additionally, the project complies with the **Environmental and Social Policy (ESP)** of the Adaptation Fund, ensuring that environmental and social risks are thoroughly assessed, monitored, and mitigated throughout the project lifecycle.

Compliance with the following Armenian legal instruments will guide the project's execution:

1. **Law on Environmental Impact Assessment and Expertise** (HO-110-N, 2014): Governs the procedures for conducting environmental impact assessments (EIA) and public consultations for projects with potential environmental impacts.
2. **Urban Development Code** (2015): Provides the framework for construction and urban planning in Armenia, including building codes, safety regulations, and energy efficiency standards.
3. **Water Code of Armenia** (2002): Regulates the sustainable use of water resources, water rights, and permits for water extraction and use.
4. **Law on Specially Protected Areas (2006)**: Defines the protection and management of Armenia's protected natural areas, ensuring conservation of biodiversity and ecosystem services.
5. **Law on Flora (1999) and Law on Fauna (2000)**: Regulates activities affecting Armenia's biodiversity, ensuring sustainable use of natural resources and protection of ecosystems.
6. **Law on Waste** (2004): Governs waste management practices, including the disposal, recycling, and management of hazardous and non-hazardous waste.
7. **Law on Energy Efficiency and Renewable Energy** (2004): Sets standards for energy efficiency and encourages the development of renewable energy sources.

The project complies with key Armenian technical standards, including:

- **Environmental Impact Assessment (EIA)**: In compliance with the **RA Law on Environmental Impact Assessment and Expert Examination (2014)**, the project will undergo EIA for activities that pose environmental risks, particularly those involving infrastructure development.

- **Construction and Safety Codes**: All infrastructure-related activities, including flood prevention systems and building renovations, will adhere to Armenian **building codes** and international best practices to ensure safety and environmental sustainability.
- **Waste Management**: Waste management activities, including stone pit waste and community-level waste collection, will follow Armenia's **waste management laws** and guidelines, ensuring the sustainable treatment and disposal of waste materials.

Category B Outputs: These outputs involve **moderate localized risks** such as soil disturbance, pollution risks, and water resource impacts, which are manageable with proper mitigation strategies like **ESMPs** and **specific management plans**. Each output with Category B will require detailed assessments to ensure proper risk mitigation and compliance with environmental regulations.

Category C Outputs: These outputs are primarily focused on **education, data gathering, and financial instruments**, which pose **minimal to no environmental or social risks**. Minimal documentation is required, primarily focusing on training materials and knowledge-sharing reports.

Component-by-component analysis of compliance with national standards and Adaptation Fund policies

Component 1: Restoration, Management, and Increase of Adaptation Potential of Natural and Agricultural Landscapes

Compliance with the national technical standards

Environmental Impact Assessment (EIA): all activities related to landscape restoration, reforestation, and agricultural development must comply with the Armenian Law on Environmental Impact Assessment and Expertise (2014, updated on 2023). Prior to initiating landscape restoration (Output 1.1 and Output 1.3), EIAs shall be conducted to assess the potential impacts on soil, water resources, and biodiversity, ensuring sustainable project implementation.

Land-use and Forest management regulations: the project adheres to Armenia's Forest Code and related land-use regulations by using sustainable forestry practices (Output 1.2). This ensures compliance with national forest management standards, promoting the regeneration of degraded lands without harming natural ecosystems. For the mapping of degraded lands (Output 1.6), the project complies with national land-use planning regulations, which guide the classification of land and restoration activities.

Agricultural standards: the establishment of perennial crops and the development of climate-resilient agricultural models will follow Armenian Agricultural Standards for crop production and soil management. This ensures that the crops planted are suitable for local climate conditions and do not disrupt natural ecosystems.

Waste management standards: waste collection and management practices in Ani and Ashotsk as well as the pilot program in Vardakar, will comply with the Law on Waste Management and Sanitation in Armenia. This guarantees that waste management is conducted safely, minimizing pollution and promoting recycling.

Water resource management: the irrigation systems introduced in Outputs 1.3 and 1.4 comply with Armenia's Water Code, ensuring that water resources are used efficiently and in compliance with water abstraction permits and resource management standards.

Compliance with Environmental and Social Policy of the Adaptation Fund:

The project's reforestation and landscape restoration efforts are in line with the ESP, particularly regarding the protection of natural habitats and biodiversity conservation. The project shall integrate the Gender Policy, ensuring that women and vulnerable groups participate equally in agricultural and environmental initiatives. Potential environmental and social risks, such as the displacement of communities or disruption of local ecosystems, shall be mitigated through continuous monitoring and adherence to international best practices for environmental conservation.

Environmental safeguards: the project shall integrate the Environmental and Social Management Plan (ESMP), which includes measures for preventing soil degradation, water pollution, and biodiversity loss during landscape restoration. This aligns with the ESP of the Adaptation Fund.

Gender and social inclusion: the project shall follow the Gender Policy of the Adaptation Fund by ensuring that women and marginalized groups are actively involved in land restoration activities and benefit from agricultural productivity increases (Output 1.4). Training and employment opportunities shall be provided equitably to ensure compliance with gender equity standards.

Component 2: Prevention and management of floods

Compliance with the national technical standards:

Building and infrastructure codes: all flood control structures and urban infrastructure upgrades (Output 2.1 and Output 2.2) comply with Armenia's Urban Development Code, which sets the standards for constructing climate-resilient buildings and infrastructure.

The project meets the requirements of the **Seismic Safety Standards** (SNIP II-7.02-95) for construction in Armenia, particularly in flood-prone regions. This ensures that all infrastructure is built to withstand climate-induced disasters, including floods and landslides.

Road construction standards: road infrastructure improvements, including the construction of bridges and the diversion of heavy vehicles, must meet the National Road Standards (2011) to ensure that roads are durable and safe for public use. The roads will be designed with climate resilience in mind, adhering to national guidelines for materials, safety, and environmental protection.

Public health and safety standards: during construction, the project follows occupational health and safety (local OHS and OHSAS 180001) standards, including those outlined in the Labour Code of Armenia and Regulation No. ՀՀՇՆ 13-02- on construction safety. Proper signage, protective equipment, and site security measures are enforced to ensure the safety of workers and nearby communities

Flood Management Regulations: The flood prevention systems will adhere to the Water Code of Armenia, particularly the provisions related to flood control and the management of water resources. The project's flood management strategies will also comply with national standards for disaster risk reduction (DRR).

Compliance with Environmental and Social Policy of the Adaptation Fund:

The flood management infrastructure and activities comply with the ESP by minimizing environmental degradation during construction and ensuring that communities are not negatively impacted by the projects. The project shall consider social equity, ensuring that vulnerable groups are protected from flood-related risks and ensure that gender-inclusive approaches are implemented in planning and executing flood management strategies.

Component 3: Raising awareness and knowledge of climate change adaptation

Compliance with the national technical standards:

Public awareness and education standards: the project's awareness-raising programs will align with national standards for public outreach and education set by the Ministry of Environment of Armenia. These programs ensure that the public is informed about climate risks and adaptation strategies, complying with national requirements for environmental education.

Training and capacity building standards: capacity-building activities for regional governments, municipalities, and local communities (Outputs 3.1 and 3.2) will follow the National Training Guidelines for Environmental Protection. This ensures that all training activities are relevant, standardized, and aligned with Armenia's environmental priorities.

Compliance with Environmental and Social Policy of the Adaptation Fund:

The outreach and capacity-building programs fully comply with the ESP by promoting the inclusion of all community members, with a focus on marginalized groups, such as women, indigenous people, and the elderly. The project will ensure that vulnerable communities receive targeted support to enhance their resilience to climate change. Additionally, the project shall emphasize transparency, stakeholder engagement, and gender equity, ensuring compliance with the Gender Policy of the Adaptation Fund.

General compliance of the Project with national standards

1. **Environmental protection standards**: across all components, the project adheres to the Law on Environmental Protection (1991) of Armenia, which mandates environmental assessments, the protection of biodiversity, and the sustainable management of natural resources. This law underpins all project activities related to landscape restoration, agricultural practices, and infrastructure development.
2. **Gender equality and non-discrimination laws**: the project aligns with the Constitution of the RoA and the Law of the Republic of Armenia "on Provision of equal rights and equal opportunities for women and men" (2013), ensuring that women and man participate equally in all aspects of the project, from decision-making to implementation. This is particularly relevant for training programs and agricultural initiatives, where gender balance is a core principle.
3. **Social impact standards**: the project complies with the Law on Social Protection (1996) by ensuring that all interventions prioritize the well-being of vulnerable communities, providing them with the necessary resources and knowledge to cope with climate risks. The project will also ensure that it aligns with the ILO (International Labour Organization) Standards on decent work, ensuring fair labor practices throughout the project.

Cross-Cutting Compliance Measures

Standard	Component	Compliance Measures
Environmental Impact Assessment (EIA)	Component 1 and 2	EIAs are conducted for landscape restoration and infrastructure development, in accordance with Armenia's EIA regulations and Adaptation Fund's environmental safeguards.

Building Codes and Construction Standards	Component 2	Infrastructure complies with Armenia's seismic and building standards, ensuring resilience against climate-induced disasters like floods and earthquakes.
Water Resource Management	Component 1 and 2	Water use for irrigation and flood control follows national Water Code regulations, ensuring sustainable water management and compliance with resource abstraction permits.
Public Health and Safety Standards	Component 2	Construction sites adhere to local OHS standards and OHSAS 180001, ensuring worker safety and minimizing risks to nearby communities. Protective equipment and regular health checks are mandated.
Land-Use and Forest Management Regulations	Component 1	Forest regeneration and land restoration comply with the Forest Code, promoting sustainable land-use practices that align with national forestry management and conservation laws.
Gender Equity and Social Inclusion	Component 1, 2, and 3	Project is mainstreamed with Gender responsive approaches and GAP ensuring compliance with the Gender Policy of the Adaptation Fund and advising peculiarities of implementation is an integral part of the project document.

F. Describe if there is duplication of project/programme with other funding sources, if any.

During the planning stage of this project several ongoing programs and projects have been identified implementing climate adaptation-related activities. During the project implementation the team will regularly communicate with relevant stakeholders and partners to identify any potential overlaps, avoid duplications and ensure complementarity of efforts. Below is a preliminary list of programs and projects which will be further reviewed to ensure coordination and avoid duplication.

The Sustainable and Inclusive Growth in Mountainous Armenia (SIGMA)	Funded by the Swiss Agency for Development and Cooperation (SDC), this project aims to alleviate poverty and inequality in Armenia's mountainous regions of Shirak, Lori, Tavush, and Gegharkunik. Implemented by DAI Global UK and its Armenian branch, in partnership with AMPERA Consulting Company, the project employs a Market System Development (MSD) approach to foster linkages between farmers, small rural businesses, and private companies, known as "catalysts of rural growth."

	Within this framework, the project collaborates with these catalysts to co-invest in cross-cutting systems within the agriculture and tourism sectors. These systems in the agriculture sector include irrigation, agro-machinery, aggregation and processing, crop seeds and seedlings, beekeeping support services, and agri-technologies. To ensure inclusivity, the project prioritizes the active involvement of women, people with disabilities, and ethnic minorities.
Promoting Green Deal Readiness in the Eastern Partnership Countries (PROGRESS)	Funded by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection and implemented by a GIZ-led consortium, this 4.5-year project supports Eastern Partnership countries in their transition to climate-oriented, resilient, and green economic development. It aims to transform selected agricultural and related industrial food value chains by promoting innovative technologies, tools, and methodologies that enhance sustainability, climate resilience, and long-term greenhouse gas (GHG) mitigation. The project also seeks to improve enabling framework conditions. Two value chains in Armenia have been selected for further interventions within the project's scope.
Land Restoration and Ecosystem Service Improvement through Use of Fruit and Nut Tree Biodiversity in Armenia	Funded by the World Bank and co-financed by the GEF and implemented by "Hayantar" SNCO and REC Caucasus Armenia, this three-year project aims to address landscape degradation and promote ecosystem restoration in Armenia through improved national strategies and policies. The project will focus on enhancing the use of local agrobiodiversity in land and ecosystem restoration, demonstrating and scaling up effective restoration practices, and marketing ecosystem services produced through restored lands. Implementation will occur in pilot areas of Lori, Tavush, Syunik, Shirak, Vayots Dzor, Gegharkunik regions and Yerevan city. A study will be conducted to identify potential restoration directions for degraded lands and ecosystems in urban and peri-urban areas, focusing on indigenous fruit and nut tree species. The projects approach involves strengthening the enabling environment through national strategies and policies, while also promoting behavioral changes through training for policymakers, smallholders, and local communities in sustainable conservation and utilization of fruit and nut tree resources.
Decarbonization and Climate Resilience in the Eastern Partnership (EU4ClimateResilience)	This multi-donor four-year action supports the green transition, enhances decarbonization, boosts energy security, and increases climate resilience in the Eastern Partnership countries, including Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine. It is co-financed by the European Union and the Federal Ministry for the Environment, Nuclear Safety, and Consumer Protection, and is implemented by GIZ and OECD. The project aims to improve the capacity of participating countries to

	measure and reduce national emissions, increase adaptation to the impacts of climate change, and demonstrate the benefits of adaptation through the financing of several demonstration projects.
USAID Economic Foundations for a Resilient Armenia Activity	This five-year (2023-2028), $24.5 million budget activity focusing on delivering technical assistance to the government and supporting the private sector and associations in the key areas of agriculture, tourism and high-tech industries. The primary objective of the program is to strengthen Armenia's economic resilience and promote competitiveness and economic governance. The program aims to improve Armenia's economic resilience by enhancing its economic stewardship, particularly in the tourism, high-tech, and agriculture sectors. Through institutional and human capacity development, legal framework improvements, and increased export competitiveness, the project seeks to drive economic growth, create jobs, and improve living standards. By collaborating with industry associations and businesses, the program aims to increase sales, access high-value markets, and promote sector competitiveness. Additionally, it focuses on mobilizing investment, building financial networks, and assisting Armenia in navigating economic fluctuations.
Innovative Agriculture Training and Learning Camp – Agri Camp	Funded by USAID and implemented by International Center for Agribusiness Research and Education (ICARE), this six-year program aims to promote innovative agriculture in Armenia by enhancing regional agricultural cooperatives, farmers, and SMEs, fostering market growth, and establishing new connections with international distributors for increasing export volumes. Key strategies include improving professional knowledge and skills of ANAU students and staff, strengthening agricultural cooperation and business development, as well as designing, piloting, and testing agricultural data and mapping systems. To promote innovative approaches, the program will provide modern knowledge and skills in areas like IT solutions, sustainable and smart agriculture (circular economy, green agriculture, intensive agriculture), and other technologies necessary for meeting market demand and achieving sector competitiveness.

To avoid duplication and ensure complementarity with existing projects, programs, and future initiatives, the project implementation team will adopt the following strategic approaches and steps:

- **Mapping:** Continuously monitor and identify ongoing and new projects or programs in the target areas, including initiatives from state and regional/local authorities, non-governmental organizations, international organizations, and other development partners. The team will actively seek opportunities for collaboration or complementarity rather than duplication.
- **Consultations:** The project implementation team will initiate consultations with relevant stakeholders, other projects, and potential partners to understand ongoing and planned initiatives and identify areas for collaboration. Existing networks and partnerships will be leveraged to strengthen collaboration and avoid duplication.
- **Coordination mechanisms:** EPIU will establish coordination mechanisms, such as regular

meetings or platforms, where representatives from different projects can meet regularly, share information, update their plans and identify potential synergies.

- **Information sharing:** The project team will establish clear communication channels to ensure timely information sharing and coordination among stakeholders. This transparency will help to avoid unintentional duplication.
- **Joint planning:** Engage in joint planning sessions with other projects to develop a coherent and integrated approach to addressing common challenges. Encourage collaboration and knowledge-sharing among project teams to identify opportunities for joint activities or resource sharing.
- **Regular review and adjustment:** The project progress will be regularly monitored and compared with the goals of other initiatives. Strategies and implementation approaches will be adjusted as needed to avoid duplication and ensure complementarity.

The following key recommendations are extracted from the Final Evaluation of the pilot Project that was conducted by independent international consultants:

- **Alternative road construction in Artik**: A critical recommendation involves constructing an alternative road to mitigate the dust pollution caused by heavy trucks passing through the town of Artik. This road construction is essential for improving local air quality and protecting public health. Despite the initiative by the Environmental Project Implementation Unit (EPIU) and communication from the Ministry of Environment to the Ministry of Territorial Administration and Infrastructures, progress on this project has been limited. It is advised to revisit and review this proposal during the budget discussions for 2024.

- **Rehabilitation of abandoned mines and solid waste management**: Another significant recommendation is the rehabilitation of other abandoned mines near community areas. This includes soil recultivation, decontamination, and afforestation, drawing from the experiences and lessons learned from the pilot project. Additionally, the construction of a solid waste landfill in the region is proposed as an integral part of the solid waste cycle. The EPIU director has initiated the design and fundraising for a pilot waste processing facility in Vardakar community, with negotiations for land identification and allocation underway.

- **Sustainability and stakeholder engagement**: Ensuring sustainability is a central theme of the recommendations. This includes preparing for funding opportunities from international climate funds and development partners for a waste-to-energy pilot project. There is also an emphasis on stakeholder engagement using international best practices. The report suggests clear formulation of target indicators and goals, regular training on climate project design and management principles, and initiatives to increase community awareness on environmental conservation. The leadership of beneficiary communities is advised to focus on awareness-raising activities for the preservation of forest parks, efficient waste management, and proper maintenance of donated property.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The learning and knowledge management component of the project is designed to ensure that the experiences, best practices, and lessons learned throughout the project's implementation are systematically captured, analyzed, and disseminated to relevant stakeholders at the local, national,

and international levels. This component is integral not only to improving the effectiveness and efficiency of the project itself but also to contributing to broader climate adaptation efforts by sharing insights with other projects, sectors, and regions. The knowledge management strategy will be built on three core pillars: knowledge capture, internal and external dissemination, and capacity building.

1. Knowledge capture and documentation

The first critical element of this component is the systematic and structured capture of knowledge and lessons learned throughout the project. This will be done through the following methods:

- **Regular monitoring and evaluation (M&E) reports**: throughout the project, the monitoring and evaluation framework will document both quantitative and qualitative data on project progress. These reports will go beyond standard metrics to include reflections on what worked, what didn't, and why certain approaches were more effective than others. Key factors such as the effectiveness of climate adaptation measures, the success of stakeholder engagement, and community response to implemented interventions will be evaluated;
- **Thematic learning workshops**: workshops will be held at critical points in the project timeline (mid-term, after key interventions, and at project close) to bring together project teams, local communities, regional authorities, and external experts. These workshops will facilitate reflection on project activities, foster peer learning, and allow stakeholders to discuss adaptive management strategies. Structured sessions will be held to capture practical insights from the field, particularly regarding ecosystem restoration, sustainable agriculture, and community-based flood prevention efforts.
- **Case study development**: key interventions, such as the introduction of climate-resilient crops, forest recultivation, and waste management pilots, will be documented as case studies. These case studies will provide in-depth analysis of the conditions for success, challenges encountered, and the socio-economic and environmental impacts of the interventions. The documentation will focus on both the technical aspects of implementation (e.g., soil and water management practices) and the social dimensions (e.g., community engagement, gender inclusion);
- **Stakeholder feedback loops**: stakeholder engagement will be central to knowledge capture. Feedback mechanisms will be established where communities, regional authorities, and partner organizations can provide real-time insights into the project's impacts. This feedback will be collected through focus group discussions, surveys, and participatory meetings, ensuring that lessons are derived directly from those who experience the interventions firsthand.

2. Internal and external dissemination

Once knowledge has been captured, the next step is to ensure it is disseminated effectively to maximize its utility for both internal learning and external sharing with a broader audience. The dissemination strategy will involve several tailored approaches for different audiences:

- **Internal learning for adaptive management**: for internal stakeholders, including the project management team and local implementing partners, the lessons learned will be used to refine and adjust ongoing activities. An internal knowledge-sharing platform will be established where team members can upload and access reports, case studies, and workshop findings. Regular internal briefings and learning sessions will be organized to ensure that project teams are continuously improving and applying insights as the project evolves. This iterative learning process will enhance the project's capacity to adapt to emerging challenges and opportunities;
- **National and regional dissemination**: to ensure that lessons learned are shared with national and

regional stakeholders, national adaptation forums will be organized in collaboration with government agencies, local municipalities, and NGOs. These forums will provide a platform for sharing project results, discussing successful adaptation models, and fostering cross-sectoral learning. Special attention will be paid to sharing technical knowledge related to ecosystem restoration, climate-resilient agriculture, and flood prevention infrastructure, providing stakeholders with actionable insights for scaling these interventions in other regions;

- **Production of knowledge products**: knowledge products such as policy briefs, technical manuals, and best practice guides will be developed to communicate lessons learned to a wider audience. For instance, manuals on climate-resilient agricultural practices or waste management in flood-prone areas will provide detailed guidance that can be adopted by other municipalities or regions. These documents will be tailored to different audiences, including policymakers, regional planners, and civil society organizations, ensuring accessibility and relevance
- **Digital knowledge sharing**: the EPIU's website will serve as the primary platform for the project's knowledge management system, providing stakeholders with access to all project-related knowledge products. The website will feature a resource hub with downloadable materials such as reports, case studies, videos, and training materials. Additionally, key lessons and insights will be disseminated through EPIU's existing digital channels, including social media platforms and regional climate adaptation networks, to ensure broader visibility and engagement with other climate adaptation practitioners and the general public;

3. Capacity building through knowledge transfer

An essential element of the knowledge management component is ensuring that the lessons learned translate into actionable knowledge for local and regional actors. This will be achieved through structured capacity-building activities, including:

- **Training of trainers (ToT) programs**: to ensure that the knowledge gained during the project reaches a broader audience, selected stakeholders from regional governments, local NGOs, and community leaders will be trained as knowledge facilitators. These trainers will be equipped with the skills and materials needed to lead local-level workshops and training sessions on climate adaptation strategies. The ToT approach ensures that knowledge transfer is not limited to project participants but is cascaded throughout communities and local institutions, contributing to long-term capacity building.
- **Community-led learning exchanges**: the project will facilitate peer-to-peer learning exchanges where community members from different regions can visit project sites, observe interventions such as the orchard demonstration sites and forest recultivation efforts, and share experiences. These exchanges will foster cross-community learning, allowing for the adaptation of successful practices in different local contexts. This grassroots knowledge transfer is crucial for empowering local populations to take ownership of climate adaptation measures.
- **Integration into national knowledge systems**: lessons learned from the project will be systematically integrated into national climate adaptation knowledge systems, ensuring that they inform future national policies and strategies. By collaborating with national research institutions and government agencies, the project will contribute to the body of knowledge that shapes Armenia's broader adaptation agenda. Additionally, the project's findings will be shared with Armenia's international partners and the Adaptation Fund, ensuring that they contribute to the global discourse on climate resilience.

4. Monitoring and continuous learning

The knowledge management component is designed to be dynamic and adaptive, allowing for continuous learning throughout the project's lifecycle. The Monitoring and Evaluation (M&E) team will play a key role in tracking the effectiveness of knowledge management activities, ensuring that lessons learned are not only captured but also applied to improve project outcomes. Key indicators related to knowledge dissemination and capacity building will be integrated into the M&E framework, allowing for the regular assessment of knowledge transfer effectiveness and stakeholder engagement.

Feedback from stakeholders, particularly community members and local governments, will be actively sought throughout the project, allowing for real-time adjustments to knowledge management activities. This feedback loop ensures that the learning process remains participatory and reflective of the needs and realities of those most affected by climate change.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

During the Project appraisal stage, extensive consultations have already been carried out with key stakeholder groups, including relevant national agencies, representatives of regional and municipal authorities, civil society organizations (CSOs), academia, and representatives of vulnerable communities. These preliminary consultations have been instrumental in understanding the significance of the Project and have provided valuable insights that helped shape the initial long list of sectors and sub-sectors described in the proposal.

After the initial project appraisal, the project development team conducted a more detailed and in-depth engagement with regional and local stakeholders during August-September 2024. This second phase of engagement built upon the initial findings by addressing specific regional concerns and incorporating localized knowledge that had emerged since the initial consultations. The additional stakeholder input provided critical insights into the unique climate challenges faced by each region, such as local ecosystem vulnerabilities and socio-economic factors that were not fully captured in the initial appraisal. This enriched understanding has been directly integrated into the project design, ensuring that the interventions are not only aligned with national strategies but are also responsive to the specific needs and priorities of the communities most impacted by climate change. A detailed report on Stakeholder Consultations is provided in the Annex III. to this Proposal.

The engagement of these diverse stakeholder groups has been critical in ensuring that the Project addresses the needs and priorities of sectors and sub-sectors identified as critical for intervention and already visualized throughout the document. National agencies and regional authorities have shared their expertise and provided context-specific information on climate vulnerabilities and adaptation requirements. Representatives of municipal authorities have contributed valuable insights into the local-level impacts of climate change and the specific challenges faced by communities.

CSOs have played a pivotal role in advocating for the inclusion of vulnerable communities and marginalized groups in the decision-making process. Their inputs have helped identify targeted interventions to enhance the resilience of these communities. Academia has contributed with research-based knowledge and technical expertise, enriching the project's design with innovative solutions and best practices.

The consultative process has also placed a strong emphasis on gender considerations, ensuring that the perspectives and needs of women and other vulnerable groups are taken into account. Through these consultations, the Project preparation team has gained a deeper understanding of the differentiated impacts of climate change on different genders and demographics.

Overall, the inclusive and participatory nature of the consultations has reinforced the importance of the project and its potential to effectively address the adverse impacts of climate change. The initial ideas on the intervention framework, developed during the **Concept Note** stage, were discussed with stakeholders, validated, and refined during these consultations. These ideas have since been incorporated into the project design and now reflect the exact needs and priorities of the communities. The iterative approach ensures that the project is not only comprehensive but also well-tailored to the specific local contexts, thereby maximizing its positive impact on climate resilience and adaptation. By building on stakeholder input at each stage, the project is positioned to deliver meaningful and sustainable outcomes.

For the proposed project, the environmental and social risk categorization is crucial in ensuring that potential impacts are identified, assessed, and managed appropriately. Based on the nature of the activities involved—restoration and management of natural landscapes, flood prevention, and awareness programs on climate change adaptation—the project can be categorized under a moderate environmental and social risk category (Category B). This categorization is justified for several reasons:

- **Environmental risks**: While the project aims to deliver significant environmental benefits, such as afforestation, sustainable land management, and ecosystem restoration, there are inherent moderate risks associated with these activities. For example, landscape restoration and flood prevention works might temporarily disrupt local ecosystems or require the use of heavy machinery that could impact the soil or local biodiversity. Mitigating these risks requires careful planning, implementation of best practices in environmental management, and continuous monitoring to ensure adherence to environmental standards. The moderate risk categorization acknowledges these potential impacts and necessitates a comprehensive environmental management plan.
- **Social risks**: The project targets vulnerable communities, involving them in various activities such as capacity building and infrastructure development. While these activities aim to improve livelihoods and resilience against climate change, they also carry moderate social risks. These include potential displacement or disruption of local communities during construction activities, changes in land use, or unintended impacts on local social dynamics. To address these risks, robust stakeholder engagement and social impact assessments are necessary, ensuring that community concerns are heard and addressed, and that benefits are equitably distributed. The moderate risk categorization reflects the need for ongoing social monitoring and community engagement throughout the project lifecycle.
- **Risk management**: The moderate risk categorization necessitates a proactive approach to risk management. This includes the development of detailed environmental and social management plans, regular risk assessments, and adaptive management strategies to address any unforeseen impacts. Moreover, this categorization ensures that adequate resources are allocated for risk mitigation activities and that there is a heightened awareness and preparedness for potential environmental and social issues.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The funding requested for the proposed project is based on the full cost of adaptation reasoning, which acknowledges the additional investments required to address the specific vulnerabilities and challenges that climate change poses. The project aims to enhance climate resilience through targeted interventions in ecosystem restoration, flood prevention, climate-resilient agriculture, and knowledge sharing. These activities are necessary to safeguard vulnerable communities in the Ani, Ashotsk, Artik, and Shirak regions and are essential to ensuring long-term sustainability in the face of increasing climate variability.

Scope and complexity of the project - the project is designed with a comprehensive scope, covering a range of climate adaptation activities that span ecosystem restoration, flood management, agricultural resilience, and community capacity building. Each component addresses a specific climate vulnerability—such as degraded landscapes, flood-prone regions, and agricultural sectors that are sensitive to shifting climate patterns. The complexity of these interventions requires significant financial resources, as they involve both large-scale infrastructure investments and long-term ecological management.

The full cost of adaptation reasoning justifies the need for substantial funding to ensure that these complex interventions are properly implemented and maintained. This is particularly important in a context where traditional development financing would be insufficient to address the unique and heightened risks posed by climate change. Without this funding, the target regions would remain highly exposed to climate-induced hazards, perpetuating cycles of vulnerability and impeding sustainable development.

Targeting vulnerable communities - the project focuses on vulnerable communities of Ani, Ashotsk and Artik of the Shirak regions, which are disproportionately affected by both climate change and anthropogenic pressures. These communities face increasing risks from floods, land degradation, and shifting agricultural conditions, which undermine their livelihoods and well-being. The requested funding is critical for enabling these communities to adapt to these risks, ensuring that they can maintain their economic and social stability in the face of climate impacts.

The full cost of adaptation approach ensures that funding is directed toward high-impact interventions that provide direct benefits to these vulnerable populations. For example, the introduction of climate-resilient crops and the rehabilitation of degraded lands not only address immediate food security concerns but also help these communities build long-term resilience to future climate variability. The funding will cover the costs of these interventions, including the necessary technical assistance, infrastructure investments, and community engagement processes, ensuring that the most vulnerable groups are equipped with the tools they need to adapt.

Environmental and ecosystem benefits - a significant portion of the project's funding is allocated to ecosystem restoration and sustainable land management. These activities are essential for enhancing the resilience of local ecosystems, which are crucial for mitigating the impacts of climate change, such as soil erosion, water scarcity, and loss of biodiversity. The afforestation and reforestation efforts, for instance, provide critical environmental benefits by stabilizing degraded lands, sequestering carbon, and enhancing water retention in drought-prone areas.

In addition, the project's emphasis on sustainable agricultural practices will lead to improvements in soil health and land productivity, helping to buffer communities against future climate shocks. By restoring ecosystems and promoting land-use practices that are resilient to climate stressors, the project aligns with the full cost of adaptation framework, which recognizes the need for additional investments to maintain and protect natural resources that are increasingly under threat

from climate change.

Social and economic benefits - the project generates substantial social and economic co-benefits, particularly through its focus on improving agricultural productivity, waste management practices, and infrastructure resilience. Climate-resilient agriculture will not only enhance food security for local communities but also contribute to poverty reduction by increasing crop yields and diversifying income sources. Similarly, the introduction of modern waste management practices will improve public health outcomes by reducing environmental pollution and enhancing the sustainability of local ecosystems.

By investing in infrastructure improvements, such as flood prevention systems and road rehabilitation, the project addresses both immediate adaptation needs and long-term economic resilience. These interventions protect critical community assets from climate-related disasters, thereby avoiding future economic losses and supporting sustainable livelihoods. The requested funding is necessary to cover the full costs of these high-impact activities, which provide immediate social and economic benefits while also building resilience to future climate impacts.

Cost-effectiveness and long-term sustainability - the requested funding is justified by the **cost-effectiveness** of the project's adaptation measures. By investing in proactive adaptation activities now, the project will prevent more significant costs associated with climate-related disasters in the future. For example, the flood prevention infrastructure and landscape restoration efforts will significantly reduce the risk of costly flood damage, while the introduction of climate-resilient agricultural practices will mitigate the financial impacts of crop failure due to droughts and extreme weather events.

The full cost of adaptation reasoning emphasizes the need for up-front investments to avoid long-term losses. By addressing the root causes of vulnerability, the project ensures that adaptation measures are sustainable and capable of delivering benefits far into the future. The requested funding will cover the full cost of these investments, ensuring that the project is fully equipped to meet its adaptation objectives without the need for further external financial support.

Leveraging private financing for climate-resilient agriculture - a key innovation in this project is its focus on leveraging private sector financing to support climate-resilient agriculture. By engaging private financiers in the implementation of high-value agriculture models, the project not only enhances the sustainability of its interventions but also creates opportunities for additional investments in climate adaptation. The funding requested will cover the initial costs of setting up these agricultural models, while private sector contributions will help scale the interventions and ensure their long-term success.

This approach aligns with the full cost of adaptation reasoning by recognizing that private financing can play a crucial role in extending the reach and impact of adaptation activities. By mobilizing additional resources from the private sector, the project maximizes its cost-effectiveness and ensures that adaptation benefits continue to accrue after the project's formal completion.

Capacity building and knowledge sharing - the project includes a comprehensive capacity building and knowledge management component, which is crucial for ensuring the long-term sustainability of the adaptation measures. By training local communities, regional authorities, and other stakeholders in climate-resilient practices, the project ensures that adaptation efforts are sustained beyond the funding period. The full cost of adaptation reasoning justifies the inclusion of this component, as it ensures that the investments made in infrastructure and ecosystem

restoration are accompanied by the necessary human capacity to maintain and manage these assets over time.

The requested funding will cover the costs of developing and delivering training programs, as well as the establishment of knowledge-sharing platforms that will enable the dissemination of lessons learned to other regions and projects. This knowledge transfer will enhance the capacity of local communities to adapt to future climate challenges, ensuring that the benefits of the project are both scalable and replicable.

Demonstrative impact and replicability - the project's pilot initiatives, such as the index insurance and flood prevention infrastructure, are designed to have a demonstrative impact, showcasing innovative solutions to climate adaptation that can be replicated in other regions. These pilots will provide valuable insights into the feasibility and effectiveness of climate resilience measures, generating knowledge that can inform future adaptation projects across Armenia and beyond.

The funding requested is necessary to implement these pilots, which will serve as proof of concept for larger-scale interventions in the future. By demonstrating the viability of these adaptation measures, the project contributes to the broader effort to build climate resilience at the national and regional levels, in line with the full cost of adaptation reasoning.

Building climate resilience in key sectors - at its core, the project is designed to enhance climate resilience across multiple sectors, including agriculture, water management, infrastructure, and ecosystem restoration. The requested funding is crucial for covering the costs of these specialized adaptation measures, which require significant technical expertise, infrastructure development, and long-term maintenance. By building resilience in these key sectors, the project ensures that communities are better equipped to cope with the impacts of climate change, thereby safeguarding their economic stability, food security, and environmental well-being.

Co-benefits and synergies - the project generates multiple co-benefits that extend beyond direct adaptation measures. For example, improved waste management will lead to better public health outcomes, while afforestation efforts will contribute to biodiversity conservation and carbon sequestration. Additionally, the focus on sustainable agriculture will enhance food security and reduce poverty in the region. These co-benefits add significant value to the project, further justifying the funding requested under the full cost of adaptation framework.

The requested funding for this project is fully justified under the full cost of adaptation reasoning, which recognizes the need for additional investments to address the specific vulnerabilities posed by climate change. The project's comprehensive approach - targeting vulnerable communities, restoring ecosystems, promoting climate-resilient agriculture, and preventing climate-related hazards - ensures that the adaptation measures are both effective and sustainable. By providing the necessary financial support, this project will contribute to building resilience in Armenia's most climate-vulnerable regions, delivering long-term environmental, social, and economic benefits.

The funding requested for the proposed project is also justified considering its comprehensive approach, targeting vulnerable communities, and delivering multiple environmental, social, and economic benefits. Climate adaptation is a long-term investment, and the funding will help build resilience and ensure the sustainable development of the project beneficiaries in the face of climate change challenges.

The proposed project has been carefully designed to ensure that its specific adaptation objectives

are achievable solely with the allocated funding. This self-sufficiency is a result of a strategic approach to project design, resource allocation, and implementation.

- **Direct impact activities**: Each activity in the project has been chosen for its direct impact on adaptation objectives. The restoration and management of natural landscapes, flood prevention efforts, and climate change awareness programs are all high-impact initiatives that directly contribute to increasing resilience and reducing vulnerabilities in the target communities. These initiatives have been planned to ensure they deliver maximum effectiveness within the available budget.
- **Integrated approach for holistic adaptation**: The project adopts an integrated approach, where each component complements and reinforces the others. This interlinked methodology means that the effectiveness of one activity aids in achieving the goals of another, creating a holistic adaptation framework. For example, afforestation not only aids in carbon sequestration but also contributes to flood prevention and biodiversity enhancement, thereby multiplying the impact of a single investment.
- **Leveraging local capabilities and resources**: A significant aspect of the project is its focus on leveraging local resources and capabilities. By involving community members in project activities and utilizing local materials and knowledge, the project maximizes the impact of the funding. This approach reduces reliance on external resources and ensures that adaptation efforts are deeply rooted in the community, enhancing their sustainability.
- **Sustainability and long-term benefits**: The project is designed to deliver long-term benefits, ensuring that the outcomes of the current funding continue to provide adaptation advantages well into the future. This includes building local capacities, establishing sustainable practices in agriculture and land management, and creating infrastructures that will continue to serve the community long after the project's completion.
- **Cost-effectiveness and efficiency**: The project emphasizes cost-effectiveness and efficiency in all its activities. By carefully planning and executing each component, the project ensures that every dollar spent contributes as effectively as possible towards achieving the adaptation objectives. This includes efficient project management, judicious procurement practices, and continuous monitoring and evaluation to ensure that the project stays on track and delivers the expected outcomes within the budget.

In summary, the project is fully equipped to achieve its adaptation objectives within the constraints of the requested funding. Its strategic design, efficient resource allocation, and focus on sustainable, high-impact activities ensure that it can deliver on its goals without the need for additional financial support from other donors. This approach not only makes the project viable and impactful but also ensures that it contributes effectively to building resilience and reducing vulnerabilities in the face of climate change.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

The design of this project has been guided by a deep commitment to ensuring the sustainability of its outcomes at every stage, from planning to implementation. The sustainability strategy is rooted in four interrelated dimensions: institutional sustainability, environmental sustainability, social sustainability and financial sustainability. Each dimension has been integrated into the project's

components, ensuring that the benefits generated by the project endure well beyond its funding period.

Institutional sustainability

A core aspect of the project's sustainability is the emphasis on institutional capacity building at local, regional, and national levels. The project has been designed to ensure that key institutions, such as local governments, environmental agencies, and community-based organizations, are fully equipped to continue managing and scaling up the project's interventions after the project's completion.

- **Capacity building and training:** a key component of the project is dedicated to training local government officials, technical staff, and community leaders in climate-resilient agricultural practices, ecosystem restoration techniques, and flood management systems. These training programs ensure that local institutions are capable of sustaining the project outcomes, implementing adaptation measures, and scaling successful interventions in the future;
- **Policy integration:** the project has been designed to align with and strengthen national policies and frameworks, such as Armenia's NAP and regional development strategies. By embedding the project's goals into existing institutional frameworks, the project ensures long-term policy support, making it easier for local authorities to secure future funding and implement ongoing climate adaptation efforts.
- **Ownership and local governance:** the project is structured to ensure that local governments and communities take full ownership of the interventions. For example, the EPIU, as the lead executing agency, is responsible for coordinating the project's activities with regional governments, ensuring that all stakeholders are engaged in the planning and management processes. This ownership is crucial for ensuring the long-term success of adaptation measures, as local authorities and communities will be more invested in maintaining and expanding the interventions;

Environmental sustainability

Environmental sustainability is a cornerstone of the project, as it seeks to restore ecosystems and manage natural resources in ways that promote long-term resilience to climate change.

- **Ecosystem-based adaptation and restoration:** The project's focus on ecosystem restoration, such as afforestation, reforestation, and sustainable land management practices, directly contributes to environmental sustainability by ensuring that degraded landscapes are rehabilitated and protected from further degradation. The restoration of natural landscapes helps stabilize soils, improve water retention, and enhance biodiversity, all of which are critical for reducing vulnerability to climate-related shocks, such as floods and droughts;
- **Sustainable land use practices:** by promoting climate-resilient agriculture and sustainable land-use practices, the project ensures that the land continues to be productive and less vulnerable to climate variability. For example, the introduction of perennial crops and improved pasture management reduces soil erosion, enhances water retention, and increases carbon sequestration. These practices ensure that the land can sustain agricultural productivity while contributing to long-term environmental resilience;
- **Mitigation of environmental risks:** the project incorporates strong environmental safeguards to ensure that none of the interventions inadvertently cause harm to the natural environment. For example, flood prevention infrastructure is designed to be eco-friendly, integrating

nature-based solutions such as wetlands and riparian buffer zones that act as natural barriers against flooding while preserving biodiversity and improving water quality;

Social sustainability

The sustainability of the project's outcomes is also grounded in its commitment to social inclusivity and community empowerment. The project is designed to ensure that local communities, particularly vulnerable and marginalized groups, are actively involved in both the design and implementation phases, which is essential for sustaining long-term outcomes.

- **Community engagement and ownership:** the project promotes active participation from local communities, ensuring that the interventions are community-driven and reflect the real needs and priorities of those who are most affected by climate change. By fostering community ownership of adaptation measures, such as natural-landscape rehabilitation and flood prevention infrastructure, the project ensures that local stakeholders are invested in maintaining and expanding these interventions in the long run;
- **Inclusive design with gender and vulnerability considerations:** special attention has been given to gender equality and the inclusion of marginalized groups in the project's design. By addressing the unique vulnerabilities faced by women, indigenous populations, and economically disadvantaged groups, the project promotes social sustainability. Women and marginalized communities are given leadership roles in managing and maintaining the project's interventions, particularly in sectors such as agriculture and waste management, which ensures that adaptation outcomes are equitably shared across society;
- **Knowledge transfer and community learning:** a critical element of social sustainability is the project's focus on knowledge sharing and capacity building. Training programs, workshops, and participatory learning exchanges are designed to ensure that community members have the skills and knowledge necessary to maintain climate-resilient practices. This ensures that the benefits of the project, such as improved agricultural techniques and flood management strategies, continue to be utilized and expanded upon by local communities long after the project ends;

Financial Sustainability

Financial sustainability is central to ensuring that the project's outcomes are maintained and scaled up over time. The project has been designed to leverage both public and private financing mechanisms to secure long-term financial resources.

- **Leveraging private sector financing:** the project's innovative approach to engaging the private sector, particularly in the agricultural sector, ensures that additional financial resources are mobilized beyond the funding period. The introduction of high-value agriculture models and climate-resilient crops provides opportunities for private investment, ensuring that these interventions are commercially viable and financially sustainable. By creating partnerships with private financiers, the project secures the necessary funding to sustain and expand adaptation measures, such as introducing climate-resilient farming technologies and implementing waste management systems;
- **Co-financing and cost-sharing mechanisms:** the project is structured to attract co-financing from national and international sources, ensuring that adaptation measures can be scaled up. Additionally, by engaging local governments and communities in cost-sharing mechanisms (e.g., community contributions to maintenance costs of flood infrastructure or ecosystem

restoration activities), the project creates a sustainable financial framework for continued adaptation efforts;

- **Long-term economic benefits:** the project's emphasis on improving agricultural productivity, waste management, and infrastructure resilience will generate long-term economic benefits for the target communities. By increasing crop yields, improving waste management practices, and reducing vulnerability to floods, the project enhances the economic resilience of local populations, creating a sustainable foundation for future growth and development. These economic gains ensure that communities have the financial resources necessary to maintain and scale adaptation interventions;

Adaptive management and long-term monitoring

The project has incorporated adaptive management strategies to ensure that it remains flexible and responsive to changing climate conditions and stakeholder needs. A robust M&E framework will track the progress of the project's interventions and provide ongoing feedback to project managers. This M&E system is designed to not only assess the effectiveness of the interventions but also identify opportunities for improvement and scaling. By incorporating continuous learning and feedback loops into the project design, the project ensures that its outcomes remain relevant and effective over time.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	All activities of the project are in line with RA laws and regulatory acts. No further assessment of potential impacts and risks is required for compliance with the law, since the project complies with all relevant national legislation and policies on agriculture, water management, climate change adaptation, land tenure, public procurement and others.	
Access and Equity	The project will provide fair and equitable access to the project beneficiaries and will facilitate access to robust institutions, sustainable livelihoods, knowledge, as well as in decision making processes. The compact area affected communities makes it easier to share information and	

	transfer knowledge using intermediary community groups such as, youth and women organizations, beneficiary farmer and family groups. No further assessment of potential impacts and risks is required for compliance access and equity, since the project planned activities will not reduce or prevent communities in the target areas from accessing basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions and land rights.	
Marginalized and Vulnerable Groups	Project activities do not have a negative impact on marginalized and vulnerable groups. Within this group there are people with disabilities and families living with persons with disability, the elderly, as well as people with a very low income and with limited access to resources to help them in their normal everyday living. In the targeted region, elderly and poor families receiving benefits from the state are considered marginalized and vulnerable.	
Human Rights	The Chapter 2 of the Armenian Constitution recognizes fundamental human rights and freedom that exist and shall continue to exist without discrimination by reason of race, national origin, color, religion, opinion, belief, or sex. The project's activities are structured in the manner with no negative impact on human rights and infringement on the right of any person during implementation.	
Gender Equality and Women's Empowerment	Well-established traditions in the Republic of Armenia prevents negative perception on the role of women in society. Also, women are empowered in villages, and they are involved in day to day activities and decision makings in	Gender Action Plan has been designed to make sure that gender responsive approaches are mainstreamed throughout the Project.

	the field of family and village affairs.	
Core Labour Rights	Labour rights (including those related to the child labour) are protected by the Constitution and Civil Code of the RA. During summer vocations children typically provide assistance to their parents by performing light activities, which could be considered as training for future farming activities. Desk research and stakeholder consultations revealed no occurrences of child labour in the Project area. Even in most vulnerable communities in Armenia education of children and adolescents in schools and universities is considered as mandatory. However, this does not mean that children do not help their parents with cultivation of their land plots. This carries a learning element and gives children an opportunity to get acquainted with the basic knowledge on framing activities.	
Indigenous Peoples	Armenia's population is homogeneous (around 96%), so there is no issue of potential violation of the rights of indigenous people.	
Involuntary Resettlement	Project implementation does not include any resettlement of residents. No further assessment is required for involuntary resettlement.	
Protection of Natural Habitats	There are no protected areas in the project area and the Program will not involve unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by the Government for their high conservation value, including as critical habitat. In Shirak marz the only specially	

	protected nature area is "Arpi Lake" national park located in the northern part of the region. It consists of 5 settlements which are located away from beneficiary communities.	
Conservation of Biological Diversity	Project activities will not have a negative impact on biodiversity conservation as within project design activities will ensure that the flora and fauna within the project area is conserved.	
Climate Change	The project does not have a negative impact on climate change. It will not generate significant and / or unjustified increase in greenhouse gas emissions or any other cause of climate change. Moreover, the creation of forested park will contribute to CO^2 absorption and milder microclimate. No project interventions are expected to contribute to release of gases responsible for CC and thus are not expected to contribute to GHG emissions.	
Pollution Prevention and Resource Efficiency	Project is not expected to generate any environmental pollution and aims for higher resource efficiency for better management of available natural resources. Industrial wastes are stone residues that originate from quarrying. During the exploitation of quarries, the environment has been polluted by dust particles. The residents of the areas adjacent to floodplains crossing the town dump garbage into the floodplain, due to insufficient number of bins causing clogging during heavy rains and snowfall and causing floods thus creating anti-sanitary conditions that can cause infectious diseases during hot summers.	
Public Health	The stability of ecosystem balance will contribute to the improvement of public health.	

	Thus, no adverse impact on public health related issues is envisaged.	
Physical and Cultural Heritage	During site assessments, heads of communities were consulted to make sure any cultural sites and sites with unique natural values are identified. As a result of this, EPIU has determined that there are no physical and cultural heritage sites in interventions envisaged by the program: closed quarry, gorges, natural, and agricultural landscapes. The activities envisaged by the Project are not implemented in such sites where there are physical and cultural heritage monuments	
Lands and Soil Conservation	Restoration activities are envisaged to help in land and soil conservation and will not create any damages to land and soil resources.	

Detailed analysis of Environmental and Social impacts and risks

Component 1: Restoration, management and increase of adaptation potential of natural landscapes

Environmental impacts and risks:

Output 1.1 - Restoration of soil cover

Positive Impact: Restoring 10 hectares of soil cover through reforestation will enhance the local environment by improving soil stability, reducing erosion, and increasing biodiversity.

Risks:

- Planting large forest cover may unintentionally affect existing plant and animal species
- Soil erosion and water pollution from runoff.

Risk mitigation:

- Use native species for planting to avoid disturbing local ecosystems;
- Use erosion control methods such as mulching and terracing;
- Conduct pre-planting biodiversity assessments to ensure no harm to rare or endangered species;
- Implement monitoring protocols to observe the effects of the reforestation on local wildlife and vegetation;
- Conduct soil and water quality monitoring during and after recultivation;

Output 1.2 - Forest grove established with support of previous project and made sustainable

Significant environmental and social impacts for the afore-mentioned activity not considered, regular monitoring to ensure long-term forest health and control invasive species recommended.

Output 1.3 - Sowing perennial plants

Positive impact: Introducing perennial plants across 900 hectares will reduce land degradation, improve soil fertility, and enhance local water retention. This contributes to the long-term sustainability of agricultural land.

Risks:

- Additional irrigation needs for these plants could strain local water resources, particularly in the drier summer months.

Risk mitigation:

- Implement water-efficient irrigation systems, such as drip irrigation, to reduce water consumption.
- Promote rainwater harvesting in areas with limited water supply to support perennial plant growth without depleting local water sources.

Output 1.4 - Increased crop yield and quality of natural-landscapes *(45 ha hay meadows, 570 ha pastures)*

Risks:

- Fertilizer runoff leads to water contamination and potential overgrazing of newly restored pastures.

Risk mitigation:

- Promote the use of organic fertilizers and precision agriculture techniques.
- Introduce rotational grazing systems to prevent overuse of pasturelands.

Output 1.5 - Waste collection practices

Positive impact: Introducing structured waste management will reduce pollution and improve sanitation in local communities, leading to healthier environments and improved public health.

Risks:

- There is a risk that waste collection could lead to improper disposal or lack of capacity for recycling.

Risk mitigation:

- Establish waste disposal protocols to ensure that collected waste is properly sorted and either recycled or disposed of safely.
- Introduce training programs for local waste management personnel to enhance their capacity to handle and manage waste.

Output 1.6 - Mapping degraded lands

Positive impact: Mapping degraded lands will help identify priority areas for restoration, leading to targeted efforts to combat land degradation and enhance soil health.

Risks:

- Data Gaps: Insufficient data or inaccurate mapping could result in the exclusion of critical areas.

Risk Mitigation:

- Use GIS technology and satellite imagery to ensure accurate mapping.
- Collaborate with local communities to gather on-the-ground data and knowledge about land conditions.

Output 1.7 - High-value agriculture model piloted at 100 ha of degraded land with private financier involvement

Risks:

- Overuse of water and soil degradation in piloted agricultural areas.

Risk mitigation:

- Implement water-efficient irrigation and soil conservation practices.
- Monitor land health and resource use to ensure long-term sustainability.

Output 1.8 - Demonstration sites for intensive orchards in beneficiary communities *(10 ha in each community)*

Risks:

- Soil degradation, water overuse and pesticide use in intensive orchard farming.

Risk mitigation:

- Promote organic farming practices
- Use water-efficient irrigation and soil health monitoring systems.

Social impacts and risks:

Gender inequality in land restoration efforts:

Positive impact: the project seeks to include women and marginalized groups in reforestation and land management activities, promoting social inclusion.

Risks:

- There is a risk that marginalized groups, especially women and indigenous communities, may not be fully included in land restoration activities.

Risk mitigation:

- Implement a gender action plan that ensures women and other vulnerable groups are involved in decision-making processes.
- Ensure gender-disaggregated monitoring to track participation rates and address any inequalities in access to resources.

Disruption to local livelihoods:

Positive impact: increased agricultural productivity and improved ecosystem services will enhance food security and economic stability for local farmers.

Risks:

- During reforestation or land restoration activities, local communities may face temporary restrictions on land access.

Risk mitigation:

- Engage local communities in the planning process to minimize disruption and ensure that any temporary displacement is mitigated with compensation or alternative land access.
- Ensure all restoration activities comply with national land-use laws and best practices in community-led planning.

Component 2: Prevention and management of floods

Environmental impacts and risks:

Output 2.1 - Infrastructure for flood management

Positive impact: improved flood infrastructure will protect residential areas and farmlands from flood damage, preventing soil erosion and waterlogging.

Risks:

- Flood barriers and drainage systems may disrupt the natural flow of rivers and streams, affecting aquatic ecosystems.
- Increased sedimentation from construction activities.
- OHS risks during infrastructure maintenance and construction.

Risk mitigation:

- Conduct hydrological studies before infrastructure installation to ensure minimal disruption to natural water courses.
- Implement sediment control measures such as sediment fences and retention ponds.
- Use eco-friendly materials and green infrastructure solutions like bioswales and vegetated retention areas to maintain natural water flows.
- Apply safety protocols, install warning signs, and engage local communities in flood preparedness.

Output 2.2 - Road infrastructure development

Positive impact: building and improving roads and bridges will enhance accessibility and economic activity while diverting heavy traffic away from residential areas.

Risks:

- Construction activities may increase sediment runoff into nearby water bodies, reducing water quality.

Risk mitigation:

- Implement sediment control measures during construction, such as silt fencing and sediment traps, to prevent runoff.
- Schedule construction during the dry season to minimize soil disturbance and sedimentation in waterways.

Social impacts and risks:

Public safety during infrastructure construction:

Positive impact: improved infrastructure will enhance safety and reduce the risk of flood-related accidents, benefiting vulnerable populations in flood-prone areas.

Risks:

- The construction of flood barriers, drainage systems, and roads may pose risks to local residents, particularly children and the elderly.

Risk mitigation:

- Implement strict safety protocols at construction sites, including proper signage, safety barriers, and awareness campaigns to inform communities of potential hazards.
- Ensure community consultations are held regularly to inform residents of construction timelines and provide alternative routes during roadwork.

Access to resources and services:

Positive impact: improved flood management will protect essential infrastructure (e.g., roads, schools, health centers), ensuring continued access to critical services for local communities.

Risks:

- There is a risk that some communities, especially marginalized or remote groups, may not equally benefit from the improved infrastructure.

Risk mitigation:

- Ensure inclusive planning processes by engaging vulnerable communities in the decision-making and prioritization of infrastructure projects.
- Establish a grievance redress mechanism to address any complaints or issues regarding access to infrastructure.

Component 3: Raising Awareness and Knowledge of Climate Change Adaptation

Environmental impacts and risks:

Output 3.1 - Environmental knowledge transfer

Positive impact: improved environmental knowledge and climate adaptation skills among local governments and communities will foster long-term resilience and sustainable practices.

Risks:

- Local governments may lack the resources or capacity to effectively implement the adaptation strategies learned.

Risk mitigation:

- Provide ongoing training and support to ensure that local authorities have the resources and capacity to implement adaptation measures.
- Establish partnerships with technical experts and NGOs to support local governments in maintaining climate adaptation efforts.

Increased awareness of climate change adaptation in target communities

Risks:

- Misunderstanding or incomplete application of adaptation strategies could lead to ineffective environmental management.

Risk mitigation:

- Use culturally appropriate training materials and techniques that are easily understandable by all community members.
- Monitor the adoption of climate adaptation practices and provide ongoing technical assistance if needed.

Social impacts and risks:

Exclusion of vulnerable groups in knowledge dissemination:

Positive impact: the inclusion of women, indigenous groups, and marginalized populations in training programs will ensure that these groups are better equipped to adapt to climate change.

Risks:

- **Information gaps**: vulnerable groups may not have equal access to training programs or information due to geographic or social barriers.

Risk mitigation:

- Design training and outreach programs that are inclusive and accessible to all, particularly marginalized groups.
- Utilize community leaders and local organizations to reach remote or disadvantaged communities.

Increased awareness of climate change adaptation in target communities

Risks:

- Vulnerable communities may not have access to resources or information on climate adaptation, leading to increased inequality.

Risk mitigation:

- Implement community-based awareness campaigns and ensure that resources are distributed equitably, particularly to women and marginalized groups.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project/programme implementation.

The project is slated for a four-year implementation period commencing in September 2024. The designated implementing entity (IE) for this endeavor will be the Environmental Project Implementation Unit (EPIU), which serves as the National Implementing Entity for the Adaptation Fund. The Government of the Republic of Armenia has specifically endorsed EPIU's role in executing this project, drawing upon its extensive experience, successful track record, and established collaborations with national stakeholders, including public and private entities, academia, and NGOs.

The Project Management Board (PMB) will assume responsibility for making key decisions pertaining to the project. Its role extends to project assurance through monitoring and evaluation, performance enhancement, accountability, and learning. The PMB will approve multi-year and annual work plans, supervise their execution, and review reports. This board will comprise representatives from relevant ministries, local self-government bodies, and EPIU staff, with one member selected as the PMB secretary.

The Environmental Projects Implementation Unit (EPIU), serving as the National Implementing Entity (NIE), will undertake comprehensive management of the project. This encompasses facilitating

interactions with the Adaptation Fund Board (AFB) and pertinent stakeholders, supervising portfolio implementation, overseeing budget reporting, ensuring the delivery of quality outputs and deliverables, managing fund disbursement, monitoring progress, integrating lessons learned into subsequent projects, and sustaining relationships with stakeholders.

Day-to-day project management will be diligently overseen by the EPIU's dedicated project management unit, working closely with the beneficiary communities. This specialized unit will be entrusted with a spectrum of responsibilities, crucially including the Monitoring and Evaluation (M&E) function. The M&E activities will be meticulously designed and implemented to align with the Adaptation Fund's stringent social and environmental standards.

Furthermore, the unit will oversee the procurement of goods and services, mobilize technical expertise, and implement risk mitigation strategies. The recruitment process will be initiated to onboard specialized experts, including but not limited to project coordinators, procurement specialists, accountants, social and gender specialists, environmental specialists, and monitoring and evaluation specialists. Engaging these experts will be pivotal for ensuring seamless coordination, efficient implementation, and robust monitoring of the project, with a keen focus on adhering to gender-responsive and environmentally sustainable principles and practices.

B. Describe the measures for financial and project/programme risk management.

Risk	Probability	Impact	Mitigation Measures
Institutional Risks			
Not all essential stakeholders might possess the necessary capacity and dedication to actively engage throughout the entire process, spanning from inception to completion, and some could perceive exclusion. Subsequently, resistance may arise from certain stakeholders when it comes to embracing the proposed measures.	Medium	High	➢ The Project will capitalize on an active approach to stakeholder engagement, fostering regular consultations within the designated beneficiary communities: ➢ To ensure equitable participation across various segments such as women, youth, the elderly, and potentially vulnerable groups, focused consultations and collaborative working groups will be established. These avenues will provide ample opportunities for addressing the distinct requirements of these stakeholder categories. ➢ The process of selecting project beneficiaries will entail multiple stages: (1) identifying potential beneficiaries through community consultation meetings, (2) municipalities offering recommendations,

			and (3) final beneficiaries chosen via face-to-face meetings and farm visits. These visits will evaluate the beneficiary's farming skills and readiness to embrace the project's terms. ➢ To facilitate community members and stakeholders in raising concerns, a grievance redress mechanism will be implemented.
Project outcomes, including properties such as, greenhouses, dryers, etc. are not well protected	Low	Medium	➢ Binding legal agreements will be established with beneficiaries who receive project assets such as greenhouses and dryers. These agreements will outline the beneficiaries' responsibility to uphold the assets' functionality and cover any repair costs required to maintain their operational status. In instances of negligence, the contract will specify the obligation to return the asset to the project in proper working order for potential reassignment to other beneficiaries. ➢ Beneficiaries will also receive informative materials and leaflets detailing proper maintenance and operation of the provided assets. ➢ The assets distributed will be marked with the logos of the project and the Project Implementation Unit (PIU).
Delays in project implementation including those related to delayed procurement	Low	High	➢ During the Project inception stage, the project's implementation plan will be revised and updated. ➢ The advancement of project implementation within set timelines will be overseen through bi-weekly meetings conducted by the PIU team.

			➢ Adherence to the Republic of Armenia's public procurement procedures is required by the PIU, where specific minimum timelines for various procurement stages are defined. To mitigate potential delays resulting from delayed procurement, the project timeframe includes maximum deadlines. ➢ Project activities have been meticulously prepared for completion within the proposed timeline. ➢ Monitoring initiatives will guarantee the realization of implementation objectives throughout the project's execution.
Implementation capacity constraints with limited human resources in national and regional authorities to ensure a timely implementation and the sustainability of the project.	Low	Low	➢ Knowledge and awareness building is one of the key components of the project. ➢ Project will equip all relevant authority workers, decision makers and local population will have sufficient knowledge on the landscape and ecosystem adaptation to climate change and efficient management of climate smart agricultural techniques.
Social Risks			
Project beneficiaries are resistant to change and/or the new technologies applied are difficult to manage	Medium	Medium	➢ During the implementation phase consultations of different stakeholders will ensure the ownership building for the project. ➢ Project will ensure active participation of stakeholders ➢ Awareness and knowledge raising activities will increase the capacity for managing the new technologies applied and will ensure that beneficiaries are not resistant towards adaptation activities.
Financial Risks			

Mismanagement of resources	Low	High	➢ Financial risk management will be possible by continuous evaluations, audits and reports as mentioned in M&E plan of the project.
Delays in the disbursement of funds.	Low	Low	➢ EPIU will ensure that all the funds are properly managed; all procurement activities are completed in a timely manner.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

This ESMP outlines the specific environmental and social risks associated with each component and output of the project, along with the appropriate mitigation measures, monitoring strategies, and responsible entities. By implementing these measures, the project ensures compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund, promoting equitable and sustainable development for all stakeholders, particularly vulnerable groups and women.

The ESMP also ensures that environmental protection, social inclusion, and gender equality are central to the successful implementation of the Project.

Component 1: Restoration management and increase of adaptation potential of natural landscapes

This component involves activities that fall under **Category B** risks due to the nature of land restoration, reforestation, and waste management. These activities have potential adverse environmental impacts that are site-specific and reversible with proper management.

Output 1.1: Soil cover of mine adjacent to Maralik community is recultivated *(10 ha of forest cover)*

Risk category: **Category B**

National standards: this activity complies with national reforestation standards and regulations. It will follow guidelines related to the sustainable management of forestry resources and restoration of degraded land.

Risk mitigation: an **Environmental and Social Impact Assessment (ESIA)** will be conducted to assess the potential risks of land disturbance and ensure proper planning for reforestation and soil stabilization, preventing soil erosion and protecting biodiversity.

Output 1.2: Forest grove established by a previous project is maintained and becomes sustainable

Risk category: **Category B**

National standards: the forest grove will be maintained in line with Armenia's **National Forest Policy** and guidelines on sustainable forestry.

Risk mitigation: monitoring and evaluation will be carried out to ensure long-term sustainability and prevent potential risks such as pest infestation or fire.

Output 1.3: Sowing areas of perennial plants are created, reducing rangeland degradation *(900 ha)*

Risk category: **Category B**

National standards: the activity will adhere to standards regarding sustainable land management and desertification prevention, following Armenia's **National Strategy and Action Program to Combat Desertification**.

Risk mitigation: the project will implement **erosion control measures** and monitor the ecological impact to ensure long-term sustainability of the newly planted areas.

Output 1.4: Crop yield and quality of adjacent natural-landscapes is increased *(45 ha of hay meadows, 570 ha of pastures)*

Risk category: **Category B**

National standards: this output complies with national agricultural standards and sustainable farming practices as outlined in Armenia's agricultural development policies.

Risk mitigation: sustainable farming techniques will be used to minimize the use of harmful chemicals and prevent soil degradation. Proper water management practices will also be implemented to avoid water overuse.

Output 1.5: Waste collection practices introduced and a pilot waste management program implemented

Risk category: **Category B**

National standards: this activity will follow Armenia's **waste management regulations** to ensure the proper handling and disposal of waste.

Risk mitigation: the project will develop a waste management plan to prevent the accumulation of waste and the contamination of nearby land and water resources. Public awareness campaigns will educate communities on proper waste disposal practices.

Output 1.6: Mapping of all degraded lands in Shirak region is implemented

Risk category: **Category C**

National standards: this activity complies with national guidelines for land use planning and environmental data collection.

Risk mitigation: as this is primarily a data-gathering activity, it carries minimal environmental risk. However, all mapped areas will be monitored for potential environmental degradation.

Output 1.7: Infrastructure for piloting high-value agriculture models (including climate-resilient crops) at 100 ha is implemented

Risk category: **Category B**

National standards: this output complies with national agricultural policies and building standards for agricultural infrastructure.

Risk mitigation: the project will incorporate climate-resilient agricultural techniques, and a thorough EIA will ensure that new infrastructure does not negatively impact local ecosystems or water resources.

Output 1.8: Demonstration sites for intensive orchards are constructed *(10 ha per community)*

Risk category: **Category B**

National standards: compliance with sustainable agricultural and horticultural practices as required by Armenian law.

Risk mitigation: the project will mitigate risks related to water overuse and soil degradation through sustainable water management systems and monitoring of orchard management practices.

Output 1.9: Architecture and design work for all components are carried out

Risk category: **Category B**

National standards: The architectural and design work aligns with Armenia's national construction and environmental protection standards, ensuring sustainable development, safety, and compliance with regulatory requirements.

Risk mitigation: Potential environmental and social risks are mitigated through comprehensive impact assessments, sustainable design practices, and inclusive community engagement to ensure equitable and climate-resilient outcomes.

Output 1.10: Index insurance is piloted in beneficiary municipalities

Risk category: **Category C**

National standards: this activity complies with national policies on agricultural insurance and risk mitigation.

Risk mitigation: as this is a financial instrument, the environmental risk is minimal. However, ongoing monitoring will ensure that the insurance scheme contributes to sustainable farming practices.

Component 2: Prevention and management of floods

Activities under this component fall under **Category B** as they involve infrastructure development that may have localized environmental impacts.

Output 2.1: Infrastructure constructed during the pilot project is maintained

Risk category: **Category B**

National standards: the infrastructure maintenance will adhere to Armenian **building and safety standards**.

Risk mitigation: an **EIA** will be conducted to assess the risk of water flow disruption and soil erosion. Regular monitoring will ensure that flood prevention infrastructure continues to operate efficiently without causing unintended harm to the surrounding environment.

Output 2.2: Road infrastructure advanced (two small bridges, road renovation) to divert heavy-duty vehicles

Risk category: **Category B**

National standards: the road and bridge construction will comply with Armenian **transportation and construction codes**.

Risk mitigation: proper environmental assessments will be carried out to ensure minimal impact on the surrounding ecosystems, and erosion control measures will be implemented to protect nearby agricultural land.

Component 3: Raising awareness and knowledge level of the population for the management of

stone pit wastes and floods

Most activities under this component fall under **Category C** due to their minimal environmental impact, but they play a crucial role in mitigating social and environmental risks through capacity building.

Output 3.1: The level of knowledge on effective recovery methods of degraded landscapes will be increased

Risk category: **Category C**

National standards: compliance with national guidelines on public education and capacity building for environmental protection.

Risk mitigation: ongoing monitoring will ensure that community training translates into effective land restoration and management practices, reducing potential risks of environmental degradation.

Output 3.2: The knowledge level on natural and agro landscape adaptation to climate change is increased

Risk category: **Category C**

National standards: this activity will align with national guidelines on climate change adaptation education.

Risk mitigation: minimal environmental risk, but knowledge-sharing activities will empower communities to adopt sustainable farming and land management practices.

Component	Output	Criteria	Potential Environmental Impacts	Potential Social and Gender Impacts	Risk Category	Rationale	Recommended Documentation
Component 1: Restoration management and increase of adaptation potential of natural landscapes							
Output 1.1	Soil cover of mine adjacent to Maralik community is recultivated (10 ha of forest cover)	Biodiversity, Soil Management, Occupation and Community Health and Safety, Air Pollution, Noise and Vibration,	Temporary soil disturbance, long-term biodiversity benefits	Risk of excluding women and vulnerable groups from reforestation activities	Category B	Soil disruption manageable through proper planning. Gender and social inclusion must be prioritized.	ESIA/ESMP, Reforestation Plan, Gender and Social Inclusion Plan
Output 1.2	Forest grove established by a previous project is maintained	Biodiversity	Minimal risks from forest management activities	Ensuring participation of women and local communities	Category B	Localized risks from ongoing management; participation of local communities and women needed.	Forest Management Plan, Community Engagement Plan
Output 1.3	Sowing areas of perennial plants are created (900 ha)	Soil and Water Management	Soil and water resource benefits, short-term disturbance during planting	Women farmers must be included in land management decisions	Category B	Soil management challenges manageable, but inclusion of vulnerable farmers critical.	ESMP, Land Use Management Plan, Gender-Sensitive Farming Strategy
Output 1.4	Crop yield and quality of natural-landscapes are increased (45 ha hay meadows, 570 ha pastures)	Water and Soil Management	Water use strain, minor soil degradation risks	Women and marginalized groups should be involved in farming improvements	Category B	Water and soil management needed to ensure long-term sustainability. Gender inclusion essential.	Sustainable Agriculture Plan, Water Management Strategy, Gender Action Plan
Output 1.5	Waste collection practices introduced, pilot waste management	Pollution Prevention, Safety	Risks from improper waste disposal	Involving women in waste management planning	Category B	Waste risks must be mitigated with proper systems, involving local women in	Waste Management Plan, Gender Inclusion Strategy

	program implemented					decision-making.	
Output 1.6	Mapping of degraded lands in Shirak region	No direct environmental impact	No physical environmental impact	No social risks, but ensures data is gender-inclusive	Category C	Mapping involves no physical risks; ensures data collection includes gender dimensions.	Baseline Study, Gender-Sensitive Data Collection Plan
Output 1.7	Infrastructure for piloting high-value agriculture models (100 ha) is implemented	Soil and Water Management, Infrastructure Stability	Potential water overuse, minor ecosystem disruptions	Ensuring equal access to agricultural opportunities for women and marginalized groups	Category B	Infrastructure needs water management and social inclusion considerations.	ESMP, Infrastructure Management Plan, Water Use and Inclusion Plan
Output 1.8	Demonstration sites for intensive orchards are constructed (10 ha per community)	Soil and Water Management, Biodiversity	Soil disturbance during orchard planting, long-term biodiversity and agricultural benefits	Ensuring equitable access for women in agricultural training and demonstration sites	Category B	Long-term benefits outweigh short-term impacts. Gender inclusion required in agricultural training.	Orchard Development Plan, Gender-Inclusive Training Program
Output 1.9	Architecture and design work for all components are carried out	Detailed designs must comply with national standards and incorporate environmental sustainability and inclusivity considerations.	Minimal impact due to resource use during the design phase; mitigated through adherence to sustainable practices and efficient use of resources.	Inclusive designs ensure equitable access, benefiting women and vulnerable groups; no significant risks anticipated.	Category B	Risks are site-specific and manageable through sustainable design practices and community engagement, with no significant adverse impacts expected.	Environmental and social impact assessments, compliance reports, stakeholder engagement records, and validated architectural plans.
Output 1.10	Index insurance is piloted in beneficiary municipalities	No direct environmental impact	No direct physical environmental or social impacts	Ensuring equitable access to financial risk mitigation for	Category C	Financial tool for risk management; no physical impacts. Social	Insurance Scheme Report, Social Risk Assessment

				vulnerable groups, including women		inclusion needed in insurance access.	
Component 2: Prevention and management of floods							
Output 2.1	Infrastructure constructed during the pilot project is maintained	Safety, Water Management, Infrastructure Stability	Moderate risk of infrastructure failure, localized flooding risk	Vulnerable groups and women must be prioritized for safety measures	Category B	Flood infrastructure maintenance is critical; ensuring safety for vulnerable groups is key.	Infrastructure Maintenance Plan, Flood Risk Management Plan, Social Inclusion Plan
Output 2.2	Flood prevention systems advanced with road and bridge infrastructure	Occupation and Community Health and Safety, Air Pollution, Noise and Vibration, Cultural Heritage, Soil Management	Localized ecosystem and heritage site disruption	Safety of women and children during construction should be ensured	Category B	Localized impacts near sensitive areas; safety protocols and gender inclusion necessary.	Cultural Heritage Assessment, Gender-Sensitive Safety Protocols
Component 3: Raising awareness and knowledge level of the population							
Output 3.1	Knowledge on effective recovery methods of degraded landscapes increased	No direct environmental impact	No physical impacts, education-based	Gender-sensitive training must ensure equitable participation	Category C	Knowledge transfer poses minimal risks but must include gender-sensitive training.	Training Materials, Gender-Inclusive Capacity Building Plan
Output 3.2	Knowledge on adaptation to climate change increased	No direct environmental impact	No physical impacts, education-based	Must ensure gender equity in climate adaptation training	Category C	Awareness activities have minimal risks and focus on strengthening local adaptation knowledge.	Workshop Reports, Climate Adaptation Training Plan

Environmental and Social Management Plan (ESMP)

Component	Potential Risks	Mitigation Measures	Monitoring Indicators	Responsible Parties
Component 1: Restoration and Management of Natural Landscapes				
Output 1.1: Soil cover recultivated (10 ha)	- Soil erosion and degradation during land preparation. - Potential loss of biodiversity. - Overuse of water resources for irrigation.	- Use soil stabilization techniques (mulching, terracing). - Prioritize native species for reforestation. - Install efficient irrigation systems (drip irrigation).	- Soil quality improvement. - Biodiversity assessments. - Water usage reports.	- Environmental specialists.
Output 1.2: Forest grove established and sustained	- Risk of introducing invasive species. - Poor long-term sustainability if local communities are not involved.	- Select native species only. - Engage communities in forest management. - Provide training for long-term maintenance.	- Survival rate of trees. - Number of community members trained.	- Environmental specialists - Local NGOs.
Output 1.3: Sowing areas for perennial plants (900 ha)	- Soil degradation. - Water resource depletion. - Exclusion of smallholder farmers and vulnerable groups.	- Implement water-efficient irrigation. - Train farmers in sustainable agriculture. - Ensure equitable access to resources through participatory planning.	- Number of farmers trained. - Soil health indicators. - Water usage efficiency.	- Environmental specialists - Local community.
Output 1.4: Crop yield and quality increased (45 ha hay meadows, 570 ha pastures)	- Overgrazing and potential land degradation. - Fertilizer runoff causing water contamination.	- Implement rotational grazing. - Promote the use of organic fertilizers. - Monitor land use and water quality.	- Pastureland productivity. - Water quality reports.	- Agricultural experts - Local farmers' cooperatives (if any).
Output 1.5: Waste collection and management introduced in three communities	- Improper waste management leading to environmental contamination.	- Develop an integrated waste management plan. - Conduct community awareness campaigns.	- Volume of waste managed. - Number of households benefiting.	- Local municipal authorities - Waste management companies

	- Exclusion of vulnerable communities from waste management benefits.	- Ensure equitable access to waste services, prioritizing marginalized groups.	- Participation of marginalized groups.	- Environmental specialists of the Contractor.
Output 1.6: Mapping of degraded lands in Shirak region	- Inaccurate mapping leading to misallocation of resources.	- Use GIS and satellite imagery for accurate mapping. - Involve local communities in the mapping process to integrate traditional knowledge.	- Accuracy of land degradation maps. - Number of community members involved in mapping.	- Environmental specialists - Local NGOs and community members.
Output 1.7: Piloting high-value agriculture model (100 ha degraded land)	- Overuse of resources (water, fertilizers). - Exclusion of smallholders and women from the benefits of high-value agriculture.	- Implement sustainable agriculture practices. - Provide targeted training and support for smallholders and women. - Monitor resource use and ensure equitable access.	- Water and fertilizer usage rates. - Number of women and smallholders trained.	- Agricultural cooperatives (if any) - Private financiers.
Output 1.8: Demonstration sites for intensive orchards (10 ha in each community)	- Water overuse and soil degradation from intensive farming practices. - Exclusion of marginalized groups from accessing demonstration sites.	- Use water-efficient irrigation methods. - Provide equal access to demonstration sites for marginalized groups. - Implement best practices for sustainable farming and monitor land health.	- Orchard productivity. - Water usage rates. - Participation of marginalized groups in demonstration activities.	- Local agricultural organizations (if any) - Community leaders.
Component 2: Prevention and Management of Floods				
Output 2.1: Flood management infrastructure maintained	- Disruption of local ecosystems. - Sedimentation and pollution from construction activities. - Poor communication with the community.	- Use eco-friendly materials and designs. - Implement sediment control measures. - Conduct public consultations before and during construction.	- Environmental impact assessment reports. - Sedimentation levels in nearby water bodies. - Number of community consultations held.	- Municipal engineering departments - Environmental specialists of the Contractor.
Output 2.2: Road and bridge infrastructure improved	- Sedimentation and air pollution during construction.	- Use dust suppression techniques. - Implement erosion control	- Air quality reports. - Sedimentation levels in nearby rivers.	- Construction companies (Contractor) - Local transport

	- Limited access to transportation for local communities during construction.	measures. - Provide alternative routes for transportation. - Conduct regular environmental monitoring.	- Number of affected residents provided with alternative transportation.	authorities, in particular relevant community and/or Road Department Fund SNCO.
Component 3: Raising Awareness and Knowledge of Climate Change Adaptation				
Output 3.1: Knowledge transfer to local governments and municipalities	- Inadequate understanding of climate adaptation strategies among local officials. - Exclusion of marginalized groups from training programs.	- Develop locally tailored training materials. - Provide specific training for marginalized groups. - Conduct follow-up assessments to ensure understanding and application of strategies.	- Number of government officials trained. - Gender-disaggregated data on training participants. - Effectiveness of climate adaptation implementation.	- Municipal governments - Local NGOs.
Output 3.2: Increased awareness of climate change adaptation in target communities	- Poor adoption of climate adaptation strategies. - Limited participation of women and vulnerable groups in training programs.	- Engage local leaders in training programs. - Use culturally sensitive training materials. - Ensure equal access to training for marginalized groups and women.	- Community awareness levels. - Number of women and vulnerable groups participating in training programs.	- Local community organizations - Educational institutions.

Monitoring and Evaluation Plan

Aspect	Monitoring Indicators	Frequency	Responsible Entity
Environmental Impact Monitoring	- Pollution levels (air, water, soil) - Habitat restoration progress	Quarterly during project implementation and/or based on GRM.	Environmental Specialist, Local Authorities
Social Impact Monitoring	- Participation rates of women and marginalized groups - Satisfaction with public consultations and project benefits	Annual reports	Social Specialist, Local NGOs

	(more details in GAP)		
Gender Equality Monitoring	- Gender-disaggregated participation data - Gender-specific benefits achieved (more details in GAP)	Annual reports	Gender Specialist, Local Authorities
Public Consultation and Stakeholder Engagement	- Number of consultations held with vulnerable groups and women - Feedback from stakeholders (more details in GAP)	Ongoing during the project	Community Engagement Officer, Local Municipalities
Waste and Resource Management	- Volume of waste collected and processed - Efficiency of resource use (e.g., water, fertilizers)	Monthly reports	Waste Management Companies, Agricultural Cooperatives

Checklist of environmental and social principles	**No further assessment required for compliance**	**Potential impacts and risks – further assessment and management required for compliance**	**Notes**
Compliance with the Law	✔		The project complies with all applicable national laws and regulations, including environmental, labor, and human rights laws.
Access and Equity		✔	The project will provide women and men regardless of their background and age with an equal opportunity to build their resilience and increase their capability to adapt to climate change impacts and interlinked challenges.
Marginalized and Vulnerable Groups		✔	Marginalized groups, including women, elderly, and smallholder farmers, could face challenges in accessing project benefits. Special

			measures are required to ensure that these groups are included in consultations, planning, and implementation activities.
Human Rights	✔		The project promotes and respects human rights principles, ensuring that no community or individual is negatively impacted.
Gender Equality and Women's Empowerment		✔	Specific gender considerations must be integrated into all components of the project to ensure women's participation and benefit equally from the project's outputs. Gender Action Plan is in place to ensure gender responsive approaches.
Core Labour Rights		✔	The project should comply with national and international labor standards, ensuring safe and fair working conditions, particularly for marginalized workers in agriculture and waste management sectors.
Indigenous Peoples	✔		There are no indigenous peoples affected by this project. However, any future engagement with indigenous groups would require full consultations and respect for their rights.
Involuntary Resettlement	✔		The project does not involve involuntary resettlement. All land use will follow a participatory approach, ensuring voluntary agreements with local landholders.
Protection of Natural Habitats		✔	Potential risks to natural habitats exist, particularly during reforestation and infrastructure construction. Mitigation measures include

			biodiversity assessments, selection of native species, and protection of surrounding ecosystems.
Conservation of Biological Diversity		✔	The introduction of non-native species during restoration efforts could threaten local biodiversity. Conservation strategies, including the use of native species and habitat monitoring, must be implemented.
Climate Change	✔		The project is designed to enhance resilience to climate change and contribute to mitigation through reforestation and climate-smart agriculture practices. No further assessment is required for compliance.
Pollution Prevention and Resource Efficiency		✔	Risks related to pollution from construction and waste management activities require careful planning and monitoring. Waste collection systems and proper resource management must be implemented to mitigate these risks.
Public Health		✔	Public health risks could arise from improper waste management and construction activities. The project must ensure that health and safety protocols are in place, particularly for waste management workers and communities.
Physical and Cultural Heritage	✔		There are no known impacts on physical or cultural heritage sites. If any such sites are identified during project implementation, appropriate protection measures will be taken.
Lands and Soil Conservation		✔	Potential risks of soil degradation during reforestation and agricultural

			expansion. Soil conservation techniques and erosion control measures must be implemented to mitigate these risks.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan, in compliance with the ESP and the Gender Policy of the Adaptation Fund.

The Project's monitoring and evaluation (M&E) arrangements encompass a comprehensive approach to oversee project progress and assess its outcomes. The M&E activities will be managed within the allocated M&E budget, as detailed below. Monitoring and evaluation will be a collaborative effort involving the Project Team, with verification by the National Implementing Entity (NIE). The progress will be evaluated based on predefined targets and indicators established in the Project Results Framework.

The Project Management Unit (PMU) will establish a robust system for monitoring the project's progress. This system will facilitate data collection and recording through participatory mechanisms, enabling the monitoring and evaluation of both outcome and output indicators. Key tasks during the Project Launch workshop will include introducing the project's results framework to all stakeholders, presenting the project team, fostering ownership, and planning the work plan in alignment with the project's results framework. This will involve defining roles, responsibilities, and functions of both the NIE and the Project Management team. Additionally, the M&E indicators, budget, and work plan will be collaboratively agreed upon and scheduled.

Throughout the project duration, the PMU and the dedicated monitoring and evaluation division will shoulder the responsibility for ongoing monitoring. Their actions will be guided by the Annual Operating Plan (AOP), which outlines all essential activities for the current year. Quarterly Status Reports (QSRs) will provide insights into the progress of executed activities. AOPs will be annually agreed upon during NIE meetings and will be guided by the project's results framework.

A significant feature of our M&E framework will be the incorporation of sex-disaggregated data in our data collection, analysis, and reporting processes. This approach ensures that the project's impacts on different gender groups are accurately captured and understood, providing a basis for gender-responsive project implementation and adjustment. Even though the specific arrangements for M&E, including the mechanisms for collecting and analyzing sex-disaggregated data, will be further refined during the project inception phase, the commitment to gender-sensitive M&E is unequivocal and will be a guiding principle throughout the project lifecycle.

To bolster the effectiveness of the project's M&E function, the unit will actively utilize gender-responsive indicators, facilitating a nuanced understanding of the project's gender-differentiated impacts and contributing to the development of interventions that are sensitive to the needs and priorities of all gender groups.

Monitoring and Evaluation (M&E) processes have been designed with a gender-sensitive lens, with a focus on women groups. This targeted approach in M&E aims to meticulously assess the direct and indirect benefits accruing to women as a result of the project, providing valuable insights into the project’s impact on promoting gender equity and women empowerment.

Several reports and evaluations will be developed over the project's lifecycle, including:

- **Inception Workshop Report:** This report, prepared after the inception workshop, will detail the roles, responsibilities, actions, and functions of all stakeholders. It will also encompass the first AOP and monitoring plan for the initial year.

- **Annual Operating Plan (AOP):** AOPs, to be approved by the NIE before each operating period, will outline all planned activities, milestones, and goals for the year. It will include the necessary financial activities relevant to the period.
- **Quarterly Status Reports (QSRs):** These reports, to be submitted by the project management unit at the end of each operating quarter, will track the execution of indicators as defined in the project results framework. They will also address challenges faced and constraints encountered during execution.
- **Annual Management Reports (AMR):** The AMR, covering the last AOP, will compare actual results against the targets and milestones outlined in the AOP. If necessary, it will propose improvements and corrective measures for the upcoming AOP.
- **External Audit Reports:** These reports, aligned with government Financial Regulations, will be prepared in conjunction with periodic financial statements.
- **Mid-term Evaluation:** Conducted halfway through project implementation, this external evaluation will assess progress towards achieving outcomes, taking into account project effectiveness and efficiency. It will suggest corrective actions if needed.
- **Final Report:** This report, presented three months before project completion, will primarily focus on assessing project results against planned outcomes. It will also evaluate project impacts and sustainability.
- **Final External Evaluation:** This evaluation will emphasize project impacts, sustainability, and long-term effects. It will provide recommendations for further actions to ensure project sustainability. These M&E arrangements will incorporate a gender-responsive stakeholder consultation process. If specific gender targets or gender-responsive outcomes are identified, a dedicated specialist will monitor these aspects closely.

M&E Budget breakdown:

Item	Responsible	Project Lifespan				Total
		1st year	2nd year	3d year	4th year	
Quarterly and annual Reports	*EPIU PMU*	-	-	-	-	**-**
Final Report	*EPIU PMU*	-	-	-	-	**-**
Project Management Board Meetings	*Project manager*	1,000$	1,000$	1,000$	1,000$	**4,000$**
Technical & copyright supervision	*Local expert/s*	10,000$	10,000$	10,000$	10,000$	**40,000$**
Inception and Final Workshops	*EPIU PMU*	2,000$	-	-	2,000$	**4,000$**
Mid-term evaluation	*International Expert*	-	-	20,000$	-	**20,000$**
Final Evaluation	*International Expert*	-	-	-	20,000$	**20,000$**

External Audit	*National audit company*	3,000$	3,000$	3,000$	3,000$	**12,000$**
TOTAL:		16,000$	14,000$	34,000$	36,000$	**100,000$**

E. **Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.**

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
<u>Objectives:</u> ➢ Increase adaptation level of natural and agricultural landscapes; ➢ Prevent floods and eliminate their consequences, ➢ Restore the natural landscape of the area affected by climate change and anthropogenic impacts, at the same time to demonstrate the possibilities of adaptation level increase of degraded natural landscapes, ➢ Improve the adaptation potential of community producers,	➢ **N** of Project beneficiaries *(direct & indirect)*; ➢ **%** of women beneficiaries; ➢ **N** of communities benefited; ➢ **N** of settlements benefited; ➢ **%** of vulnerable settlements benefited;	**15,000** direct beneficiaries out of which **60%** are women **3** communities **10** settlements	**27,000** direct beneficiaries **40%** **3** communities **6** settlements	**47,000** direct beneficiaries **40%** 3 communities 10 settlements	➢ 6 monthly project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;

[17] Achieved in the result of implementation of the pilot Project "Artik city closed stone pit waste and flood management pilot project"
[18] Include also beneficiaries indicated in the baseline
[19] Include also beneficiaries indicated in the baseline

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
institutions, and other relevant stakeholders regarding climate change under current climate change conditions; ➢ Replicate and scaleup good practices achieved during implementation of the pilot project "Artik city closed stone pit waste and flood management pilot project";						
Component 1: Restoration, management and increase of adaptation potential of natural landscapes of the area affected by climate change and anthropogenic factors						
Outcome 1: Adaptation and sustainability of natural landscapes of the area affected by climate change and anthropogenic factors increased.	➢ **N of ha** of land rehabilitated and with increased adaptation capacity	➢ **30 ha** of land rehabilitated and with increased adaptation capacity	➢ **465 ha** of land rehabilitated and with increased adaptation capacity	➢ **1,665 ha** of land rehabilitated and with increased adaptation capacity	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 1.1 Soil cover of mine adjacent to Ani community is	➢ **N of ha** of soil cover of mine recultivated	➢ **30 ha** of soil cover of mine recultivated	➢ **35 ha** of soil cover of mine recultivated	➢ **40 ha** of soil cover of mine recultivated	➢ Semi-annual project reports; ➢ Annual PPRs;	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
recultivated *(10 ha of forest cover will be created);*					➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	
<u>Output 1.2</u> Forest grove established with support of previous project is taken care of and became sustainable;	➢ **%** of trees survived during the first 5 years;	➢ **60%** of trees survived during the first 5 years;	➢ **70%** of trees survived during the first 5 years;	➢ **90%** of trees survived during the first 5 years;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
<u>Output 1.3</u> Sowing areas of perennial plants are created reducing rangeland degradation and enhancing the adaptability of degraded arable lands in Ani, Ashotsk and Artik *(900 ha of perennial sowing area established)*;	➢ **N** of ha of perennial sowing areas of perennial plants are created;	➢ **0** ha of perennial sowing areas of perennial plants are created;	➢ **300** ha of perennial sowing areas of perennial plants are created;	➢ **900** of ha of perennial sowing areas of perennial plants are created;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
<u>Output 1.4</u> Crop yield and crop quality of the	➢ **N** of ha hay meadows with increased crop	➢ **15** ha hay meadows with increased crop	➢ **40** ha hay meadows with increased crop	➢ **60** ha hay meadows with increased crop	➢ Semi-annual project reports;	EPIU, targeted municipalities and

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
adjacent natural-landscapes is increased in Ani, Ashotsk and Artik communities *(45 ha hay meadows and 570 ha pastures)*;	yield and crop quality; ➢ **N** of ha pastures with increased crop yield and crop quality;	yield and crop quality; ➢ **190** ha pastures with increased crop yield and crop quality;	yield and crop quality; ➢ **460** ha pastures with increased crop yield and crop quality;	yield and crop quality; ➢ **760** ha pastures with increased crop yield and crop quality;	➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	settlements;
<u>Output 1.5</u> Waste collection practices are introduced in Ani, Ashotsk and Artik communities *(garbage tracks, bins and collection) and* pilot program for integrated management of household waste in the village of Vardakar is implemented;	➢ **N** of waste management plans introduced in targeted communities; ➢ Pilot program for integrated management of household waste in the village of Vardakar is implemented;	➢ Waste management plans introduced in Artik community;	➢ -	➢ **3** of waste management plans introduced in targeted communities; ➢ Pilot program for integrated management of household waste in the village of Vardakar is implemented	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
<u>Output 1.6</u> Mapping of all degraded lands in Shirak region is implemented;	➢ **100** ha of degraded land requiring priority interventions is mapped;	➢ **0** ha of degraded land requiring priority interventions is mapped;	➢ **100** ha of degraded land requiring priority interventions is mapped;	➢ **100** ha of degraded land requiring priority interventions is mapped;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
Output 1.7 Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities);	➢ **N** ha of degraded land benefited from infrastructure for piloting high value agriculture models *(with the commercial lending)*; ➢ **%** of women beneficiaries;	➢ **0** ha degraded land benefited from infrastructure for piloting high value agriculture models *(with the commercial lending)*; ➢ **40%** of women beneficiaries;	➢ **50** ha of degraded land benefited from infrastructure for piloting high value agriculture models *(with the commercial lending)*; ➢ **40%** of women beneficiaries;	➢ **100** ha of degraded land benefited from infrastructure for piloting high value agriculture models *(with the commercial lending)*; ➢ **40%** of women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 1.8 Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community);	➢ **N** ha in 3 beneficiary communities with demonstration sites for intensive orchards; ➢ **%** of women beneficiaries;	➢ **0** ha in 3 beneficiary communities with demonstration sites for intensive orchards;	➢ **15** ha in 3 beneficiary communities with demonstration sites for intensive orchards; ➢ **40%** of women beneficiaries;	➢ **30** ha in 3 beneficiary communities with demonstration sites for intensive orchards; ➢ **40%** of women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of training participants; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 1.9 Architecture and design work for all components are carried out;	➢ **N** of Architecture and design work reports;	**N** of Architecture and design work reports;	➢ **N** of Architecture and design work reports;	➢ **N** of Architecture and design work reports;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of training participants; ➢ M&E interim and	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
					final reports; ➢ Impact assessment report (upon completion);	
Output 1.10 Index insurance piloted in beneficiary municipalities	➢ **N** of farmers participated in the pilot of index insurance scheme; ➢ **%** of women beneficiaries;	➢ **0** farmers participated in training sessions of the pilot of index insurance scheme; ➢ **0%** of women beneficiaries;	➢ **50** farmers participated in training sessions of the pilot of index insurance scheme; ➢ **40%** of women beneficiaries;	➢ **100** farmers participated in training sessions of the pilot of index insurance scheme; ➢ **40%** of women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of training participants; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Component 2: Prevention and management of floods						
Outcome 2: Social, economic and environmental threats caused by floods as a result of climate change is reduced	➢ **N** of floods causing social, economic and environmental impacts;	➢ **7** floods causing social, economic and environmental impacts;	➢ **0** floods causing social, economic and environmental impacts;	➢ **0** floods causing social, economic and environmental impacts;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 2.1 Infrastructure constructed during the pilot project is maintained;	➢ **N** of infrastructural elements maintained;	➢ **3** infrastructural elements maintained;	➢ **3** infrastructural elements maintained;	➢ **3** infrastructural elements maintained;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys;	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
					➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	
Output 2.2 Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities;	➢ **N** of bridges renovated; ➢ **N** of km of the existing roads renovated;	➢ **0** bridges renovated; ➢ **0** km of the existing roads renovated;	➢ **1** bridge renovated; ➢ **2** km of the existing roads renovated;	➢ **2** bridges renovated; ➢ **3** km of the existing roads renovated;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Component 3: Raising awareness and knowledge level of population for the management of stone pit wastes and floods						
Outcome 3: Raising awareness and knowledge level of population on the recovery of agro landscapes and flood risk reduction	➢ **N** of community inhabitants benefitting from awareness raising and on the recovery of agro landscapes and flood risk; ➢ **%** of women beneficiaries;	➢ **1500** community inhabitants benefitting from awareness raising and on the recovery of agro landscapes and flood risk; ➢ **35%** are women beneficiaries;	➢ **2500** community inhabitants benefitting from awareness raising and on the recovery of agro landscapes and flood risk; ➢ **40%** are women beneficiaries;	➢ **3500** community inhabitants benefitting from awareness raising and on the recovery of agro landscapes and flood risk; ➢ **50 %** are women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of beneficiaries; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 3.1 The level of knowledge on effective recovery methods of	➢ **N** of beneficiaries with increased knowledge on effective recovery methods of	➢ **200** beneficiaries with increased knowledge on effective recovery methods of	➢ **500** beneficiaries with increased knowledge on effective recovery methods of	➢ **700** beneficiaries with increased knowledge on effective recovery methods of	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
degraded natural and agro landscapes will be increased;	degraded natural and agro landscapes; ➢ **%** of women beneficiaries;	degraded natural and agro landscapes; ➢ **40%** are women beneficiaries;	degraded natural and agro landscapes; ➢ **40%** are women beneficiaries;	degraded natural and agro landscapes; ➢ **40%** are women beneficiaries;	beneficiaries; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	
Output 3.2 The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased;	➢ **N** of farmers and community workers whose knowledge has increased towards the adaptation of natural and agricultural landscapes; ➢ **%** of women beneficiaries;	➢ **200** farmers and community workers whose knowledge has increased towards the adaptation of natural and agricultural landscapes; ➢ **40%** are women beneficiaries;	➢ **500** farmers and community workers whose knowledge has increased towards the adaptation of natural and agricultural landscapes; ➢ **40%** are women beneficiaries;	➢ **700** farmers and community workers whose knowledge has increased towards the adaptation of natural and agricultural landscapes; ➢ **40%** are women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Surveys of training participants; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
Output 3.3 Increasing of the knowledge level of the population on the occurrence and prevention possibilities of floods;	➢ **N** of community workers whose knowledge towards management and prevention of floods has increased; ➢ **%** of women beneficiaries;	➢ **25** community workers whose knowledge towards management and prevention of floods has increased; ➢ **30%** are women beneficiaries;	➢ **60** community workers whose knowledge towards management and prevention of floods has increased; ➢ **40%** are women beneficiaries;	➢ **80** community workers whose knowledge towards management and prevention of floods has increased; ➢ **40%** are women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Community-based adaptation plans; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;

Result	Indicator	Baseline[17]	Milestone[18] *(end of year 2)*	End of Project target[19]	Means of verification	Responsibility
<u>Output 3.4</u> Promoting the importance of the sustainable thinking, learning and dissemination of information related to the landscape adaptation to climate change in communities;	➢ **N** of community engagement and awareness raising events; ➢ **%** of women beneficiaries;	➢ -	➢ **30** community engagement and awareness raising events; ➢ **50%** of women beneficiaries;	➢ **60** community engagement and awareness raising events; ➢ **50%** of women beneficiaries;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Strategies for sustaining climate smart agriculture and LDN; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;
<u>Output 3.5</u> The involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change will be increased;	➢ **N** of local media and environmental NGOs in the process of mitigating the negative effects of climate change;	➢ **3** local media and environmental NGOs in the process of mitigating the negative effects of climate change;	➢ **6** local media and environmental NGOs in the process of mitigating the negative effects of climate change;	➢ **9** local media and environmental NGOs in the process of mitigating the negative effects of climate change;	➢ Semi-annual project reports; ➢ Annual PPRs; ➢ Municipalities' and CSO's mapping, capacity assessment and completion reports; ➢ M&E interim and final reports; ➢ Impact assessment report (upon completion);	EPIU, targeted municipalities and settlements;

F. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
1. Increase adaptation level of natural and agricultural landscapes;	Project interventions contributed towards reduction of the spread of dust, and increase of adaptation of natural and agricultural landscapes	**Outcome 5:** Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	
2. Prevent floods and eliminate their consequences,	Advanced infrastructure in the vicinity of beneficiary municipalities contributed towards adaptation to extreme hydro meteorological events posed by climate change	**Outcome 1:** Reduced exposure to climate-related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	
3. Restore the natural landscape of the area affected by climate change and anthropogenic impacts, at the same time to demonstrate the possibilities of adaptation level increase of degraded natural landscapes,	➢ Quality of land increased; ➢ The level of erosion decreased; ➢ Anthropogenic factors affecting natural and agricultural landscaped reduced;	**Outcome 5:** Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	
4. Improve the adaptation potential of community producers, institutions, and other relevant stakeholders regarding climate change under current climate change conditions;	Costs of flood damage is reduced.	**Outcome 6:** Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1. Percentage of households and communities having more secure access to livelihood assets	
5. Replicate and scaleup good practices achieved during implementation of the pilot project "Artik city closed stone pit waste and flood management pilot project";	➢ **N** of best practices replicated; ➢ **N** of communities benefited; ➢ **N** of people benefited; ➢ **%** of women engaged	**Outcome 8:** Support the development and diffusion of innovative adaptation practices, tools and technologies	8. Innovative adaptation practices are rolled out, scaled up, encouraged and/or accelerated at regional, national and/or subnational level.	
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Adaptation and sustainability	➢ 10 ha of forest cover will be	**Output 5:**	5.1. No. and type of	**2.961.320**

of natural landscapes of the area affected by climate change and anthropogenic factors increased.	created; ➢ Forest grove established; ➢ 900 ha of sowing areas of perennial plants are created reducing rangeland degradation in Ani, Ashotsk and Artik communities; ➢ Crop yield and quality at 45 ha of hay meadows and 570 ha of pastures is increased in Ani, Ashotsk and Artik communities; ➢ Waste collection practices introduced in Ani, Ashotsk and Artik communities ➢ Pilot program for integrated management of household waste in the village of Vardakar is implemented; ➢ Degraded lands in Shirak region are mapped; ➢ 100 ha of degraded land has benefited from constructed infrastructure for piloting high value agriculture models (including new types of climate resilient crops), as well as commercial lending from private financier is implemented; ➢ 10 ha of demonstration sites (in each community) for intensive orchards in all beneficiary communities are constructed; ➢ Architecture and design work for all components are carried out; ➢ Index insurance piloted in beneficiary municipalities;	Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change	
Social, economic, and environmental threats caused by floods as a result of climate change is reduced	➢ Infrastructure constructed during the pilot project is maintained; ➢ Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away	<u>Output 1.1:</u> Risk and vulnerability assessments conducted and updated <u>Output 4:</u>	1.2 No. of early warning systems (by scale) and no. of beneficiaries covered 4.1.2. No. of physical assets strengthened or constructed to	**800.000**

	from the adjacent to the mine communities;	Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability **Output 6:** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	withstand conditions resulting from climate variability and change 6.1.1.No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies 6.2.1. Type of income sources for households generated under climate change scenario	
Raising awareness and knowledge level of population on the recovery of agro landscapes and flood risk reduction	➢ Increased level of knowledge on effective recovery methods of degraded natural and agro landscapes; ➢ Increased level of knowledge of the population on natural and agro landscape adaptation to climate change; ➢ Increasing level of knowledge of the population on the occurrence and prevention possibilities of floods; ➢ Promoting the importance of the sustainable thinking related to the landscape adaptation to climate change in communities; ➢ Increased involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change;	**Output 3.1:** Targeted population groups participating in adaptation and risk reduction awareness activities **Output 3.2:** Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	3.1.1 No. of news outlets in the local press and media that have covered the topic 3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	**300,000**

G. **Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.**

Output	Item	Budget Notes	Budget during Project lifespan (in USD)				Total Budget (in USD)	Comments
			Year 1	Year 2	Year 3	Year 4		
Component 1: Restoration, management, and increase of adaptation potential of natural and agricultural landscapes of the area affected by climate change and anthropogenic factors.								
Output 1.1 Soil cover of mine adjacent to Ani community is recultivated *(10 ha of forest cover will be created)*;	Construction Company N 1	Preparation of the soil layer for the purpose of creation of the forestation;	-	90,000	-	-	**216,320**	-
		Reforestation	-	-	126,320	-		-
Output 1.2 Forest grove established with support of previous project is taken care of and became sustainable;	Specialized Company N 1	Maintenance of the forest cover	45,000	45,000	45,000	45,000	**180,000**	-
Output 1.3 Sowing areas of perennial plants are created reducing rangeland degradation and enhancing the adaptability of degraded arable lands in Ani, Ashotsk and Artik *(900 ha of perennial sowing area established)*;	Specialized Company N 2	Creating of sowing areas of perennial plants	300,000	300,000	100,000	-	**700,000**	-
Output 1.4 Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani, Ashotsk and Artik communities *(45 ha hay meadows and 570 ha pastures)*;	Specialized Company N 3	Soil improvement and fertilization	60,000	60,000	60,000	60,000	**360,000**	-
		Introduction of the climate resilient crop varieties	30,000	30,000	30,000	30,000		-
Output 1.5 Waste collection practices are introduced in Ani, Ashotsk and Artik	Waste management	Waste collection	-	110,000	-	-	**200,000**	-

Output	Item	Budget Notes	Budget during Project lifespan (in USD)				Total Budget (in USD)	Comments
			Year 1	Year 2	Year 3	Year 4		
communities *(garbage tracks, bins and collection) and* pilot program for integrated management of household waste in the village of Vardakar is implemented;	Company N 1	infrastructure						
		Waste collection practices	-	30,000	30,000	30,000		-
Output 1.6 Mapping of all degraded lands in Shirak region is implemented;	Specialized Company N4	Mapping of degraded lands	25,000	-	-	-	**25,000**	-
Output 1.7 Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities);	Specialized Company N5	Site preparation and assessment	25,000	-	-	-	**250,000**	-
		Selection of the crops	15,000	-	-	-		
		Infrastructure development	100,000	110,000	-	-		
Output 1.8 Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community);	Constrution Company N 1	Construction of demonstration sites	300,000	300,000	300,000	-	**900,000**	-
Output 1.9 Architecture and design work for all components are carried out;	Architectural design Company N1	Design of the necessary layouts and drawings	85,000	-	-	-	**85,000**	-
Output 1.10 Index insurance piloted in beneficiary municipalities	Insurance Company N 1	Subsidization of the insurance risks	-	15,000	10,000	-	**25,000**	-
Subtotal for Component 1			**985,000**	**1,090,000**	**701,320**	**165,000**	**2,961,320**	-
Component 2: Prevention and management of floods								
Output 2.1 Infrastructure constructed during the	Specialized Company N6	Maintenance of the	25,000	25,000	25,000	25,000	**100,000**	-

Output	Item	Budget Notes	Budget during Project lifespan (in USD)				Total Budget (in USD)	Comments
			Year 1	Year 2	Year 3	Year 4		
pilot project is maintained;		infrastructure						
Output 2.2 Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities;	Specialized Company N6	Advancement/ renovation of the road infrastructure	200,000	400,000	100,000	-	**700,000**	-
Subtotal for Component 2.			**225,000**	**425,000**	**125,000**	**25,000**	**800,000**	-
Component 3: Raising awareness and knowledge level of population for the management of stone pit wastes and floods								
Output 3.1 The level of knowledge on effective recovery methods of degraded natural and agro landscapes will be increased	Consulting Company N 1	Implementation of the awareness raising events	15,000	15,000	15,000	15,000	**60,000**	-
Output 3.2 The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased;	Consulting Company N 2	Implementation of knowledge increase events	20,000	20,000	-	-	**40,000**	-
Output 3.3 Increasing of the knowledge level of the population on the occurrence and prevention possibilities of floods;	Consulting Company N 3	Implementation of knowledge increase events	15,000	15,000	10,000	-	**40,000**	-
Output 3.4 Promoting the importance of the sustainable thinking, learning and dissemination of information related to the landscape adaptation to climate change in communities;	Consulting Company N 4	Implementation of the knowledge learning and sharing community engagement events	20,000	20,000	20,000	-	**60,000**	-
Output 3.5 The involvement of local media and	Consulting Company N 5	Capacity building of the	50,000	50,000	-	-	**100,000**	-

Output	Item	Budget Notes	Budget during Project lifespan (in USD)				Total Budget (in USD)	Comments
			Year 1	Year 2	Year 3	Year 4		
environmental NGOs in the process of mitigating the negative effects of climate change will be increased		media outlets and NGOs						
Subtotal for Component 3			**120,000**	**120,000**	**45,000**	**15,000**	**300,000**	
TOTAL for Project's Components			**1,210,000**	**1,635,500**	**871,320**	**205,000**	**4,061,320**	
Project Execution costs (EPIU)1.5% of total budget)			**15,500**	**15,500**	**15,500**	**14,420**	**60,920**	
TOTAL Project Costs			**1,225,500**	**1,651,000**	**886,820**	**219,420**	**4,122,240**	
IE Fee / Oversight Costs (*max 8.5% of total budget)			**65,360**	**63,000**	**83,000**	**85,000**	**350,390**	
GRAND TOTAL			**1,290,860**	**1,714,000**	**969,820**	**304,420**	**4,472,630**	

IE Fee / Oversight Costs *(*max 8.5% of total budget)*

Item	Responsible	Project Lifespan				Total
		1st year	2nd year	3d year	4th year	
I. Project Management						
Project Manager	*EPIU PMU*	16,000$	16,000$	16,000$	16,000$	**64,000$**
Project Coordinator	*EPIU PMU*	14,000$	14,000$	14,000$	14,000$	**56,000$**
Monitoring Specialist	*EPIU PMU*	8,000$	8,000$	8,000$	8,000$	**32,000$**
Social and Gender risk assessment specialist	*EPIU PMU*	7,250$	7,250$	7,250$	7,250$	**29,000$**
Environmental risk specialist	*EPIU PMU*	6,000$	6,000$	6,000$	6,000$	**24,000$**
Subtotal for Project Management		49,000$	49,000$	49,000$	49,000$	**196,000$**
II. Monitoring & Evaluation						
Quarterly and annual Reports	*EPIU PMU*	-	-	-	-	**-**
Final Report	*EPIU PMU*	-	-	-	-	**-**
Project Management Board Meetings	*Project manager*	1,360$	1,000$	1,000$	1,000$	**4,169$**

Technical & copyright supervision	*Local expert/s*	10,000$	10,000$	10,000$	10,000$	**40,000$**
Inception and Final Workshops	*EPIU PMU*	2,000$	-	-	2,000$	**4,000$**
Mid-term evaluation	*International Expert*	-	-	20,000$	-	**20,000$**
Final Evaluation	*International Expert*	-	-	-	20,000$	**20,000$**
External Audit	*National audit company*	3,000$	3,000$	3,000$	3,000$	**12,000$**
Subtotal for Monitoring & Evaluation		16,000$	14,000$	34,000$	36,000$	**100,000$**
TOTAL		**65,360 $**	**63,000$**	**83,000$**	**85,000$**	**350,390**

Project Execution costs (EPIU)1.5% of total budget

Item	**Project Lifespan**				**Total**
	1st year	**2nd year**	**3d year**	**4th year**	
Finance Officer	6,000$	6,000$	6,000$	6,000$	**24,000$**
Administrative Support	4,000$	4,000$	4,000$	4,000$	**16,000$**
Procurement Specialist	2,500$	2,500$	2,500$	1,420$	**8,920$**
Field trips	1,500$	1,500$	1,500$	1,500$	**6,000$**
Misc	1,500$	1,500$	1,500$	1,500$	**6,000$**
TOTAL:	**15,500$**	**15,500$**	**15,500$**	**14,420$**	**60,920$**

H. Include a disbursement schedule with time-bound milestones.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Total**
Scheduled Date	September 2025	January 2026	January 2027	January 2028	
Project Funds	1,210,000	1,635,500	871,320	205,000	**4,061,320**
Project Execution costs	15,500	15,500	15,500	14,420	**60,920**
Total Project Cost	1,225,500	1,651,000	886,820	219,420	**4,122,240**

IE Fee / Oversight Costs	65,360	63,000	83,000	85,000	**350,390**
Total Project/ Programme Cost	**1,290,860**	**1,714,000**	**969,820**	**304,420**	**4,472,630**

[1] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

ANNEX I. – Gender Assessment

I. Introduction

This Gender Assessment will serve as a resource for the RoA Ministry of Environment, Environmental Project Implementation Unit State Agency during the projects implementation and some elements will be used as an awareness-raising tool for the wider public. In addition to the work conducted during the preparation of the funding proposal, a series of consultations with diverse groups, including grass root women's groups and women from female headed households will be held under various project components throughout the project cycle. Similarly, the surveys planned at mid-term and conclusion of the project will ensure that the questionnaires are developed in a gender responsive manner, and gender analysis is conducted based on the survey results.

II. Existing Gender Inequality in Armenia

Attainment of women and men's equality is one of the main goals and an important part of the international development agenda. The principle of gender equality reflects the idea that it is impossible to achieve full realization of human rights without ensuring equal rights, responsibilities, and opportunities for men and women. This principle is stressed in numerous international documents, agreements, national constitutions, and legislative acts of the states of the world, including the Republic of Armenia.

In recent years, Armenia has made certain progress in human development including gender equality. The progress is mainly achieved thanks to the improvements in legislative environment and policy frameworks triggered by international conventions on gender equality and women rights as well as changes in the national legislation.

Thus, equal rights and equal opportunities for citizens are currently enshrined in the Armenian Constitution (articles 28, 29, 30, 86, 87) and in the RoA *Law on provision of equal rights and equal opportunities for women and men* adopted in 2013.

Armenia is a member of more than 40 international organizations, including the United Nations; the Council of Europe; the Asian Development Bank; the World Trade Organization; World Customs Organization; the Organization of the Black Sea Economic Cooperation; and La Francophonie. During the independence Armenia signed and adopted almost all the international documents and treaties on gender equality. Below is the list of Republic of Armenia legally binding laws and political commitments to reduce gender inequalities ratified by the country, such as:

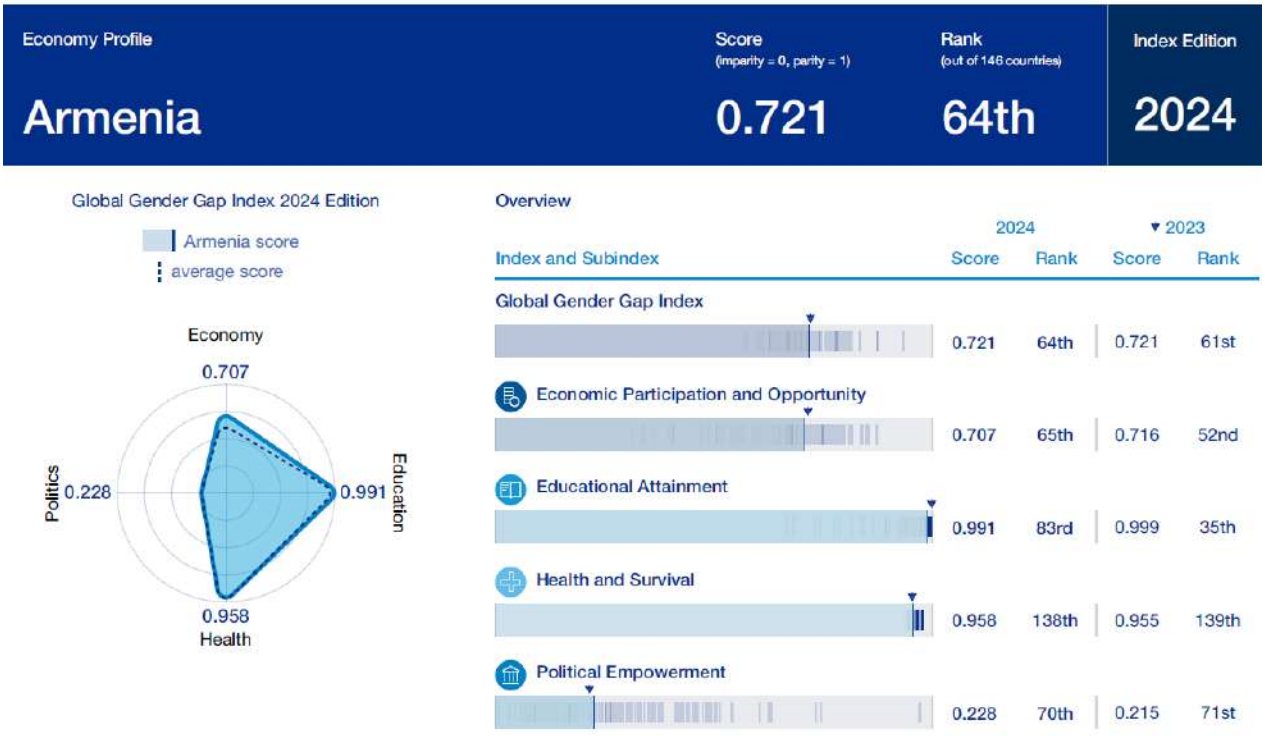
- Beijing Declaration and Platform for Action;
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and Optional Protocol to the Convention on the Elimination of All Forms of Discrimination Against Women;
- Council of Europe Declaration on Equality of Women and Men;
- Declaration: Making Gender Equality a Reality (119th Session of the Committee of Ministers, Madrid, 12 May 2009);
- International Covenant on Civil and Political Rights and Optional Protocol to the International Covenant on Civil and Political Rights;
- International Covenant on Economic, Social and Cultural Rights and Optional Protocol to the

International Covenant on Economic, Social and Cultural Rights;

- Istanbul Declaration on Equality Between Men and Women as a Fundamental Criterion of Democracy;
- PACE Resolution 1489 (2006): Mechanisms to Ensure Women's Participation in Decision Making;
- Recommendation CM/Rec(2007)17 of the Committee of Ministers to Member States on Gender Equality Standards and Mechanisms;
- Recommendation Rec(2003)3 of the Committee of Ministers to Member States on Balanced Participation of Women and Men in Political and Public Decision Making;
- Transforming Our World: The 2030 Agenda for Sustainable Development – Resolution;
- Universal Declaration of Human Rights (UDHR);

Despite the professed commitment to gender equality the situation leaves much to be desired, especially from the perspective of substantive equality, which encompasses not only equal rights but also equality of opportunity and equality of outcomes. This gap between rhetoric and reality is most vividly demonstrated in low participation in political and economic decision-making, the feminization of poverty and higher rates of women in low-paid jobs and in unemployment, which further undermine their status in the society.

The gender situation in country is reflected in the Gender Gap/Inequality Index[20], according to which Armenia ranks 64th among 146 countries (2024) with an overall score around 72.1.



Armenia's Human Development Index value for 2022 is 0.79 - which put the country in the High human development category - positioning it at 75 out of 204 countries and territories where Gender Inequality

[20] The Index is calculated by the World Economic Forum (WEF) in four key areas of economy, politics, education and health. The index reflects most accurately the problem of ineffective use of human capital and proves that the countries that make ineffective use of the half of their labor resources risk diminishing competitiveness.

Index[21] and Gender Development Index[22] are taken into account.

As evidenced by the indicators, the best situation is in economic participation and opportunity and educational attainment.

In "health and survival" sector, where differences in life expectancy and in sex ratio at birth are also taken into consideration, Armenia ends up with the 138th (out of 146) rank[23] because of the practice of sex-selective abortions. Nevertheless, in this area some positive changes have been taking place. The reported boy preference has decreased significantly, being replaced by a response favoring no gender for any future child. According to the National statistical service data for 2017, unlike 2011, when 59.3 percent explicated reported believing that the environment (that is the reference network) preferred a boy over a girl, this number has declined to a level of 36.7 percent. The real situation has been also changed: in 2016, the birth ratio of boys to girls dropped to 112 boys per 100 girls instead of 115 boys per 100 girls, as it was five years ago[24]. .

Table 1. Demographic statistics disaggregated by sex[25]

Demographic profile	Women #	Men #	Women %
Total population	1 571 757	1 405 373	53
Rural	551 362	527 628	51
Urban	1 020 395	877 745	53,8
Life expectancy at birth - rural	78.7	71.7	
Life expectancy at birth - urban	78.1	71.2	
Total births 2022, girls and boys	17 139	19 236	47.1
Number of pensioners	283 350	185 440	60,4

Women have a higher life expectancy at birth – 78.3 years compared to 71.6 years of men.
Studies demonstrate that men more rarely realize their exposure to the risk of getting ill, infliction of traumas and emergence of different problems with health than women. In spite of the fact, that men's risk of developing drug addiction or alcoholism is much higher, men of all ages underestimate, to a large degree, the risks associated with smoking and use of alcohol and narcotic substances. Contemporary researchers consider one of the social factors of men's morbidity to be the traditional masculine ideology which ascribes to men and expects from them a certain standard of behavior: not to turn to doctors, not to accept one's weaknesses, to avoid self-revelation, etc[26].

According to the World Bank, percentage of the population living below the national poverty line, was 24.8% percent[27], which means that almost every fourth person lived in a household below the upper

[21] **Gender Inequality Index (GII) reflects** gender-based inequalities in three dimensions: Reproductive health is measured by maternal mortality and adolescent birth rates; Empowerment is measured by the share of parliamentary seats held by women and attainment in secondary and higher education by each gender; Economic activity is measured by the labour market participation rate for women and men. The GII can be interpreted as the loss in human development due to inequality between female and male achievements in the three GII dimensions, ibid

[22] **Gender Development Index (GDI)** is based on the sex-disaggregated Human Development Index, defined as a ratio of the female to the male HDI. The GDI measures gender inequalities in achievement in three basic dimensions of human development: health (measured by female and male life expectancy at birth), education (measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (measured by female and male estimated GNI per capita), ibid

[23] ibid

[24] Women and Men in Armenia, Statistical Booklet, NSS 2023,

[25] ibid

[26] Men and Gender Equality in Armenia, Report, UNFPA 2016, P.187

[27] World Bank, Armenia Overview,

poverty line. Poor are 25.6% of women headed households and 24.5 percent of Male headed households.[28]

Armenia exhibits gender parity in enrolment rates from primary to higher education, with the only significant deviation occurring when students enter vocational or professional education. Boys more often enter vocational education after having completed basic or general education. Females are more often in Bachelor's or master's level of education:

Table 2. Gross Enrolment Ratio in Vocational and Professional Education, 2023[29]

Vocational and Professional Education	Female students, %	Male students, %
Preliminary (Vocational) Education	2.8	8.1
Middle Vocational Education	16.7	14.1
First Stage of Higher Education (Bachelor's degree)	64.4	43.9
Second Stage of Higher Education (Master's degree)	16.6	8.5

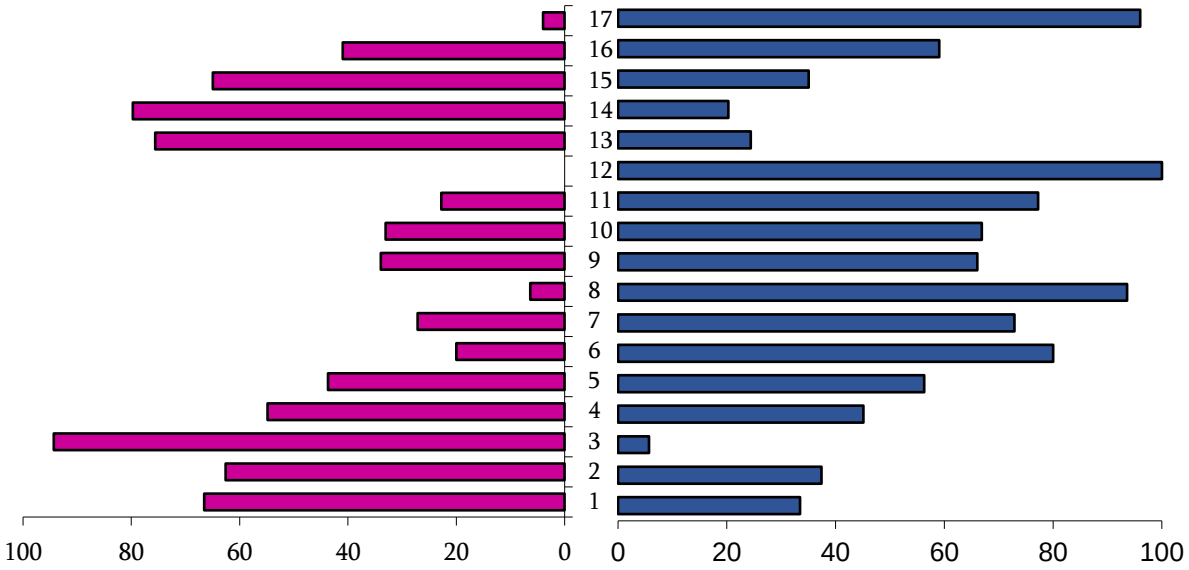
The low level of girls' enrolment in primary vocational educational institutions can be explained, on the one hand, by a not very high rating of these institutions (usually children with poorer progress in studies get enrolled in primary vocational institutions) and, on the other hand, by lack of professions considered "feminine" in society. In addition, in the case of younger age girls, their parents prefer that they study at their community school rather than go to another community, even if it is for educational purposes. There are no such obstacles in the case of boys.

There are major differences between girls and boys in terms of choice of professions in middle vocational education where the number of girls is higher in the areas of journalism (92%), social work (77%) and health care (69%).

Table 3. Students in Middle Vocational Education Institutions by Specialization, 2022/2023 [30]

Women 16 926 persons	***Men 16 304 persons***

[28] https://armstat.am/file/article/poverty_2023_en_2.pdf
[29] Women and Men in Armenia, Statistical Booklet, NSS 2023,
[30] ibid



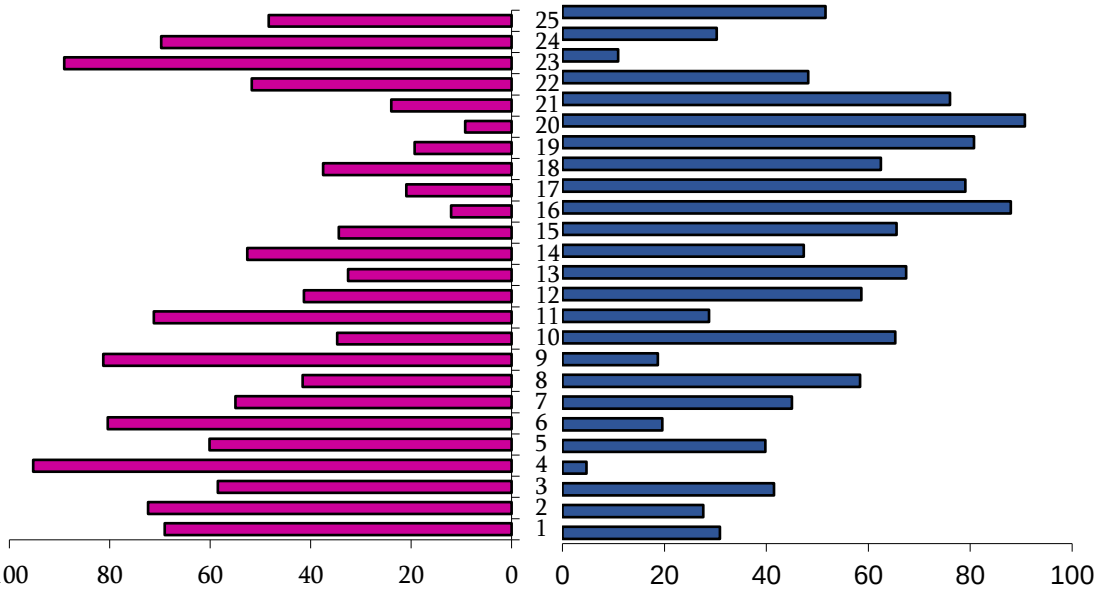
1. Education
2. Arts
3. Journalism and information sciences
4. Management, business administration
5. Law
6. Environment
7. Information and communication technologies
8. Engineering
9. Manufacturing and processing
10. Architecture and construction
11. Agricultural sciences
12. Fishery
13. Health care
14. Social work
15. Personal services
16. Sciences of security services
17. Transport services

The situation is different at Higher/ University education level, where women make up to 57% of enrolled persons. However, despite women's high level of educational attainment, this has not resulted in corresponding gains in the labor market. As with employment, there are clear gender patterns in subjects of study. Young women dominate the "traditionally female" areas of study (i.e., education, social sciences, services, and health) while young men are concentrated in technical fields (i.e., law, energy, transport, and construction). These technical fields generally correlate with jobs in higher-paying sectors, while the humanities lead to work in lower-paid public sector jobs.

Table 4. Students in Higher Educational Institutions by the Specialization, 2022/2023 [31]

Women 40 368 persons	**Men 31 364 persons**

[31] ibid



1. Education
2. Arts
3. Humanities
4. Philological sciences
5. Social and behavioral sciences
6. Journalism and information sciences
7. Business and administration
8. Law
9. Biological sciences
10. Environment
11. Chemistry
12. Earth sciences
13. Physical sciences
14. Mathematics and statistics
15. Information and communication technologies
16. Engineering
17. Industry and technology
18. Architecture and construction
19. Agricultural sciences
20. Forestry
21. Veterinary
22. Healthcare
23. Social work
24. Personal services
25. Sciences of security services

Among the numerous young women who complete higher education, many do not become employed after graduation, either because their qualifications do not meet labor market demands or because they marry and are expected to take on a family focused role.[32]

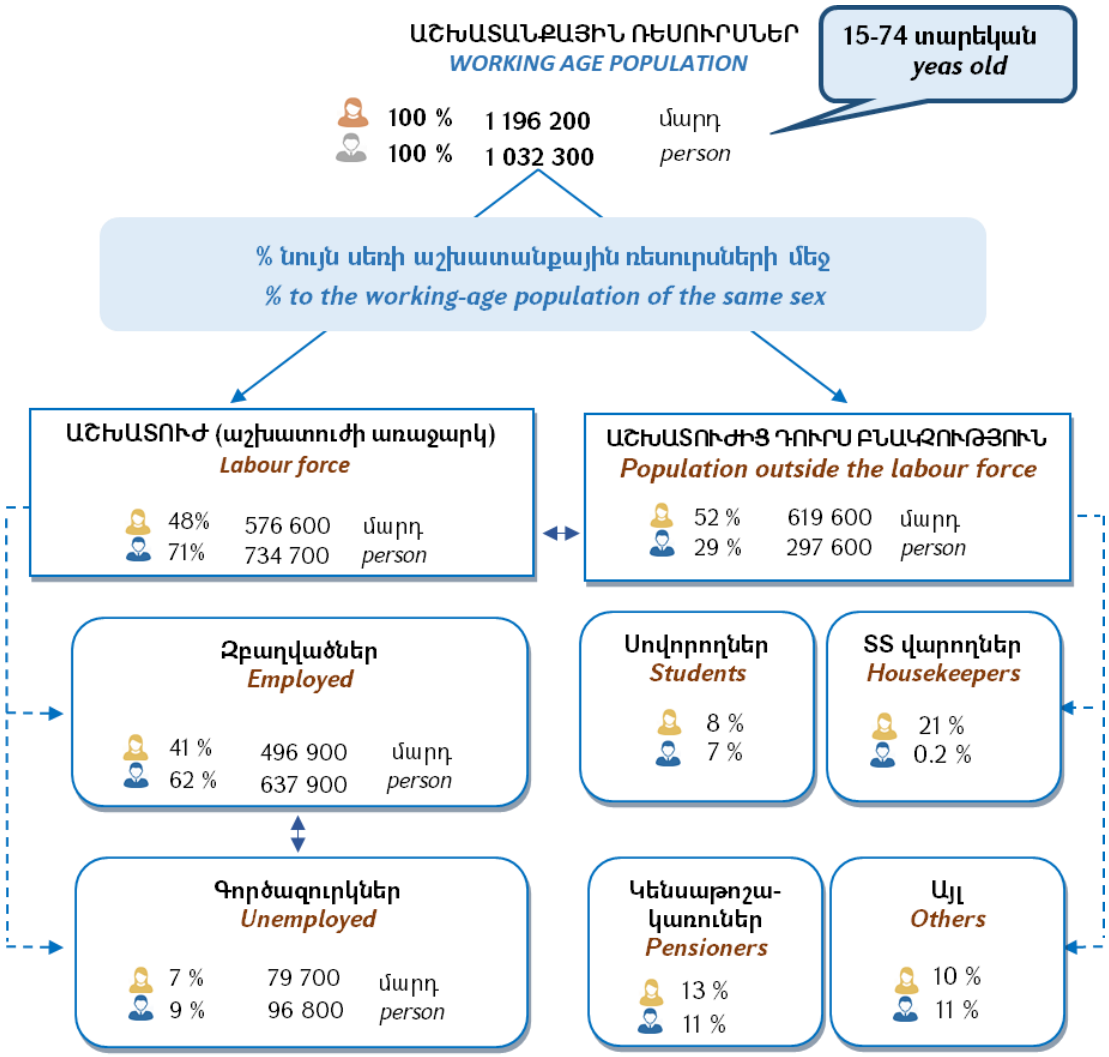
Stereotypes remain influential in Armenia. For instance, overwhelming majority of the public surveys indicated that around 85% of respondents agreed with the statement that "a man should normally be the breadwinner" (only 14% thought this role should be shared equally and 1% that this was women's role).[33]

As to the indicators of a gender imbalance in the economic sphere (employment rates for men and women, men's and women's pay for equal work, the proportion of men and women among specialists and technical staff), Armenia ranks 71th.[34]

[32] Asian Development Bank. Armenia country gender assessment. Mandaluyong City, Philippines: Asian Development Bank, 2015
[33] Altered Gender Roles in Armenian Families, AUA 2019, ; Caucasus Research Resource Centers–Armenia and UNDP. 2011. 2011 Social Cohesion Survey.
[34] Gender Cap Index

The total share of women in labor resources is a little bit bigger than that of men. However, only 41% of women are employed, while among men the percentage is 62. At the same time women make up 62% of the *long-term unemployed* and 67,8% of the officially registered unemployed in the Republic of Armenia, whereas labor migration occupies a significant place in the employment structure of men[35].

Table 5. Working age population, 2023[36]



Married men are more than twice as likely as married women to be employed (89% versus 42%). Employed men are more likely to be paid in cash (87%) than employed women (65%). Similarly, employed women are more likely to be unpaid (9%) than employed men (1%)[37].

At the same time the situation on the Armenian labor market[38] is characterized by the existence of *vertical* (unequal access to career hierarchies) and *horizontal* (in jobs and employment spheres) segregation of the labor market, which brings about a significant gender pay gap. In 2022 Gender pay gap indicated as

[35] ibid

[36] Women and Men in Armenia, Statistical Booklet, NSS 2023,

[37] 2015-16 Armenia Demographic and Health Survey (ADHS), P.16 http://armstat.am/file/article/adhs-himnakan-2015-english.pdf

[38] The problematic nature of the labor market in Armenia is revealed by the 2013 Human Capital Index. As to the Index, according to the *Human Capital Report 2013* of the World Economic Forum (WEF) Armenia ranks 73rd out of 122 countries. This is accounted for by an extremely low (113th) rank in the "workforce and employment" category.

39.2%.[39] GG is especially high in the 25 to 34 age groups (in average - 40%), mainly due to engagement of women in family responsibilities (pregnancy, childbirth, childcare, older people care etc.)[40]. The gender pay gap is not always reduced due to women's high level of educational attainment because of obstacles to women's career growth. Thus, vertical segregation remains even in the spheres where women's employment traditionally predominates such as health care, education, culture, social welfare and agriculture.

A gender analysis of the unemployment also reveals high rate of unemployment among youth - Almost 31.6% of female and 24.3% of male youth aged 15 to 24 are neither in education, nor in employment.[41]

Here it is important to point out that the youth in Armenia is defined as the citizens aged 18-30 and according to the National Statistical Service the number of young people living in Armenia is 905.2 thousand people which accounts for 27.9 % of the population. The ratio between male and female is accordingly 49.4 and 50.6 per cent, and the ratio of urban and rural youth is 62 % to 38 %. The major challenges Armenian youth is facing now are the high level of poverty (20.4 per cent of poor and 3.1 per cent of extremely poor) and unemployment. The high rate of youth unemployment (55.9 %) is connected not only with the hard socio-economic situation of the country but also with the inconsistency between the education system's products and the requirements of the labor market.

Similarly, according to the official statistics, the proportion of older people (65+) in Armenia currently is at 11.8 %. While currently much lower than the levels seen in Western European countries, the proportion of older persons in Armenia is rapidly catching up, and this fast rate of increase makes the changes especially challenging. According to expert estimates, by 2050, almost one third (31.5 percent) of Armenia's population will be over 60. A high degree of vulnerability can be observed among older people living alone, especially women. A significant factor that has quickened the pace of change is the massive emigration of young people: around two thirds of Armenians live outside of the country and net migration out of the country is about 0.5 per cent of the total population each year. Combined with a total fertility rate of 1.74 children per woman — well below the level of about 2.1 required for long-term generational replacement — and a gain in life expectancy of almost six years since 1990, the phenomenon of demographic ageing in Armenia is now striking.

The state measures to support women to balance work and -family responsibilities, are minimal. As a result, there are 2.4 times more men in managerial positions as compared **to women**[42]

Table 6. Employed Population by Major Sectors of Economic Activity[43], 2022

	A	Agriculture
	B, C, D, E	Industry
	F	Construction
	G, H, I	Trade and repair, Transport and storage, Accommodation and food service activities
	J	Information and communication
	K	Financial and insurance

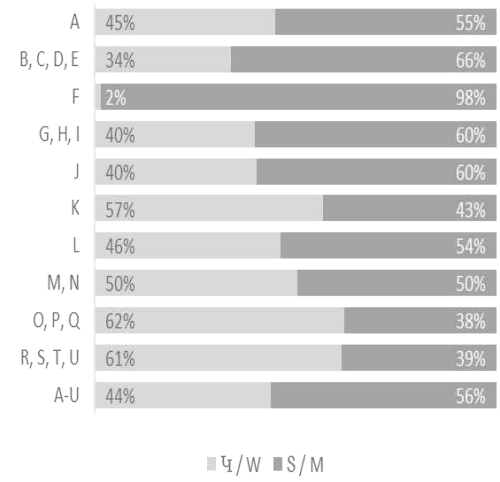
[39] Women and Men in Armenia, Statistical Booklet, NSS 2023,

[40] In 2022, 52% of women aged 15-74, or 620,000 women, did not have a job and did not look for it, being mainly engaged in housekeeping. https://armstat.am/file/article/gender-2023.pdf

[41] ibid

[42] Women and Men in Armenia, Statistical Booklet, NSS 2023,

[43] Based on the national version of Classification of Types of Economic Activity (NACE rev. 2).



	activities
L	Real estate activities
M, N	Professional, scientific and technical activities; Administrative and support service activities
O, P, Q	Public administration, Education, Human health and social work activities
R, S, T, U	Other services

Approximately 35 %[44] of all employed population are involved in the area of agriculture, of which 45% are women, however, in men's employment structure the share of agriculture stands at 31% and in women's employment structure it comprises 37%, which makes women a rather important actors in agriculture development. In addition, the number of women engaged in non-formal employment in agriculture is 82 percent.

In family farming, a strong gender-based segregation of tasks exists. Men tend to be more present in those tasks that are capital-intensive, involving higher amount of machinery and technology, and in those tasks that are better paid. Women from rural communities are strongly involved in livestock farming, particularly in dairy production (including milking, milk processing, and the marketing of milk and other dairy products). Poultry production in Armenia is also almost completely the responsibility of women, including feeding, watering, slaughtering and trade in small scale (of both poultry and eggs). Both women and men are deeply involved in the crop production sector, with clear-cut roles and responsibilities. Women are generally responsible for seeds - including buying, sowing and marketing, and are strongly engaged in harvesting of most crops where this is done by hand, as they do not usually drive tractors or operate other agricultural machinery. Regarding the two main cash crops cultivated in Armenia, apricots and grapes, women are mainly responsible for picking up the apricots and putting them in boxes and for processing apricots, producing dry fruits, juices and jams.[45] In its Concluding observations on the combined fifth and sixth periodic reports of Armenia, the UN CEDAW Committee expressed concern by the lack of social, health and economic infrastructure in rural environments, as well as by the concentration of rural women in the informal sector.

Traditionally men involvement in construction activities is at 98% level and women are more involved in *Public administration*, *Education*, *Human health* and *Social work* activities (62%) as well as other service provision (61%). Gender Gap: analysis of the discriminatory approaches towards women research, implemented by UNFPA in Armenia reveals that due to the limitations towards women employment and their discrimination in the labor market, Armenia suffers an annual GDP loss equal to 50-60 million dollars[46].

[44] Labour market in the Republic of Armenia, 2011-2015 P.12

[45] Even though there is no official statistic, the fact was registered by different research conducted throughout Armenia, including Gender assessment report of the "Development of Agriculture in Syunik marz" project ACDI/VOCA, and Gender approaches of "Water to market" activity, MCA-Armenia, January 2011, as well as voiced by the participants of the focus groups conducted within the framework of the Assessment.

[46] Gender Gap: analysis of the discriminatory approaches towards women (Գենդերային ճեղքվածք. Կանանց նկատմամբ խտրական

In Armenia the violence against women (VAW) is recognized as a serious problem, based on the findings of the first Nationwide Survey on Domestic Violence against Women in Armenia (2008-2009)[47], UN CEDAW Committee's Concluding Observations regarding the combined third and fourth periodic reports of Armenia[48] as well as the Nationwide survey on Men and Gender equality (2016)[49]. According to the latest "Survey on Domestic Violence Against Women"[50] implemented by the National statistical service in 2021 women ever experienced physical, sexual and psychological violence by their partners comprised 35.9%.

The Government regards the advanced development of the entrepreneurship, in particular of small and medium size businesses, as an effective way for solving employment and social problems. According to the Republican Union of Employers of Armenia, women account for not more than 10 percent among entrepreneurs in small and medium sized and big businesses. In micro businesses, the number of women constitutes 20-25 percent[51].

The obstacles that women have to overcome before they go into business include lack of confidence and risk management skills, the lack of business contacts, entrenched and perpetuated stereotypes about women's role and their participation in economy and in business in particular. Objective reasons include limited access to funds, difficulties in obtaining loans, the absence of savings and property for collateral, burdensome interest rates, unfavorable business environment and informal payments to officials to facilitate business[52].

In its Concluding observations on the combined fifth and sixth periodic reports of Armenia, the UN CEDAW Committee recommended to reinforce measures to expand women's access to microfinance and microcredit at low interest rates, enabling women to engage in income-generating activities and to start their own businesses[53].

The Foundation of Doing Business[54] by World Bank Group has traditionally assumed that the entrepreneurs or workers discussed in the case studies were men. This was incomplete by not reflecting correctly the *Doing Business* processes as applied to women—which in some economies may be different from the processes applied to men. Starting this year, *Doing Business* measures the starting a business process for two case scenarios: one where all entrepreneurs are men and one where all entrepreneurs are women. Within the registering property indicators, a gender component has been added to the quality of land administration index. This component measures women's ability to use, own, and transfer property according to the law.

Armenian law provides equal property rights to women and men, but in practice women are in more unequal situation due to the following reasons/peculiarities: 1) Since independence the Government of Armenia privatized land in 1991 and 1992 by dividing it among households. Land ownership was awarded to the person who was identified as the "head of the household". Although in the context of Armenia, both women and men play equally important role as breadwinners, the majority of land was registered on the

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[47] *Report on Nationwide Survey on Domestic Violence against Women in Armenia (2008-2010).* Yerevan: UNFPA and RoA NSS, 2011.

[48] *Concluding Observations of the Committee on the Elimination of Discrimination against Women: Armenia*. Geneva, 2009. UN Document CEDAW/C/ARM/CO/4/Rev.1

[49] Report on Nationwide survey on Men and Gender equality in Armenia, UNFPA, Yerevan 2016,

[50] ARMSTAT 2021 https://www.armstat.am/en/?nid=81&id=24

[51] Gender policy in Armenia and the right of women entrepreneurship

[52] Gender Assessment USAID/Armenia.

[53] Concluding observations to the 5th and 6th Armenia's State Periodic Reports Armenia CEDAW/C/ARM/CO/5-6, Distr.: General, 25 November 2016,

[54] The Foundation of Doing Business by World Bank Group measures aspects of business regulation affecting domestic small and medium-size firms defined based on standardized case scenarios and located in the largest business city of each economy. Doing Business covers 11 areas of business regulation across 190 economies. WBG, 2017

name of men as "household head by default". Women received land titles only in case of absence of a male head of the family. 2) Limited knowledge by women and whole communities about women's ownership rights over land contributed to the problem. This includes limited knowledge about rights and of the consequences of not having land registered also in their name; 3) another reason is "inheritance practices" widely accepted in Armenia. - parents usually grant the house, vehicle and other property to sons, and daughters are having nothing or less from their parents and almost nothing from the husbands' families; 4) women have limited access and control over financial resources that's why are less able to purchase land and other property than men; 5) Lack of control over their own earnings - only 34 in urban and 11 percent of women in rural areas decide about their earnings.[55]

Households headed by men are more likely to keep livestock, and to have a larger number of animals across all categories, than female-headed households. When female headed households have livestock, they tend to have cattle and poultry, possibly because dairy farming is traditionally "female" work or because selling extra milk and eggs is a relatively simple way to supplement the household income. Men have greater involvement in grazing, feed production and purchasing and sales of livestock.[56]

Limited access to productive resources is a serious constraint to rural women's agricultural activity. For instance, rural women have little or no direct access to farm equipment such as tractors, combines and harvesters. Traditionally, these are operated only by men. Even female heads of household do not personally use these resources, they hire in assistance or ask male relatives to help.[57]

Markets accessibility depends greatly on the mobility of the producer or the accessibility of the community. Cars and machinery are rarely owned by women. In rural areas, in more than 95 percent of car and machinery owners are men, as are 100% of agricultural machinery operators in the marzes. Female car owners and female drivers are increasingly prevalent in urban areas, especially in Yerevan, but continue to be rare in rural areas.[58]

Lack of access to transportation impedes women's income earning opportunities, through sale of their agriculture and other production. Dairy products are mostly sold at place rather than in other rural or urban markets. In the absence of dairy products collection systems, there is a need to take the products directly to the urban market. As a result, women, and mostly lonely women and even women heads of households have no opportunity to do that due to stereotypical practices and lack of transportation.[59]

In most of the households the husband is the main decision-maker. However, the Decision-making at household level can vary - there are also households where decisions are taken jointly by the husband and wife.

Only twenty-eight percent of women are the main decision makers about their own *health care*, 14% decide mainly themselves about major *household purchases*, and decisions about *visits to the woman's family or relatives* are also mostly made jointly (80 percent), with 13 percent of women making this decision by themselves - in all other cases the decision are taken jointly.[60]

According to the Global Gender Gap Report 2024, with respect to the political empowerment indicator

[55] Prevalence of and Reasons for Sex Selective Abortions in Armenia, UNFPA 2012, http://unfpa.am/sites/default/files/Sex-selective_abortions_report_Eng.pdf ; Sex Imbalances at Birth in Armenia: Demographic Evidence and Analysis Report, UNFPA 2013, Missing Girls in the South Caucasus, World Bank, CRRC 2014.

[56] ACDI/VOCA "Development of Agriculture in Syunik marz" project documents, 2011

[57] From the gender analysis of the project on "Water-to-Market Activity (2006-2011)" carried out in 2007 within the framework of the Millennium Challenge Account:

[58] ibid

[59] "Gender and Transport" Background materials of the 2011 International Transport Forum, Leipzig, Germany, 2011

[60] Armenia Demographic and Health Survey 2015-16, Report, National Statistical Service Armenia, Yerevan 2016, *Table 15.8*

(which is based on gender representation in decision-making structures) Armenia is ranked 70th, which means that it betters its position even comparted with 2023[61]. Women's representation in the National Assembly and other elected bodies is slowly advancing in Armenia. In 1999, women held only 3 per cent of seats in the Parliament and only 10.7 per cent in 2012. As a result of the parliamentary elections, the representation of women in the National Assembly of Armenia increased up to 36 per cent[62] of all members of the National Assembly improving the country's rank on the list of the Inter-Parliamentary Union (IPU). This result may be considered as a step forward due to the quota which requires at least 30 percent representation of each sex stipulated in the Electoral Code. The quota provision/ requirement was also added for the local self-governance elections and worked quite effective.

Although the number of women MPs has increased as compared with the previous convocations, nevertheless, women are not represented in leadership (chairmen or deputy) and only 2 women are holding the positions of heads of standing committees[63].

During the entire period of the democratic transition (1991-2024), women did not run for the position of the Armenian President or *held* a position of a Prime Minister or Speaker of the National Assembly.

In April 2018 as a result of a series of anti-government protests in Armenia, a new Prime Minister was appointed. Armenia's new government is a technical cabinet to administer the country until new parliamentary elections. Almost all the officials of the former government were changed and it provided opportunity to women to be appointed to some decision making positions. Nevertheless, there are only 2 women out of 12 in the political position (Ministers) [64] and 12 women (26%) in discretionary positions of a deputy minister in the executive branch of the Government. There are no women among the governors (marzpets)[65], with only four out of 71 enlarged communities are headed by women (4%).

Table 7. Women in leadership and decision-making positions, 2023

Position	# women	# men	% women
Number of Deputies in the National Assembly of RA[66]	38	69	36
Ministers[67]	2	10	16
Deputy Ministers[68]	12	80	13
Judicial bodies at national level - Judges[69]	93	203	31
Judicial bodies at national level – Lawyers (advocates)[70]	1 125	1 413	44
Members of the Constitutional Court[71]	1	8	11
Council members of the Central Bank[72]	1	4	20
Ambassadors[73]	6	36	14

[61] https://www3.weforum.org/docs/WEF_GGGR_2024.pdf
[62] http://www.parliament.am/deputies.php?lang=eng : 38 female MPs out of 107 members of Parliament
[63]National Assembly of the Republic of Armenia / Council, http://www.parliament.am/Council.php?do=members&lang=eng
[64] As to the Armenian legislation, the hierarchy in the public administration system includes 3 categories: political, discretionary positions and civil servants, www.gov.am
[65] Head of regional authority in Armenia
[66]http://www.parliament.am/deputies.php?lang=eng
[67]http://gov.am/am/structure/
[68]http://gov.am/am/structure/
[69]Women and Men in Armenia, Statistical Booklet , NSS, Yerevan 2023 https://armstat.am/file/article/gender-2023.pdf
[70]ibid
[71]ibid
[72]ibid
[73]ibid

Table 8. Women in regional (provincial) administrations,2023[74]

Position	# Women	#Men	Women %
Marzpet (Head of province)	0	10	-
Head of community	4	67	6
of which Capital city - Yerevan	0	1	-
Council members of community	405	986	29
of which Capital city - Yerevan	19	46	29

Number of women elected as members of community councils decreased based on the decision to enlarge the communities (currently it is 72 enlarge communities uniting 916 geographical locations), however showing positive tendence of increase due to quota introduces for local electoral processes as well.

However, women's participation in decision making can vary in accordance with age, residence, and education. Decision making in the community level depends also on the following aspects:

1) *Cultural norms and stereotypes* which affect women's participation in the decision making: Women are not generally prominent in local community-level decision making, and are very rarely elected as members of community councils. The Gender assessment conducted by USAID in 2010 pointed out that while "there is evidence that societal views of the "appropriate" roles for men and women are quite rigid and influenced by patriarchal traditions"[75], there is significant variation within Armenia, and some marzes appear to be more socially conservative than others in relation to gender roles and women's status. Nevertheless, the perception of men as the main decision-makers and leaders in society is prevalent and influences women's access to political positions and participation in public life overall. The influence of traditional roles affects women's own confidence and perception of what is appropriate.

2) *Knowledge:* on management is depending on the level of education and/or experiences, accessibility to consultancies; on average, women enjoy less education than men in some areas and consultancies focus in general on men. There is no Government policy in place to promote women education in management and entrepreneurship. Small efforts have been made to offer training, retraining or vocational education to women to equip them with adequate skills and competence and to match those with the existing challenges and opportunities. The Government policies to promote small and medium businesses have yet to become gender sensitive.

3) *Access to financial resources*, and financial independence. Given the more limited range of employment and income opportunities for women, particularly in rural areas, and continuing gender inequality in income and salary levels. Women face more difficulties in receiving a loan and in having access to the family budget. Sometimes women have no own funds even to register her candidacy for the local elections, which means that they should check their availability with other members of the family.

According to the National statistical service of Armenia in 2023 the executive staff picture was as follows:

Table 9. Female staff in regional and local administrations

Position	Women%	Men%
Deputy Marzpet	22	78

[74] ibid

[75] Gender Assessment, USAID/Armenia, Yerevan 2010

Regional administration Marzpetaran staff	49	51
Deputy head of community	6	94
Community staff	49	51
Deputy of Yerevan city mayor	0	100
Yerevan city municipality staff	53	47

Thus, the governance pyramid, which is primarily male-oriented and which does not reflect the existing gender balance in the society, inequality of women's and men's rights and opportunities in political, economic and social spheres and the maintained and even constructed by some media outlets[76] the division of gender roles hinders the development processes is an obstacle to the country's full-fledged integration into international agenda.

III. Legal and Administrative Framework on Gender Equality in Armenia

Since independence, the Government of the Republic of Armenia has been steadily incorporating the international *acquis* on gender equality and establishing a number of laws and policies to address gender inequalities. In 1998, the Armenian Government issued Decree No. 242 "On the Basics of the Programme for the Improvement of the Status of Women in the Republic of Armenia" and Decree No. 406 "On Approving the National Plan for the Improvement of Women's Status and Enhancement of Their Role in the Society for the Period 1998-2000 in the Republic of Armenia." In April 2004, the Armenian Government adopted the first National Action Plan on Improving the Status of Women, and, since then, increased efforts have been carried out to contribute to the reduction of gender inequalities in the country.

The main document that reflects current Armenia's commitment to gender equality policy is the *RoA Gender Policy Concept Paper* approved by the Armenian Government in February 2010[77]. The mission of the *Gender Policy Concept Paper* is to facilitate *gender mainstreaming* in all spheres of socio-political and socio-economic life and in policies at all levels of government *as a tool for* ensuring sustainable democratic development of the society and for consolidating democratic, open and just civil society and the rule-of-law State.

Of great significance for gender policy implementation and for addressing the issues of imbalanced rights and opportunities was the *Law of the Republic of Armenia on provision of equal rights and equal opportunities for women and men*[78] that was adopted in 2013. It regulates the issue of ensuring equal rights and equal opportunities to women and men in the fields of politics, public administration, labour and employment, entrepreneurship, health care and education.

The Law is a document that has incorporated to the maximum extent the requirements of the Convention on the Elimination of all Forms of Discrimination against Women[79] and the CEDAW Committee's recommendations[80].

In particular, the Law:

- introduces the concept of "gender-based discrimination" into the legislation,

[76] *Woman's image as represented in Armenian media*. Analytical report on monitoring. ProMedia-Gender NGO with support from UNFPA, 2011.
[77] *RoA Gender Policy Concept Paper*, 2010(in Armenian) http://www.gov.am/u_files/file/kananc-xorh/Gender-hayecakarg.pdf
[78] Armenian version http://www.parliament.am/legislation.php?sel=show&ID=4761
[79] http://www.un.org/womenwatch/daw/cedaw/cedaw.htm
[80] *Concluding observations of the UN Committee on the Elimination of Discrimination against Women*/ Forty-third session / 19 January-6 February 2009/, CEDAW/C/ARM/CO/4/Rev.1 /

- prohibits discrimination on the grounds of sex,
- introduces the concepts of direct and indirect discrimination into the legislation,
- provides the opportunity and the procedure for protecting citizens from discrimination on the grounds of sex,
- introduces legal responsibility of officials and employers for discrimination,
- contributes to the development of culture of gender equality and to the elimination of gender stereotypes that underlie discriminatory practices,
- outlines the spheres, framework and timeline for the use of temporary special measures aimed to redress a gender imbalance,
- codifies the necessity to establish national machinery for gender equality, and
- makes provisions for the monitoring and reporting mechanism concerning the implementation of gender policies.

In line with the recommendations established by the Committee on the Elimination of Discrimination against Women in 2010[81], amendments to the Constitution made in December 2015 included important articles and provisions such as: *General Equality before the Law* (Article 28), *Prohibition of Discrimination* (Article 29) and *Equality of Rights for Women and Men* (Article 30)[82].

In the context of the Platform and the establishment of the new Sustainable Development Goals, the government of Armenia made a commitment at the Global Leader's Meeting on Gender Equality and Women's Empowerment in September 2015 to ensure the effective implementation of the Law of the Republic of Armenia on "Equal Rights and equal opportunities of women and men", and to sign the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence.

All these documents are important because they not only provide a framework for promoting gender equality and women's empowerment but also advocate gender mainstreaming and demonstrate how the gender component can be integrated into the national policies and programs.

During this period amended were also other laws and Codes that aim to protect exclusively women's rights as well as to secure gender equality[83] [84]. It is unfortunate that insignificant and occasional amendments have not yet brought about a dramatic change in the situation. The real practices do not match the broad rights of women that are codified in legal norms. The mismatch between the rights and opportunities is a main obstacle to ensuring equality. Thus the existence of functional and efficient gender equality mechanisms

[81] http://www.refworld.org/publisher,CEDAW,,ARM,52dd05054,0.html

[82] Amendments to the Constitution of the Republic of Armenia, December 2015, Armenian version

[83] In order to fulfil the implementation of the 29th article of the Constitution of Armenia "Prohibition of Discrimination", the Ministry of Justice in 2019 drafted a **Law "On ensuring legal equality"**, which refers to "Direct and indirect discrimination, incitement to discrimination, harassment, segregation, victimization, associated discrimination and temporary special measures "This is actually the law prohibiting discrimination against different groups, such as Persons with Disabilities, Older people, LGBTI, etc and this law is found in its draft version yet. This is distinguished from the below mentioned actual Law on "Ensuring Equal rights and Equal opportunities for women and men", as adopted in 2013, which is the law on Gender equality.

[84] Earlier significant steps towards combating domestic violence were made in 2017 by the adoption of the Law on prevention of violence within the family, protection of victims of violence within the family and restoration of peace in the family84 that ensures preventive and protective mechanisms for the victims of domestic violence, while it also guarantees the social assistance. It should be noted that the mechanisms needed for the proper implementation of that law were adopted at some later time, through issuing relevant orders84. However, the adoption of such law was unprecedented for Armenia and has its influence both as a prevention measure, the first ever national legal document prohibiting violence in the family, as well as protection measures prescribing the organization of proper services to the victims of violence.

and National machinery in the public administration system is crucially important for the formulation and implementation of the national gender equality policies grounded in the principles outlined in international and national documents.

According to the CEDAW Committee General Recommendation No. 6, the machineries should be endowed with professional capacity and authority to be able to advice on the impact on women of all government policies, to monitor the situation of women comprehensively and to help formulate new policies and effectively carry out strategies and measures to eliminate discrimination[85].

Therefore, there is a growing realization that the national machinery is absolutely indispensable and, hence, that it has to be established to perform its main function to effectively mainstream a gender perspective into legislation, state policies, national programs and projects.

The *Gender mechanism* in the Republic of Armenia is made of a variety of institutions with a specific roles and responsibilities in the: identification of gender issues, analysis of the needs for women and men, drafting of the policies that address the inequalities, implementation of the gender policies, monitoring and evaluation of those policies and interventions, decisions making on behalf of women and men in need so *that no one is left behind. Among the institutional mechanisms for gender equality in Armenia the following structures could be mentioned:* Council on Women's Issues, Ministry of Labour and Social Issues, Departments for Children's, Family and Women's Issues at the Regional Governance Offices, Gender Policy Implementation Commissions, Council on Preventing and Combating Violence against Women and Domestic Violence in Armenia and others. In fact, all the mentioned structures are by default institutional mechanisms for implementation of gender policies and for attaining gender equality and should be supported with the National machinery on Gender equality as indicated in the number of international treaties and documents committed by the Republic of Armenia.

IV. Gender Issues in the target areas of the projects

Armenia is a country with an ambitious climate change mitigation agenda, which makes significant efforts towards low carbon development through increasing the share of renewable energy, promoting energy efficiency, preserving and enhancing forest-covered areas, and reporting regularly to the UNFCCC[86]. Climate change is leading to an increase in the frequency of extreme weather events, thereby increasing desertification and land degradation. Therefore, the most vulnerable sectors are those dealing with water resources, agriculture, forestry, health care, transport, and energy.

The Prospective Development Strategy for 2014-2025 mentions climate change as an important issue to be addressed to improve the economic growth, with a strong focus on mitigation measures and reduction of emissions. Currently there is a number of climate relevant/ environmental laws and policies, such as: Water Code (2002), Law on Energy Saving and Renewable Energy (2004), National Forest Policy, (2004), Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector 2020-2030, (2019), Strategic Programme for the Development of the Energy Sector of the Republic of Armenia (until 2040)). Unfortunately, these existing laws and policies do not have a specific focus on climate change. The National Strategy on Disaster Risk Management (2017) integrates climate change actions and is in line with Sustainable Development Goals (SDGs)[87]. The National Action Programme of Adaptation to Climate Change and the list of Measures for 2021-2025 were approved by the Government in 2021, and Water

[85] General recommendations made by the *Committee on the Elimination of Discrimination against Women*. General Recommendation No. 6 "Effective National Machinery and Publicity" (seventh session, 1988).

[86] https://eu4climate.eu/armenia/

[87] https://sdgs.un.org

Sector Adaptation Plan and its Program of Measures for 2022-2026 adopted in 2022. Unfortunately, these existing laws and policies do not have a specific focus on gender equality or just transition issues. Gender issues are taken into account only in the Program on Energy Saving and Renewable Energy for 2022-2030 and its Action Plan for 2022-2024 and National strategy on gender equality for 2024-2026 (pending adoption) has a section on climate change and gender.

In line with the revised European Neighborhood Policy (ENP) the EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA) was signed in 2017 and in 2021, entered fully into force thorough ratification by the Republic of Armenia, all EU Member States and the European Parliament. This was an important, positive milestone for EU-Armenia relations and inter alia envisioned reforms in the rule of law and respect of human rights as well as those aimed at enhancing the responsiveness and effectiveness of public institutions and at promoting conditions for sustainable and inclusive development.

In terms of financial assistance envisioned by the 2021-2027 multi-annual indicative programme (MIP) for EU support to Armenia the focus on enhancing Armenia's environmental and climate resilience, which includes sustainable use of resources, promotion of green growth, decarbonization and scaling up renewable energy generation, improving energy efficiency and security is recognized as one of the priority areas (priority 3). Among other priorities "enabling a more resilient, fair and inclusive society through increased democracy, migration management, promotion of social inclusion and enhanced public healthcare systems" (priority 5) is mentioned.

The designated authority for climate change in Armenia is the Ministry of Environment and the Inter-Agency Coordination Council for the Implementation of the Requirements and Provisions of the UNFCCC established in 2012 and revised in 2021. The count of high-level and mid-level decision-makers responsible for addressing climate policy matters within the Ministry of Environment showed 86% of women involved in staff and 73% of Women involved into the Interagency Coordination Council.[88]

According to the International Labour Organization (ILO), gender equality is one of the main dimensions in green agenda as ensures *"fair and inclusive environment to everyone concerned, creating decent work opportunities and leaving no one behind"*.[89] Thus in terms of policy development the following principles should guide the transition to environmentally sustainable economies and societies: (i) Policies must respect, promote and realize fundamental principles and rights at work. (ii) Policies and programs need to take into account the strong gender dimension of many environmental challenges and opportunities. Specific gender policies should be considered in order to promote equitable outcomes. (iii) Coherent policies across the economic, environmental, social, education/training and labour portfolios need to provide an enabling environment for enterprises, workers, investors and consumers to embrace and drive the transition towards environmentally sustainable and inclusive economies and societies. [90]

The main document to regulate the area is the Constitution of the republic of Armenia, and particularly its Chapter 3 on Legislative guarantees and main objectives of state policy in social, economic and cultural spheres, that define national policy and approaches in setting up *Working Conditions, Social Security, Decent Living and Minimum Salary, and Health Care.*

The recent amendments to the Labour Code of the Republic of Armenia were initiated based on the Armenia's international obligations in the field and relate to gender equality issues, maternity issues and paternity leaves, labor rights of persons with disabilities as well as professional and vocational education

[88] Women and Men in Armenia, Statistical Booklet, NSS 2023,

[89] https://www.eurofound.europa.eu/en/european-industrial-relations-dictionary/just-transition

[90] Guidelines for a just transition towards environmentally sustainable economies and societies for all, ILO, 2015;

and internship opportunities. However, the majority of the state documents and procedures on social security and health care are at best gender neutral and not even sensitive or responsive.

Access to resources and services

Armenia proclaiming itself the part of the Green Deal also tries to set out a roadmap for a new type of policies that will focus on the sectors most affected by the transition. Thus, the Armenia government should ensure the instruments of fair compensation for health, environment, jobs and economic assets, including access to resources.

Some research[91] shows that disadvantaged groups of population, including women and young girls bear a disproportionate amount of the environmental and economic costs of the extractive economy while receiving very few of the associated benefits. Among difficulties faced by these groups of population are lack of resources available to deal with the financial, social, and environmental impacts of climate change.

Women's equal access to and control over economic and financial resources is crucial for the achievement of gender equality and empowerment of women, and more importantly for equitable and sustainable economic growth and development of the country. Gender equality in the distribution of economic and financial resources has positive multiplier effects for a range of key development goals, including poverty reduction and the welfare of children. Long-standing inequalities in the gender distribution of economic and financial resources, all over the world, have placed women at a disadvantage relative to men in their capability to participate in, contribute to and benefit from broader processes of development. The Economic resources used in the production of goods and services are mainly categorized as Land and other natural resources, Labor and financial resources, as well as entrepreneurship. Due to the gender inequality and discrimination, women have less access and control over resources.

One of the most important resources in rural Armenia is land and real estate. Although there is some official statistics providing info on the Agricultural holdings by sex of the owner, where women in average comprise 1/3 it is true on land sized less than 0.1 ha only:

Table 10 Agricultural Holdings by sex[92]

Total holdings	**Of which by land, ha**												
	< 0.1ha	0.1-0.19	0.2-0.49	0.5-0.99	1-1.99	2-2.99	3-4.99	5-9.99	10-19.99	20-49.99	50-99	100-199	200> ha
Agricultural holdings by sex of head of HH													
Women	19688	6121	10421	13670	14498	6139	4273	2060	412	78	13	2	0
Men	50242	15569	26348	41277	46791	20848	14829	8254	1916	538	82	27	10

Armenian law gives equal property rights to both women and men, but in practice women rarely exercise

[91] Seth B. Shonkoff et al., The climate gap: environmental health and equity implications of climate change and mitigation policies in California - a review of the literature. Climatic Change (2011) 109 (Suppl 1):S485–S503, ;

[92] Agricultural census 2014

these rights due to the following reasons: 1) registration practices[93]; 2)Inheritance practices giving preference to sons; 3)Access to resources: Women are less able to purchase property than men, due to their limited access to, and control over financial resources either through income or credit.4) Limited knowledge by women and whole communities about women's ownership rights, including over land. This includes limited knowledge about rights and of the consequences of not having land registered also in their name.[94]

The sum of renewable groundwater and renewable surface water resources in Armenia are as follows:

Table 11 Renewable water resources in Armenia

Renewable Water Resources	8 billion m³/year
Water Resources per Capita	2,652 m³/person/year
Water Dependency	12%

In 2024, the water abstraction in Armenia comprised 2 829.8 mln. cub. M (excluding Hydro plant stations PSs), water use – 2 176.3 mln. m3 (83.6% – agriculture, fish breeding and forestry, 8.8% – industrial, communal and construction, 7.6% – drinking):

According to the RA Constitution the water resources are under exclusive ownership of the state (Article 10), thus the data could not be disaggregated by the sex of owners, but the citizens and legal entities of Armenia are the members of water-users associations. Unfortunately, there is no sex-disaggregated data available on membership and engagement in Water User Associations of Armenia. The water user right is given by default with the land property, thus registered mainly on men's name. Meanwhile, despite the substantial investments in the water sector that have led to improvements in both the reliability and quality of the water supply available to the population, about 560 communities in rural areas are not connected to the grid, and 40 000 rural inhabitants do not have access to a piped water supply. Overall, the access to clean water is around 96.3%, which is measured through a Proportion of households with centralized water supply.[95]

In the picture of financial resources one of the most important part is on unpaid work done by women: ARMSTAT data demonstrates that many of these women may be registered under the category "Other" within the self-employed population. They can also be registered as a member of the "inactive population" under the category of "housekeepers", who account for almost 21 percent of all women of working age in Armenia. There are 41 times more women in this category than men (ARMSTAT, 2023).

Moreover, the women are overrepresented in unpaid work in agriculture, especially in family farming. Based on the current survey data women have at least 50% of involvement in different value chains (VC) and even more then 80% in case the VC recognized as women area of work.

Table 12 Men Involvement in Agricultural Value Chain

N	Value chain	Men Involvement, %									
		10	20	30	40	50	60	70	80	90	100
1	Production					x	x	x	x	x	x
2	Harvest					x	x	x			

[93] After the collapse of the Soviet Union the Land ownership was awarded to the person who was identified as the "head of the household", although this could legally be a woman or a man, the majority of land was registered in the name of men as "representatives" of the whole household

[94] FAO.2017.56 pp https://www.fao.org/3/i6737e/i6737e.pdf

[95] https://sdg.armstat.am/6-1-1-a/

3	Processing			x	x						
4	Packaging		x	x							
5	Sale/distribution							x	x		

Table 13 Women Involvement in Agricultural Value Chain

N	**Value chain**	**Women Involvement, %**									
		10	20	30	40	50	60	70	80	90	100
1	Production					x	x	x	x		
2	Harvest							x	x		
3	Processing							x	x	x	x
4	Packaging								x	x	x
5	Sale/distribution							x	x		

Rural women working informally on family farms do not get any compensation defined by the Labor Code, such as maternity leave[96], sick leave and childcare allowances, as they are considered either self-employed or inactive. In rural communities, two thirds of employed women do not get cash earnings when they are self-employed[97].

The "time poverty" phenomena are recognized by a number of studies in Armenia and in other countries: "Women experience time poverty due to their responsibility for unpaid domestic tasks. Women's time poverty is accentuated when they enter the labour force and their domestic workload does not diminish"[98]. In rural areas, men are more likely to assume tasks using machinery and technology, leaving more time-consuming manual work to women. Moreover, in rural communities less than 1/3 of children are enrolled in kindergartens or preschool, and primary school hours tend to finish early in the afternoon; there is no system of home-based care for older people, etc. Thus, more support is needed to assist women with child and older people care options and in dealing with work-family balance.

Another interesting information concerns the overall percentage of women heads and members of households in agriculture[99], which highlights the presence of serious discrimination against women in the agricultural labor market, starting from 1 month of work (6%) up to 7-12 months (37%) among female heads of households and 7% for short term and 35% for long term for other female family members. According to the data of a comprehensive agricultural registry, women head 25% of rural households. Women-headed households are more vulnerable and at risk of poverty due to the absence of the agricultural machinery, difficult access to land plots, and problems related to irrigation and financial means.

Table 14 Employment of female members of WHHs by months

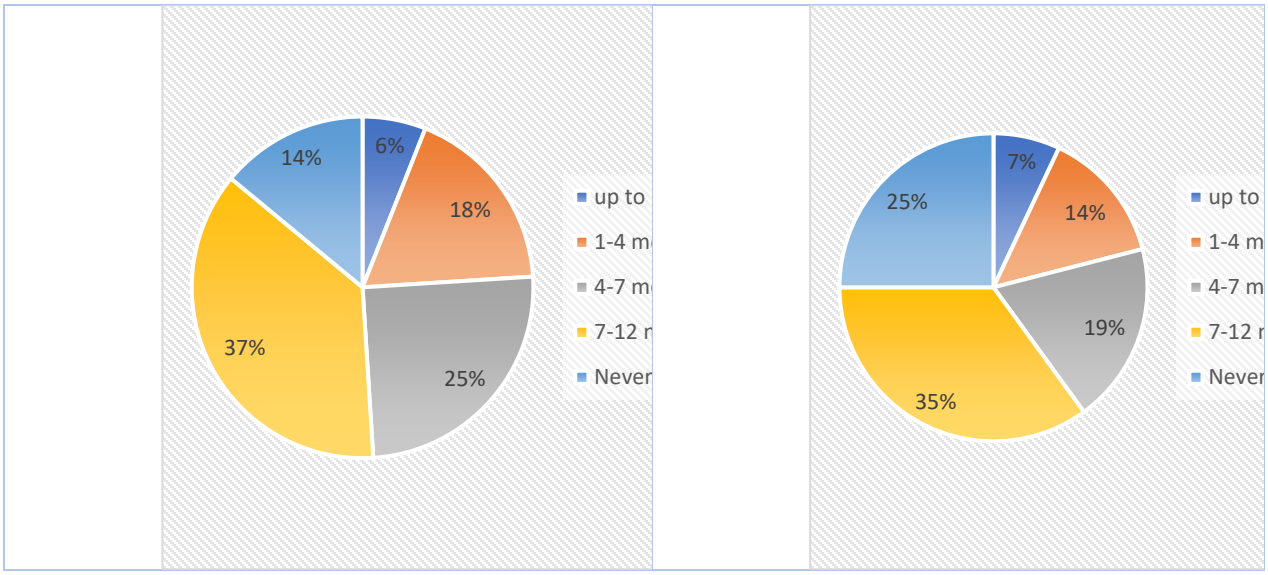
Employment of female HH heads by months	**Employment of other female members of WHHs by months**

[96] Although since 2016 rural women, formally employed or not, are entitled to some payment (fix amount) for maternity leave, they receive money but do not use the right for a leave/rest.

[97] Gender Barometer Survey, Yerevan State University, 2019

[98] ADB, ARMENIA. COUNTRY GENDER ASSESMENT, 2019

[99] Agricultural Census of RA (2014)



Women are less able to purchase property or any equipment than men, due to their limited access to, and control over financial resources either through income or credits. In Armenia women make up only a third or even a quarter of the applicants for loans/credits due to the aforementioned stereotypical attitudes as well as their limited solvency.

Rural women usually benefit from micro-credit or loan programs provided by foreign and international programs/organizations, which make these funds available on the basis of a specific level of women's involvement ("quotas").

One of the most Important preconditions for the genuine equality is *access to services*. Overall, in Armenia the access to healthcare is ranked as 5.1, which is the number of medical doctors versus 1,000 population, which is measured through Health / medical doctor density and distribution[100], whereas access to education is around 91.5% (Gross Enrolment Ration in general education)[101]. However, the preschool education, including kindergartens as well as day-care centres for children and older people and of those with disabilities (which are the main parts of care work done by women) is not yet available in all regions and geographic locations.

V. Recommendations

Climate change impacts men and women differently due to differences in their gender roles, societal norms and values. Women, who make up most of the poor, generally have lower incomes, less access to credit and decision-making authority, and limited control over resources, which increase their vulnerability in case of emergency and climate impacts. It is crucial to see and understand gender picture of the society to mainstream development programs and projects as climate change efforts can be more effective when gender and social peculiarities are considered. Climate change interventions can also provide opportunities to empower women – recognizing women's role in some agricultural value chains as well as their capacities of women community activists. Incorporating gender considerations into climate change and disaster risk reduction approaches can *inter alia* improve women's, and their families', resilience to climate change. Thus, the following approaches and actions are recommended:

- The analysis of the existing gender inequalities, men labour migration, as well as demographic situation

[100] https://sdg.armstat.am/3-c-1/
[101] https://databank.worldbank.org/source/world-development-indicators/Series/EG.CFT.ACCS.ZS

in the targeted areas showed that it is highly recommended to involve women, into the process of the project implementation. Women's participation in the project will be twofold: 1) Women will be considered as agents and main advocates for behavior and attitude change in the families, as well as on community and at the national level. This function *inter alia* could be paralleled with monitoring activities implemented by them; and 2) Women will be involved in the project as active participants: staff and/or providers of the planting material through tree nurseries and farming cooperatives organized and administered by them. Both functions shall be based on their participation in educational and awareness raining activities.

- Women shall be also involved as project beneficiaries - participating in capacity building activities and receiving vocational education. The project shall set a minimum target at 30 percent of all beneficiaries of the project to be women, as this is the UN recommended quota to ensure critical mass of women's representation. However, this represents just a target, and not a goal. The goal should be 50 percent or even more depending on demographic representation in the project area. Also, actual participation can be higher, and the project team will apply all possible efforts to achieve that.
- While the risks of escalating the level of VAW due to the project implementation are assessed as low, to avoid any negative implications, caused by the involvement of women in the project activities, the project should dedicate specific attention to a profound awareness raising work with communities and families, especially men. Media resources will be also used for this purpose and profound awareness raising on VAW will be integrated into the overall community level work.
- Considering the demographic structure of targeted areas and the vulnerability faced particularly by older and young female Armenians, the project shall pay special attention to the involvement of lonely elderly, especially women as beneficiaries. In this context, the project implementation shall ensure periodic collection of sex and age disaggregated data and analysis in the area.
- The project shall approach to gender expertise to further develop gender balanced approaches and to adjust the proposed Gender action plan.
- Based on this assessment, a Gender and Social Inclusion Action Plan (GAP) has to be prepared to implement the gender strategy and to ensure inclusion of disadvantaged groups (poor families, elderly, single-headed households and youth). The GAP is in line with the overall project implementation plan and timeline; thus, all activities are incorporated into the relevant components of the project.

ANNEX II. – Gender Action Plan

The GAP of the project is based by the UNFCCC GAP priorities set forth by parties at COP 25. Furthermore, it is advised by Adaptation fund Gender policy, the local gender equality situation in Armenia and will lead to overcome the existing inequalities as well as to build gender responsive approaches to Climate change activities and initiatives in general. The below plan is compiled in accordance with the project's TOC and intervention framework.

Goal: IF capacitated communities of Ani, Ashotsk and Artik are successful in implementing landscape restoration, flood prevention, improved land and waste management and increased agricultural productivity activities, **THEN** they become empowered to sustainably manage their natural resources and adapt to climate change impacts, experience increased resilience and improved well-being and livelihoods, as well as environmental health, **BECAUSE** the tools and knowledge to adapt to climate change impacts effectively and capacity to leverage existing infrastructures and synergies efforts across the sectors will result in necessary economic, social and environmental co-benefits.

Outputs	*Gender Responsive Action*	*Performance Indicator*	*Project Target*	*Additional Notes*	*Budget102*	*Timeframe (year to implement)*				*Responsible*
Component 1: Restoration, management, and increase of adaptation potential of natural and agricultural landscapes of the area affected by climate change and anthropogenic factors.						*1*	*2*	*3*	*4*	
Outcome 1: Adaptation and sustainability of natural landscapes of the area affected by climate change and anthropogenic factors increased.	A. Ensure sex disaggregated statistical data on the targeted communities in order to equally involve male and female population in project activities and enjoyment of the results	Availability of sex-disaggregated statistical data and indicators and their use in monitoring and reporting	100% of all project documentation contain data disaggregated by sex, and where possible by age.	The project set minimum target at 30 percent of all beneficiaries of the project to be women, as this is the UN recommended quota to ensure critical mass of women's	M&E related	*x*				EPIU and local communities

[102] Such figures reflect the estimated incremental budget that the project earmarked and will dedicate to ensure gender mainstreaming and implementation of the GAP's Gender Responsive Actions.

	B. Identify the women activists/groups to support the project activities e.g. planting, rehabilitation, re-forestry.	Percent of target women beneficiaries # of women groups and CSOs involved	At least 30% of beneficiaries are women, or women groups	representation. However, it is just a TARGET, and not a GOAL. The goal should be 50 percent or even more depending on demographic representation in the project area.	Community mobilization related.	x				EPIU and local communities
	C. Target the staff of the main project participant agencies and organizations with gender sensitization, mainstreaming and women empowerment workshops	# and % of women and men members of the main implementing partners trained on gender mainstreaming issues	At least 60 % of the staff of the main implementing partners trained on gender mainstreaming issues		EPIU Gender focal point salary and M&E related	x	x	x		EPIU and local communities
	D. Review of the community policies and practices, including those on CC to assess if gender concerns are adequately mainstreamed, and provide recommendations, based on stakeholders' consultations that solicit the views and opinions of women	Community documentation and policies are gender-responsive and address the needs of both women and men.	Gender perspective is duly mainstreamed	Produced polices and guidelines will be gender responsive, and the staff will be trained on how to use them and will be also exposed to awareness raising and sensitization. Focal points appointed at EPIU will ensure project	EPIU Gender focal point salary and M&E related		x	x		EPIU and local communities

	and men on the ground.			commitments, activities and expected results. The M&E team of the project will monitor the process through gender lens.						
	E. Ensure participation of women in the project management committee, planning and activity meetings	# and % of women and men staff participating in the project management committee, planning and activity meetings	At least 30% of the participants of the project management committee are women	The project team, working under technical guidance and assistance provided by the Project' Gender focal point will ensure constant monitoring of the situation and update of the baseline	M&E related	***x***	***x***	***x***	***x***	EPIU
	F. Secure the effective participation of women in the projects monitoring activities	# and % of women and men staff participating in the project monitoring and evaluation	At least 30% of the staff participating in the project monitoring and evaluation activities are women	The project will encourage participation of women, including those community members in Project monitoring activities.	M&E related	***x***	***x***	***x***	***x***	EPIU

	G. Build the capacity and technical expertise of the project staff, project beneficiaries and partners on gender analysis, and gender responsive M&E	"No exclusion policy" is in place to ensure women - beneficiaries and implementing partners are trained on gender responsive approaches.	At least 60 percent of the project staff and key partners are sensitized in gender, and trained in gender analysis, and gender-responsive M&E.	The project will ensure that there will be no gender based discrimination in the selection process of staff, training and project beneficiaries and, where feasible, that women and women in need (according to Armenia social security standards) are given higher priority.	Staff training – related to capacity development.	*x*	*x*	*x*	*x*	EPIU
	H. Support women to ensure their participation in decision making on the community level.	# and % of women and men involved in community level councils	At least 30% of people involved in regional and community level councils is women	The project will advocate for women's greater natural resource and CC management at community, level.	Community mobilization related.	*x*	*x*	*x*	*x*	EPIU and local communities

Outputs	*Gender Responsive Action*	*Performance Indicator*	*Project Target*	*Additional Notes*	*Budget*[103]	*Timeframe (year to*	*Responsible*

[103] Such figures reflect the estimated incremental budget that the project earmarked and will dedicate to ensure gender mainstreaming and implementation of the GAP's Gender Responsive Actions.

						implement)				
Component 2: Prevention and management of floods						*1*	*2*	*3*	*4*	
Outcome 2: Social, economic, and environmental threats caused by floods as a result of climate change is reduced	I. Ensure Community engagement and particularly women, young and older people as well as those with disability in discussions and decision making regarding planned infrastructure and road construction works	# and % of women and men community members participating in discussions on community level # and % of young and older people, participating in discussions on community level # and % of Persons with disabilities participating in discussions on community level	At least 30% of the participants are women At least 30% of the participants are representing young and older people and those with disability	The project will ensure community engagement and particularly women, young and older people as well as those with disability in discussions and decision making regarding planned activities.	Community engagement related.	*x*	*x*			EPIU and local communities
	J. Ensure women participation in the	# and % of women and men participating	At least 30% of participants are women	The project will encourage participation of women in	M&E related	*x*	*x*	*x*	*x*	

	monitoring activities	in the monitoring and evaluation		Project monitoring activities.						

Outputs	*Gender Responsive Action*	*Performance Indicator*	*Project Target*	*Additional Notes*	*Budget*[104]	*Timeframe (year to implement)*				*Responsible*
Component 3: Raising awareness and knowledge level of population for the management of stone pit wastes and floods						*1*	*2*	*3*	*4*	
<u>Outcome 3:</u> Raising awareness and knowledge level of population on the recovery of agro landscapes and flood risk reduction	K. Identify and involve women-leaders and community activists in Training of Trainers (ToT) on sustainable climate adaptive approaches	% of women - participants of the ToT on sustainable climate adaptive approaches	At least 30 % of the participants of the ToT are women	The project will ensure that women are reached, to be part of the training programs, and benefit from improved access to skills and learning. A needs assessment will be conducted prior to the training, and measures undertaken to ensure that women have	Training and AR related	x	x			
	L. Collaborate with both women and men in organization of Training and awareness	# and % of women and men participating in training and awareness raising activities	At least 30 % of participants in trainings and awareness raising activities are women		Training and AR related	x	x			EPIU

[104] Such figures reflect the estimated incremental budget that the project earmarked and will dedicate to ensure gender mainstreaming and implementation of the GAP's Gender Responsive Actions.

	raising (AR) activities			equal access to the trainings.						
	M. Contribute with gender awareness raising sessions to community level trainings and awareness raising (AR) activities	# of gender awareness raising sessions introduced in the community level trainings and % of women and men participating in those gender sessions of the trainings	At least 80% of the community / sectoral level trainings include a gender awareness session At least 30 % of participants in the community level trainings and AR are women	In addition, the contents of the training will include provisions that substantiate the need for sex-disaggregated data collection and gender analysis.	Training and AR related		x	x		EPIU
	N. Develop and disseminate gender sensitive information materials	Number of gender sensitive materials produced and distributed	At least 2 relevant gender sensitive materials are produced (in Armenian) and widely disseminated	The project will ensure dissemination of gender sensitive materials on the project activities and CC adaptive measures	Publication related	x	x	x	x	EPIU
	O. Insure meaningful involvement of local media in dissemination of gender sensitive information about the				Publication related	x	x	x	x	EPIU

	project activities and CC adaptive measures									
	P. Ensure cooperation with CSOs working on women issues and gender equality in the process of mitigating the negative effects of climate change	Number of CSOs working on women issues and gender equality supporting project implementation activities	At least 3 CSOs working on women issues and gender equality supporting project implementation activities	The project will ensure the cooperation with local CSOs in project implementation		x	x	x	x	EPIU

Management of procurements and activities of the projects.

1. **The management and coordination** of the project will be organized in a way to provide secure and enabling work environment to all employees, a place of work that is gender responsive and recognizes the role of men and women as equal players, agents and leaders of change.

The following principles shall be kept:

a) **Staff Policies**: All staff policies, rules and regulations will be guided by the principles of equal right and opportunities, as prescribed by AF and will be reviewed periodically.

b) **Recruitment:** Will seeks gender balance in staffing. Women candidates will be encouraged to apply for all vacancies including management and leadership positions both at the field and head office. There will be adequate representation of women in recruitment and interview panels.

c) **Capacity building for gender sensitization**: Workshops, training programs and other capacity development activities for promoting and enabling a gender responsive work culture will be organized. Also, regular trainings will be conducted on awareness and confidence building of field staff, with special focus on women staff.

d) **Harassment**: Anti Sexual Harassment policy is in place and is gender neutral according to AF standards and practices.

2. **Programme**

a) Building skills and capacities on gender perspectives to enable greater participation of all sections of community will be one of our objectives of the project,
b) The project will promote equal participation of all stakeholders. To promote and assess inclusion of gender equality in the project, implementers will prepare and use a gender equality checklist

ANNEX III. – Report on Stakeholder Consultations

Stakeholder consultations for development of "Enhancing resilience of communities to climate change in Shirak Marz leveraging best practices of the pilot project implemented in Artik community" full project proposal

Background

The "Environmental Project Implementation Unit" State Agency of the Ministry of Nature Protection of the Republic of Armenia (EPIU) has contracted "Consecoard" LLC (Consultant) to support in development of full proposal for the "Enhancing resilience of communities to climate change in Shirak Marz leveraging best practices of the pilot project implemented in Artik community" project to be submitted for funding to the Adaptation Fund (AF) (hereinafter Project).

This project, aiming to enhance the resilience of Shirak Marz communities to climate change, builds upon the successes of the Artik city pilot project and focuses on natural landscape restoration, flood prevention, and enhancing the adaptive capacities of local stakeholders.

Given the increasing climate variability in Armenia and its impacts on agriculture, ecosystems, and infrastructure, this project is vital for protecting vulnerable regions.

The consultant's key role was discussion of the details of the upcoming Project full proposal.

Stakeholder consultations were an essential element of the project development process, ensuring that the project design is both inclusive and responsive to the needs of local communities and key regional actors. Stakeholders provided invaluable insights on the sustainability of the interventions, specific needs of vulnerable groups, and coordination with other existing programs, thus shaping the project's approach to effectively tackle climate challenges in Shirak Marz.

The objectives of the proposed Project are as follows:

- Increase adaptation level of natural and agricultural landscapes;
- Prevent floods and eliminate their consequences,
- Restore the natural landscape of the area affected by climate change and anthropogenic impacts, at the same time to demonstrate the possibilities of adaptation level increase of degraded natural landscapes,
- Improve the adaptation potential of community producers, institutions, and other relevant stakeholders regarding climate change under current climate change conditions;
- Replicate and scaleup good practices achieved during implementation of the pilot project "Artik city closed stone pit waste and flood management pilot project";

Stakeholder consultations

On July 26,2024 the Consultant's team had meeting with the management and respective experts of the EPIU. During the meeting the lists of the target communities of the upcoming Project were discussed and agreed (see the list of the target communities in the table below):

N	Region	Community	Participants
1.	Shirak	Ani consolidated community	Head and municipality officials, NGOs
2.		Artik consolidated community	Head and municipality officials, NGOs
3.		Ashotsk consolidated community	Head and municipality officials, NGOs

Stakeholder consultations have been conducted in the format of Focus Group Discussions and a dedicated workshop, ensuring broad representation of the Shirak regional government and the target communities (please see the photos in the Annex).

The main topics discussed with the stakeholders, among others, where as follows:

- Any specifics that need to be considered during designing the Project,
- Potential challenges and risks that upcoming Project may encounter during implementation,
- Any specifics related to vulnerable groups, including gender considerations
- Sustainability considerations,
- Any other project/programme with other funding sources.

These consultations aimed to gather insights from regional government officials, local self-governance bodies, civil society organizations (CSOs), and other relevant stakeholders to ensure that project components address the region's specific needs and challenges.

These discussions were structured to gather feedback on project components, identify potential risks and barriers, and explore opportunities for engaging vulnerable groups, including women and youth.

Key consultations took place on August 6, 2024, where experts from the consulting team, in collaboration with the Environmental Project Implementation Unit (EPIU), visited the target communities (Ani, Artik, and Ashotsk). Initial meetings with local officials helped introduce the project and collect early feedback. Later, on September 5, 2024, a more comprehensive workshop was held with representatives from regional government (including deputy governor of the region), local governments and CSOs, focusing on identifying potential risks, challenges, and specific considerations related to vulnerable groups and sustainability.

Consultations revealed a strong local commitment to addressing environmental degradation and climate risks, especially regarding landscape restoration, flood prevention, and climate-resilient agricultural practices. Local authorities from each of the target communities expressed their readiness to support project activities, emphasizing the need for early and thorough mapping of degraded lands, as well as coordinated efforts to pilot climate-smart agricultural models and intensive orchards. The workshop participants also highlighted the need for coordination with state support programs to maximize the project's reach.

The stakeholder consultations were successful in gathering essential local insights and securing the support of key actors in Shirak Marz. These discussions will help shape a more inclusive, sustainable, and effective project proposal that addresses the unique challenges of the region while building on the successes of the pilot project implemented in Artik. This collaborative approach will be key to ensuring

the project's success.

Key Discussions and Outcomes

Landscape Restoration and Agricultural Interventions

Participants recognized the importance of restoring the landscape of Shirak Marz, particularly the soil cover in areas impacted by mining activities. The proposal to recultivate 10 hectares of forest adjacent to Maralik was widely supported. Stakeholders highlighted the need for clear identification of the areas for sowing perennial plants, proposing specific crops such as sainfoin and alfalfa, which have proven to be resilient and suitable for the local climate.

Local authorities from Artik, Ani, and Ashotsk communities were particularly enthusiastic about the pilot of climate-resilient agricultural models. They expressed their willingness to engage local farmers and suggested coordination with state-supported programs for the establishment of intensive orchards. Establishing orchards across smaller, community-owned plots was recommended as a means to enhance knowledge sharing and involve more local farmers.

Waste Management and Flood Prevention

The introduction of integrated waste management practices was positively received. Local communities expressed interest in piloting such systems, with a strong focus on raising awareness through youth eco-clubs and NGOs. Waste management is seen as an essential component of environmental health, with the potential to involve women-led organizations in the outreach and education efforts.

Regarding flood prevention, stakeholders discussed the maintenance of infrastructure constructed during the Artik pilot project. There was unanimous agreement that improving road infrastructure to divert heavy-duty vehicles from flood-prone areas would not only mitigate flood risks but also reduce air pollution and dust from mining trucks.

Gender and Vulnerable Group Considerations

A significant part of the discussions revolved around the need to ensure that women and youth actively participate in the project. Local women-led NGOs and eco-clubs were identified as valuable partners in both waste management initiatives and environmental education campaigns. These groups are well-positioned to lead grassroots-level awareness efforts and play a key role in promoting sustainable practices within their communities. In addition, there was a call for ensuring that women are adequately represented in decision-making processes at both the local and regional levels, ensuring that project benefits are equitably distributed.

Coordination and Sustainability

Throughout the consultations, participants emphasized the need to align project activities with existing state programs, particularly those focused on orchard development and agricultural resilience. They suggested that close coordination with state and private sector partners would help scale up successful initiatives and ensure long-term sustainability. To maximize impact, stakeholders encouraged leveraging financing from local commercial lenders for agricultural innovations and infrastructure investments.

For more details on the key discussions and outcomes please see the table below.

Project components discussed and results of the discussions

Table below summarizes all the discussions and the results thereof during the stakeholder consultations, including during the workshop:

Project/Program Components	Expected Concrete Outputs	Community	Results of discussions
Component 1: Restoration, management, and increase of adaptation potential of natural and agricultural landscapes of the area affected by climate change and anthropogenic factors.	Output 1.1 Soil cover of mine adjacent to Maralik community is recultivated *(10 ha of forest cover will be created)*;	**Ani**	➢ The old mine is between Maralik and Dzorakap settlements, the community management has started some works ➢ The risk of reopening of the closed mines needs to be addressed ➢ There is around 250,000 m3 of quality fertile soil available in the community ➢ Community self-government body will support as much as possible
	Output 1.2 Forest grove established with support of previous project is taken care of and became sustainable;	**Artik**	➢ Community self-government body will support as much as possible
	Output 1.3 Sowing areas of perennial plants are created reducing rangeland degradation in Ani, Ashotsk and Maralik communities *(900 ha of perennial sowing area established)*;	**Artik, Ani, Ashotsk**	➢ There is a need for identification and mapping of the exact areas where sowing areas of perennial plants will be created ➢ In Artik it was suggested to sow sainfoin and alfalfa, as well as to pilot also oats (although it is an annual crop) ➢ All communities self-government bodies will support as much as possible
	Output 1.4 Crop yield and crop quality of the adjacent natural-landscapes is increased in Ani, Ashotsk and Maralik communities *(45 ha hay meadows and arable lands 570 ha pastures)*;	**Artik, Ani, Ashotsk**	➢ There is a need for identification and mapping of the exact areas where sowing areas of perennial plants will be created ➢ All communities self-government bodies will support as much as possible
	Output 1.5 Waste collection practices are introduced in Ani, Ashotsk and Maralik communities *(garbage tracks, bins and collection) and* pilot program for integrated management of household waste in the village of Vardakar is implemented;	**Artik, Ani, Ashotsk**	➢ Type of the waste to be processed need to be determined based on the feasibility study ➢ Artik and Ani communities are very enthusiastic ➢ There is a need for feasibility study that will study economic viability of inclusion of Ashotsk community in the initiative ➢ There are youth NGOs and eco-clubs in the schools that can be involved in some activities and raising awareness initiatives (some small grant competitions can be organizes among young people)

	Output 1.6 Mapping of all degraded lands in Shirak region is implemented;	**Artik, Ani, Ashotsk**	➢ All communities self-government bodies will support as much as possible
	Output 1.7 Infrastructure for piloting high value agriculture models (including new types of climate resilient crops) at 100 ha of degraded land is implemented with the commercial lending from private financier engaged (construction of the facilities);	**Artik**	➢ Community self-government body will support as much as possible
	Output 1.8 Demonstration sites for intensive orchards in all beneficiary communities are constructed (10 ha in each community);	**Artik, Ani, Ashotsk**	➢ It is suggested to establish intensive orchards on average on 5,000 sq.m plots, so several orchards in several settlements could be established. This will allow to spread the knowledge and practices in more settlements, hence, to reach more farmers ➢ Communities suggest establishing around 20% of the orchards in the community owned plots that will be cultivated/managed by community management ➢ Possibility of coordination with the respective State support programmes (on establishment of intensive orchards, on installation of drip irrigation systems, on leasing of agri-machinery, etc.) could be considered – either as possibility for co-financing or scaling up ➢ The criteria for selection of the potential beneficiaries shall be well though and discussed
	Output 1.9 Architecture and design work for all components are carried out;	**Artik, Ani, Ashotsk**	➢ All communities self-government bodies will support as much as possible
	Output 1.10 Index insurance piloted in beneficiary municipalities	**Artik, Ani, Ashotsk**	➢ All communities self-government bodies will support as much as possible
Component 2: Prevention and management of floods	Output 2.1 Infrastructure constructed during the pilot project is maintained	**Artik**	➢ Community self-government body will support as much as possible
	Output 2.2 Road infrastructure (two small bridges and renovation of existing road) is advanced to divert the heavy-duty vehicles away from the adjacent to the mine communities;	**Artik**	➢ Community self-government body will support as much as possible
Component 3: Raising awareness and	Output 3.1 The level of knowledge on effective recovery methods of	**Artik, Ani, Ashotsk**	➢ There is a need for training of local experts ➢ Social advertisements are among the most effective means

knowledge level of population for the management of stone pit wastes and floods	degraded natural and agro landscapes will be increased		➢ There is a need for increasing awareness on pasture management plans, because lack of knowledge create many problems ➢ Youth, Women and Environmental NGOs, as well as farmers are ready to be involved in the Project activities ➢ All communities self-government bodies will support as much as possible
	Output 3.2 The knowledge level of the population on natural and agro landscape adaptation to climate change will be increased		
	Output 3.3 Increasing of the knowledge level of the population on the occurrence and prevention possibilities of floods		
	Output 3.4 Promoting the importance of the sustainable thinking, learning and dissemination of information related to the landscape adaptation to climate change in communities		
	Output 3.5 The involvement of local media and environmental NGOs in the process of mitigating the negative effects of climate change will be increased		

Recommendations and Next Steps

The stakeholder consultations underscored the importance of community engagement and strong collaboration between local authorities, NGOs, and government agencies. To ensure the success of the project, the following actions were recommended:

- Mapping of degraded lands should be initiated early in the project to identify priority areas for restoration.
- Coordination with state programs for orchard establishment and waste management should be formalized to maximize resource efficiency and impact.
- Youth involvement should be prioritized through eco-clubs and NGOs, particularly in raising awareness about waste management and climate resilience.
- Gender-sensitive approaches should be integrated into all project components to ensure that women's perspectives and needs are addressed.

By incorporating these recommendations, the project will be better positioned to deliver meaningful, sustainable results that align with the needs of the Shirak Marz communities and contribute to broader national climate resilience efforts.

Photos from Consultation meetings






PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[2] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Hakob Simidyan *Minister of Environment of the Republic of Armenia*	18.08.2023

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REPUBLIC OF ARMENIA
MINISTER OF ENVIRONMENT
РЕСПУБЛИКА АРМЕНИЯ
МИНИСТР ОКРУЖАЮЩЕЙ СРЕДЫ

№ 1/08.5/12087

«18» «08» 2023

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for the project "Enhancing resilience of communities to climate change in Shirak Marz leveraging best practices of the pilot project implemented in Artik community"

In my capacity as designated authority for the Adaptation Fund in the Republic of Armenia, I confirm that the above national grant proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Republic of Armenia.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by the "Environmental Project Implementation Unit" State Agency of the Ministry of Environment of the Republic of Armenia and executed by the same Agency.

Sincerely,

18.08.2023

X

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Signed by: SIMIDYAN HAKOB 3004840588

Mr. Hakob Simidyan

International Cooperation Department
Ani Khachaturyan, +37411 818 508

B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (National Adaptation Plan, Sectorial Adaptation plans and Marz (Regional) Adaptation Plans) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Name & Signature:  Implementing Entity Coordinator: Armen Yesoyan, Director, "Environmental Project Implementation Unit" State Agency Under the Ministry of Environment of the Republic of Armenia	
Date: 27.01.2025	Tel. and email: info@cep.am, +37410651631
Project Contact Person: Margarita Gasparyan, Head of Cooperation with Donors Department, "Environmental Project Implementation Unit" State Agency under the Ministry of Environment of the Republic of Armenia Milena Kiramijyan, Chief Specialist of Cooperation with Donors Department, "Environmental Project Implementation Unit" State Agency under the Ministry of Environment of the Republic of Armenia	
Tel. And Email: margarita.gasparyan@epiu.am, +37410651631 milena.kiramijyan@epiu.am, +37410651631	