

GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

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General Project Information

Project Title

Land Restoration and Ecosystem Service Improvement through Use of Fruit and Nut Tree Biodiversity in Armenia

Region

Armenia

GEF Project ID

11140

Country(ies)

Armenia

Type of Project

MSP

GEF Agency(ies):

UNEP

GEF Agency Project ID

Project Executing Entity(s)

Forest Committee of the Ministry of Environment

Project Executing Type

Government

GEF Focal Area (s)

Multi Focal Area

Submission Date

4/30/2024

Type of Trust Fund

GET

Project Duration (Months)

36

GEF Project Grant: (a)

1,971,590.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

187,300.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

2,158,890.00

Total Co-financing

28,659,000.00

PPG Amount: (e)

50,000.00

PPG Agency Fee(s): (f)

4,749.00

Total GEF Resources: (a+b+c+d+e+f)

2,213,639.00

Project Tags

CBIT: No NGL: No SGP: No Innovation: No

Project Sector (CCM Only)

Taxonomy

Biodiversity, Focal Areas, Land Degradation, Sustainable Land Management, Sustainable Development Goals, Stakeholders, Communications, Education, Public Campaigns, Behavior change, Awareness Raising, Strategic Communications, Civil Society, Non-Governmental Organization, Community Based Organization, Academia, Beneficiaries, Type of Engagement, Consultation, Participation, Partnership, Information Dissemination, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Capacity Development, Access and control over natural resources, Access to benefits and services, Knowledge Generation and Exchange

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Significant Objective 1	Principal Objective 2	Principal Objective 2

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

Land degradation is a crucial issue in Armenia; 90% of Armenia is composed of fragile mountain ecosystems, with 86% classified as degraded. Overgrazing, unsustainable forest harvesting, poor agricultural techniques resulting in soil salinization and chemical overuse, climate change increasing the unpredictability of weather patterns, and regional glacier retreat, are instruments in land degradation. **The project objective** is to contribute to landscape restoration by harnessing indigenous fruit and nut tree biodiversity to improve environment and ecosystem services, support food security and safety, and enhance livelihoods in Armenia. The project aims to **transform** current use of unsustainable practices that rely on exotic crops and plant species, to **innovative (and traditional as the same time)** practices that assess and use the broad range of intra-specific diversity of indigenous fruit and nut tree crops and their wild relatives, still available but neglected in Armenia. Use of locally adapted fruit and nut trees biodiversity, which require less water, energy, and chemical inputs than exotic plants for land restoration, will not only improve landscape productivity, but also improve ecosystem health. Restored lands will enhance climate change mitigation and adaptation. Local food security and health will improve with increased availability of nutrient fruits and nuts from restored lands. **The project addresses barriers of inadequate policy frameworks, access and use of agrobiodiversity, and community capacity**, through strengthening an enabling environment to adopt national strategies, improving availability of agrobiodiversity for restoration, and promoting behavioral changes through gender and age inclusive training. **Global environmental benefits provided**, include, land restoration, enhanced ecosystem services, and agrobiodiversity conservation.

Project Description Overview

Project Objective

To contribute to landscape restoration by harnessing indigenous fruit and nut tree biodiversity to improve environment and ecosystem services, support food security and safety, and enhance livelihoods in Armenia

Project Components

1. Policies and institutions to sustainably manage agrobiodiversity for restoration

Component Type	Trust Fund
----------------	------------

Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
534,900.00	9,100,000.00

Outcome:

1.1. National strategies and policies that support enhancing the use of local agrobiodiversity for land and ecosystem restoration are adopted

1.2. Institutional and Financial support at national and regional levels for the use of fruit and nut tree biodiversity for land restoration and mitigating climate change

Output:

1.1.1. National and regional (provincial) management/ development plans and strategies revised to include the use of fruit and nut tree biodiversity

1.1.2. Harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species, quality and diverse seedlings supply standards developed and available

1.1.3. The Ministry of Environment develops and implements a knowledge management system to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity

1.2.1. Institutional and financial support for selected regions (marzes) increased for mitigating risks of climate change and land degradation through planting fruit and nut trees and other tree species in deforested areas

1.2.2. Center for Biodiversity and Climate Adaptation Knowledge which is an ecological Hub for various environmental scientific and public awareness programs is established with sustainable financing in peri-urban forest area

2. Agrobiodiversity planting materials, information, and management practices

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
724,540.00	10,255,000.00

Outcome:

2.1. Area restored with use of local inter- and intra-specific (varietal) diversity of fruit and nut tree species increased in the pilot sites of Lori, Tavush, Syunik, Shirak, Vayots Dzor, Gegarkunik Regions and Yerevan City

2.2. Information system developed and available at local regional and national levels available and used by public and private sectors

Output:

2.1.1. Local governments in Armenia implement sustainable land and forest restoration through local fruit and nut trees in degraded communal areas outside the pilots

2.1.2. Drought-resistant local fruit and nut trees species and varieties are identified and used for restoration of degraded lands and deforested ecosystems

2.1.3. Water and soil-saving technologies surrounding fruit and nut trees are used in land and forest ecosystem restoration activities

2.2.1. A National database and information system on local fruit and nut tree species recommended for use in land and forest restoration practices is established and available for use by public organizations, private sector and local communities

2.2.2. Climate change vulnerability and land degradation maps, maps of vulnerable zones and mining sites developed and available for making decisions on combating desertification, biodiversity conservation, climate change mitigation and adaptation

3. Capacity building at all levels to assess manage and benefit from the use of fruit and nut tree diversity

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
478,000.00	6,489,000.00

Outcome:

3.1. Trained policy makers, smallholders and local communities in pilot sites support sustainable conservation and utilization of locally important fruit and nut tree resources in land and ecosystem restoration taking gender and youth inclusion into account

Outcome 3.2. Local communities and farmers benefit from increased availability of nutritionally rich food products (fruits and nuts) and marketing of ecosystem services (eco- and agro-tourism) produced by restored lands and forest ecosystems and supported by national and regional (provincial) governments

Output:

3.1.1. Gender and youth responsive national capacity building strategy for all stakeholder groups dealing with agrobiodiversity conservation, land and forest ecosystems management.

3.1.2. Youth and gender equitable training programs established for forestry and city gardening workers developed and implemented on resilience and adaptation practices with use of fruit and nut tree biodiversity

3.1.3. High Schools, technical colleges, and universities curriculum include courses and club activities to develop and use knowledge and leadership skills in agrobiodiversity conservation, land and ecosystem restoration activities is enhanced through capacity building activities of the project.

3.2.1. Farmers and local communities in the project sites have knowledge and skills in value adding, ecosystem services marketing through trainings, round tables and other project activities on building capacity and raising awareness.

3.2.2. Technologies on value addition and creation of new products, and eco- and agro-tourism based on local fruit and nut tree species promoted and used to benefit local communities

M&E

Component Type	Trust Fund GET
GEF Project Financing (\$)	Co-financing (\$)
55,000.00	180,000.00

Outcome:

4.1. Integrated and effective monitoring and evaluation system in place

Output:

Project progress reported timely.

Mid-term and Terminal Reviews conducted

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
1. Policies and institutions to sustainably manage agrobiodiversity for restoration	534,900.00	9,100,000.00
2. Agrobiodiversity planting materials, information, and management practices	724,540.00	10,255,000.00
3. Capacity building at all levels to assess manage and benefit from the use of fruit and nut tree diversity	478,000.00	6,489,000.00
M&E	55,000.00	180,000.00
Subtotal	1,792,440.00	26,024,000.00
Project Management Cost	179,150.00	2,635,000.00
Total Project Cost (\$)	1,971,590.00	28,659,000.00

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Armenia lies in the southern part of the Transcaucasus, between latitudes 38° 50' and 41°18' N and longitudes 43°27' and 46°27' E. The total area is 29,800 km². Armenia is a typical highland country, over 76 percent of the land lying at altitudes between 1000 and 2500 meters above sea level. Some 11.2 percent of the total area of the country is wooded. The wooded area of Armenia today amounts to 459,900 ha of which 334,100 ha are forest. There is 0.1 ha of forest land per person of population. Sixty-two percent of the woodland lies in the north-east and 36 percent in the south-east. Only 2 percent of the forests lie in the central regions.

Armenia is rich in the plant species. Numerous morphological and biological forms of these plants have survived up to the present. Wild fruit plant diversity is important for inventorying, introduction into cultivation and utilization in breeding practice. There are over 17 wild species and numerous forms. The variability of fruit and berry plants, which need special attention and protection are presented below. Wild apple-trees (*Malus*) grow in almost all forests of Armenia. Wild spp. *M. orientalis* and *M. pumila* Mill. Are polymorphic. Pear (*Pyrus*) is one of the most widely occurring fruit plants in Armenian woods. Mountain ash (*Sorbus* L.) is represented by 10 spp., hawthorn (*Crataegus* L.) by 11 spp., plum (*Prunus* L.) by 4 spp. And almond (*Amygdalus* L.) by 4 spp. In Armenia there exist numerous wild and run-wild forms of quince (*Cydonia*), medlar (*Mespilus*), apricot (*Armeniaca*), sweet and sour cherry (*Cerasus*), filbert (*Corylus*), walnut (*Juglans*), pistachio (*Pistacia*), persimmon (*Diospyros*), pomegranate (*Punica*), oleaster (*Elaeagnus*), fig (*Ficus*), strawberry (*Fragaria*), raspberry (*Rubus*), currant (*Ribes*), etc. In the forests of Armenia, wild fruit trees such as apple, sweet cherry, cherry, dogwood and many others can often be seen.^[1]

Over 250 varieties of trees and bushes grow in Armenia's forests. The principal forest species are oak, beech and hornbeam. Because of the economic and energy crisis that arose in the 1990s after the collapse of the USSR, Armenia's forests are now threatened with annihilation and according to palaeobotanical data the wooden surface has reduced in 3 times since ancient time, when it counted as much as 35% of the country. **Variety of forest species.** Some 120 (about 40 percent) of the woody species growing in the forest are wild fruit or berry bearing plants used extensively by the population either as edible preserves or as root stock for high-yielding cultured varieties. The most valuable plants, yielding fruit which can be processed on an industrial scale, are: dog rose, pear, apple, Cornelian cherry, currant, dewberry, raspberry, gooseberry, hawthorn, walnut, beech, fig, pomegranate, blackthorn, cherry plum, hazel and sea-buckthorn^[2].

Armenia is a typical mountainous country, where the landscapes and ecosystems form a complex multi-functional system. In general, ecosystems of Armenia are characterized by a number of peculiarities, which all together contribute to formation of rich and unique biodiversity. Typical conditions contributed to formation of high diversity of habitats of flora and fauna species and as a consequence the presence of unique communities, high level of endemism as well as rich agrobiodiversity. The abundance of species composition of biodiversity in Armenia is conditioned also by the fact that Armenia as a part of the Armenian Highland is located in the intersection of important provinces of formation of flora and fauna of the region as well as is a crossroad of migration routes of birds. In the result, on the small territory of the country (about 30 thousand km²) there are about 549 species of vertebrates and about 17,200 species of invertebrates. The biodiversity of

Armenia is notable for high endemism: about 500 species of fauna (about 3% of the fauna) and 144 species of flora (3.8% of total flora) are considered endemics. In the country all main natural ecosystems of the Caucasus are presented except moist subtropical ecosystems[3]³. Furthermore, Armenia is located in the Caucasus Ecoregion – one of the Planet’s biodiversity hotspots. Flora of Armenia includes about 3,800 vascular plant species, 144 of which are local endemics.

Rare species, genetic diversity within a number of taxa, including wild relatives of cultivated plants and habitats of regional and global conservation concern are of particular scientific interest and conservation importance. *Pyrus L.* is one of the most interesting genera in this context: there are 32 pear species in the flora of Armenia, 12 of which are endemics of Armenia and 6 are endemics of the Southern Transcaucasia; 18 from all the known pear species were described from Armenia.

Armenia’s climatic conditions positively affect the quality of plant material harvested from forests. Reliance on nature, transferring ecological knowledge as a means of preserving traditional way of life, frequently referred to as “green mentality”, has deep roots among many ethnicities in Armenia and in the greater Caucasus region[4]⁴.

Agrobiodiversity as an important component of biodiversity is represented by a number of economically valuable plants, crop wild relatives, endemic species of animals, and ancient local varieties which are considered valuable genetic resources for food production and agriculture management. The necessity and the significance of the reliable protection of agrobiodiversity keeps rising, becoming one of the important components of the policy in the fields of agriculture and nature protection. The components of agrobiodiversity are valuable starting material in the selection process, contributing to economic growth, national sovereignty and food security since possessing in their genotype the genes which are resistant to different diseases, pests, as well as biotic factors. Thus, those components of agrobiodiversity play an important role in the process of maintaining ecological balance[5]⁵.

Land degradation and deforestation are global environmental issues that are particularly crucial in Armenia, where 90% of the territory is represented by fragile mountainous ecosystems and 86% of them are degraded[6]⁶. Overgrazing and unsustainable harvesting of forest ecosystems have led to serious land erosion, while poor agricultural techniques have resulted in soil salinization and overuse of agricultural chemicals making land restoration difficult[7]⁷. Armenia is threatened today by many factors – primarily agrobiodiversity loss, lack of water resources for crops watering, and land degradation – all of which intertwine[8]⁸. Many currently grown crops are exotic ones(i.e *Kiwi*, *Mespilus L.* among others requiring extensive use of water resources and inputs of agricultural chemicals, which lead to local loss of agrobiodiversity. The irrigation systems in place are also ineffective, leading to water loss and soil salinization, degrading the arable lands and thus limiting crops diversity that can be grown on these lands.

These landscapes are also under increased pressure from climate change, with temperature and precipitation patterns destabilizing. Climate modeling shows that according to unmitigated scenario climate warming in Armenia would increase air temperature by 2.8°C on average in 2050, and by 5.8°C in 2090, which is 35-40%

more than the global average.^[9] Average air temperatures have increased 1.23°C since the last century, increasing the rate shrinking of glaciers in Armenia's mountain areas to approximately eight meters per year^[10]. Pest and forest fire outbreaks have increased with warmer temperatures, adding to forest covered areas reduction due to climate aridification. A larger portion of Armenia's forest and alpine landscapes have been essentially reduced versus expansion of the desert and steppe landscapes. In forest areas (particularly, in the republic's south-east) a slow but persistent expansion of the semideserts at the account of the forest's lower section has been observed. If the projected climate change scenarios became reality, even omitting sharply negative anthropogenic impact, forest belts would move 100 to 150 meters up the mountain profile within the next 20 to 30 years, diminishing by three to four thousand hectares^[11].

The drivers of environmental change in Armenia include population growth, economic development, climate change, sociocultural factors, and political influences. The expansion of the human population has led to increased pressure on land for grazing and agriculture, resulting in deforestation and forest clearance. Economic factors including mining industry have also contributed to soil pollution and degradation. Additionally, unsustainable agricultural practices, water scarcity, and ineffective irrigation systems further exacerbate land and ecosystem degradation. These environmental dynamics are observed in Lori, Tavush, Suynik and Yerevan regions (marzes) of Armenia and require urgent interventions.

Extensive deforestation for fuelwood needs also took place from 1992 to 1995, during the period of economic blockade and energy crisis. A combination of poor forest management and illegal felling resulted in damage to some 27,000 ha of forest (more than 8 percent of the total forest area), including the total clearance of approximately 7,000 ha. Today, forests cover at most 10 percent of the land surface in Armenia. Forest are now concentrated mostly in the northeast of the Country, with some stands in the south ¹².

The expansion of the human population has led to increased pressure on land for grazing and agriculture, resulting in forest clearance. A combination of poor forest management and illegal felling resulted in damage to some 27,000 ha of forest (more than 8 percent of the total forest area), including the total clearance of approximately 7,000 ha^[12].

Currently forest covered areas occupy 11.54% (about 459,900 ha) of the country, which is 0.14% less than the coverage in 2000^[13]. The forests are distributed unevenly: 62% are in the north-east, 36% in the south-east and only 2% in the central part of the country. The forests of Armenia are rich in biodiversity and provide supporting and regulating ecosystem services, which are crucial in fragile mountainous ecosystems. The forests of Armenia are home to 274 native tree and shrub species out of which 25 are endemic. 90% of forests in the Republic of Armenia, regardless of their ownership type, are classified as forests of special significance.

Today, forests cover at most 10 percent of the land surface of Armenia. Forests are now concentrated mostly in the northeast of the country, with some stands in the south^[14]. According to data on soil resources, 44% of lands are exposed to erosion including 94,000 of 464,300 ha (20.3%) of arable lands. The situation with soil erosion is severe in Aragatsotn, Kotayk, and Vayots Dzor regions (marzes). Unfavorable impact of soil erosion is also spread sites sites of Lori, Tavush, Suyink, Shirak, Gegharkunik and Yerevan marzes. Soil

erosion resulting in land and ecosystem degradation is hampered with soil pollution due to extensive input of agricultural chemicals.

Specific trees of Armenia. Armenia's unique relief has about 3,700 meters of altitude difference. This geographical position enriches the land with a great variety of trees and bushes. Armenia is home to such species as oriental beech, oak, Caucasus hornbeam, pine, basswood, ash tree, junipers, maple, wild pear, almond tree, and even rare types of local trees, such as yew, ivy, hazel, Armenian whitebeam (*Sorbus hajastana*), etc. Plane, aspen, willow and oak trees are widely used in landscaping of Yerevan streets and parks.

The diversity of Armenia's geography and climate made it possible in the ancient times to grow foreign exotic plants, which later became very common for Armenia. Over time, these species began to be introduced as local, such as peach, mulberry, fig, pomegranate, walnut, etc. Many centuries ago, these trees were brought to Armenia, and they became so beloved and well-integrated into this nature, that soon some of them became national symbols of Armenia.

Apricot Tree (*Prunus armeniaca*). The Armenian Apricot (*Prunus armeniaca*) tree is the most commonly cultivated apricot species, also known as a wild Apricot, Early Golden, Wilson Delicious, Chinese Apricot.

Pomegranates and Grapes (*malum granatum*). Pomegranates and grapes are actively cultivated in Armenia and used for winery. Best pomegranates in Armenia grow in the south, mainly in Meghri City of Syunik Region. Villagers make jam with its seeds and tea from its flowers. Pomegranates are widely used for both homemade and factory-produced wine. They became national symbols.

Sea Buckthorn (*Hippophae rhamnoides*). Sea buckthorn or seaberry (in Armenian, 'chichkhan') are called hippophae (usually, large dark green bushes with tiny orange berries are cultivated roadsides). In Armenia, seaberries can be found around Lake Sevan, as well as in Vayots Dzor and Syunik Regions. Local people make from them juice, jam, liquor. Extracted of hippophae is used for different medical purposes.

Elderberry (*Sambucus nigra*). Elderberry is a small tree or a shrub growing in forests and roadsides. In spring, it blooms with white flowers that develop into dark berries in late summer. There are several species of elder shrubs, of which one called *Sambucus Tigranii* is indigenous to Armenia. It has both decorative and medical purposes.

Hawthorn Tree (*Crataegus monogyna*). The hawthorn, or hawberry tree (in Armenian, 'szni') is found in more dry regions of Armenia. Its leaves and flowers are small and neat, like its berries that have small seeds inside. Berries are collected in autumn, people eat it raw, prepare jams or juice from it, or dry the leaves and the berries to use with tea. This tree is known for its medical purposes since ancient times.

Rose hip (*Rosa canina* L.). Rose hip (in Armenian, 'masour') is a common bush that can be found all around Armenia. Locals gather its red berries in autumn when they are still solid and use them for making medical liquors, juice, jam or dry them for making tea. Rose hip is a source of vitamin C. Even its flowers, leaves, seeds and roots are used for making natural medicaments for inflammatory and other purposes.

Medlar (Medlar). This shrub belongs to Rosacea plant family. It grows mainly in the southern parts of Armenia. Its mid-sized fruits are mainly collected in the end of November.

Oleaster(*Elaeagnus*). Oleaster trees can be found in Yerevan City, around the Ararat valley, in Vayots Dzor and Syunik regions. The oleaster fruit, which resembles an olive, is used for medical purposes, while its yellow flowers are used for making perfumes[15]¹⁵.

As of the beginning of 2020, women comprised 53% of Armenia’s population, while men accounted for 47%. The average age of the population is 36.9 years; 64% of the country’s population is urban. Average life expectancy is 73.1 years for men and 79.7 years for women[16]¹⁶.

The impact of climate change is also affecting women and men unevenly. As noted in a Country Gender Assessment for Armenia, due to “the increasing migration of male family members, women are assuming a greater workload for agriculture production as the sector becomes more prone to disaster risks, putting women at the forefront of dealing with disaster impacts on agriculture production.”[17]¹⁷

The negative effects of climate change on women have been also addressed in some policy documents. In light of the many discussions held, and reports written, by civil society actors and the Ministry of Environment detailing the additional vulnerabilities facing women due to climate change, programmes addressing the impact of climate change on women were incorporated into the second NAP (pillar 4: Participation). Recommendations by the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) Committee strongly demand that the gender-related dimensions of climate change on women be addressed. The Committee recommends that, in line with its General Recommendation No. 37 (2018) on the gender-related dimensions of disaster risk reduction in the context of climate change, “the state party review its climate change and energy policies, taking into account the negative effects of climate change on the livelihoods of women, especially rural women, and ensuring that women are able to participate in decision-making on such policies and in projects on the green economy.”[18]¹⁸

The agricultural sector is affected by natural disasters including frost, hailstorms, floods, landslides, mudslides, drought and earthquakes. In 2010, US\$416 million was lost from potential agricultural output because of natural disasters. The impact of these losses is acute given that agriculture represents 19 percent of GDP and employs 28 percent of the population. In terms of food security, food access and availability can be seriously affected by the natural shocks and stresses[19]¹⁹.

Many globally important agricultural biodiversity species are found in the agricultural landscapes of Armenia. Armenia’s floral biodiversity is extremely rich, with 123 endemic species, constituting 3% of all flora species in the country. Armenia’s floral biodiversity includes more than 200 edible plant species, 40 edible fungi species, more than 1,000 fodder plants, 120 dye plants, and 60 rubber producing plants. Around 10% of the flora in Armenia is considered to have medicinal properties[20]²⁰. According to the study conducted within the framework of the UNEP/GEF project “*In-situ* conservation of crop wild relatives through enhanced information management and field application” 2004-2009[21]²¹), 2,518 species of the flora of Armenia were evaluated as crop wild relatives, making up around 70% of all plant species native to the country[22]²². Due to

this abundance of wild relatives of cultivated plants, the country was defined as one of the centers of crop diversity. This diversity of crop wild relatives does not only support rural communities through direct harvest and utilization, but also represents a rich gene pool for the development of new crop varieties resistant to diseases and pests, and other characteristics of adaptation to stress factors of environment. Unfortunately, the habitats of these species' diversity are rapidly being threatened due to anthropogenic pressure (logging and pollution), while some plant species harvested in the wild are at risk from unsustainable harvesting^{[23]²³}. Successful conservation of these wild plant species requires a multipronged approach to ensure their long-term availability while continuing support to local community is also needed, where effective project engagement and intervention in those communities is essential.

If the current environmental trends continue unchecked, Armenia could face dire consequences. The baseline in the absence of the project is characterized by ongoing environmental degradation, loss of biodiversity, declining agricultural productivity, and increasing vulnerability to climate change impacts. Climate change scenarios indicate a significant reduction in forest areas. The continued loss of forests and biodiversity habitats could lead to increased desertification and land degradation. Forest areas would diminish, and the expansion of semideserts and deserts would encroach on the remaining forested regions. Soil erosion and pollution would worsen, impacting agricultural productivity and exacerbating malnutrition and poverty. Natural disasters, including floods, landslides, and droughts, would become more frequent, causing significant losses in agricultural output and food security.

In order to reverse the situation, the follow outcomes will be necessary:

- **Outcome 1.1** National strategies and policies that support enhancing the use of local agrobiodiversity for land and ecosystem restoration are adopted.
- **Outcome 1.2** Institutional and Financial support at national and regional levels for the use of fruit and nut tree biodiversity for land restoration and mitigating climate change.
- **Outcome 2.1** Area restored with use of local inter- and intra-specific (varietal) diversity of fruit and nut tree species increased in the pilot sites of Lori, Tavush, Syunik, Shirak, Vayots Dzor, Gegarkunik Regions and Yerevan City.
- **Outcome 2.2** Information system developed and available at local, regional and national levels and used by public and private sectors.
- **Outcome 3.1** Trained policy makers, smallholders and local communities in pilot sites support sustainable conservation and utilization of locally important fruit and nut tree resources in land and ecosystem restoration taking gender and age equity into account.
- **Outcome 3.2** Local communities and farmers benefit from increased availability of nutritionally rich food products (fruits and nuts) and marketing of ecosystem services (eco- and agro-tourism) produced by restored lands and forest ecosystems and supported by national and provincial governments.

The project will work to reverse the existing barriers to agricultural biodiversity conservation. These have been identified as:

Barrier 1 - Lack of specific policies and regulatory framework. The lack of specific policies and regulatory framework is a major barrier for the conservation and sustainable use of the fruit and nut tree biodiversity in Armenia. The legislation does not specially regulate the harvesting of non-wood forest products (NWFPs). The roles and competences of specific regional governmental, local self-governing agencies and scientific-educational institutions in respect of agrobiodiversity conservation and use are not clearly defined. Actors involved, from local to global, do not fully understand the power dynamics that

influence the interactions between these various actors and their ability or mandate to influence and/or control the management of agrobiodiversity.

Barrier 2 - Lack of access to planting materials knowledge and management practices to use the fruit and nut tree agrobiodiversity. Lack of awareness among the local population including policy and decision-makers, farmers, producers and consumers of the value of fruit and nut species agrobiodiversity has limited the use of this diversity in development planning. This includes low recognition of adapted fruit and nut species and their products on the market and lack of knowledge on enhancing sustainable agrobiodiversity vs agrobiodiversity based agritourism value chains. Limited access to local seed and planting materials, increasing dependence of national breeders on import of seeds and seedlings and other planting materials, lack of special knowledge on the cultivation of local varieties of adapted fruit and nut tree crops; and lack of pilot sites that demonstrate sustainable use of agrobiodiversity of fruit and nut species have limited the adoption of local varieties for land restoration. Substantial evidence shows that biologically diverse farms can equal and even out-perform conventional high chemical input systems. Improved access to fruit and nut tree genetic resources in the form of diversified varieties and wild genotypes, coupled with technical training in nature-friendly practices has demonstrated that these production systems can rival, if not out-perform conventional, agrochemical dependent commodity farming with less environmental and social impact^[24]²⁴. Local adaptation of the varieties used will lead to an enhanced production and reduced needs for inputs (water, pesticides, chemical fertilizer), improving also risk management of unpredictable climatic extremes (e.g., temperature, frost, precipitations). Cultivated and wild production systems restored with biodiversity of indigenous fruit and nut tree species will enhance ecosystem services, support food security and safety, livelihoods and adaptation to climate change.

Barrier 3 - Communities lack capacity to use and benefit from land restoration with local fruit and nut trees. Local communities have limited awareness of the importance of land restoration benefits by local fruit and nut trees. Mass media and school curriculums do not promote the benefits of local fruit and nut trees to communities for land restoration. There is also limited capacity in local communities to assess the diversity they have, and the management practices needed to implement development actions targeted to men and women and different age groups to reap the economic benefits for the communities from local fruit and nut tree diversity.

In addition to the barriers already highlighted, poor policies and lack of coordination also contribute to poor extension support to farmers and local communities. In fact, national policies and extension practices have been more supportive of intensive, high-input agriculture at the cost of the agricultural biodiversity and the environment. This focus on the transformation of the agricultural sector has contributed to greater uniformity in farmer fields and forest restoration, which in turn contributes to greater vulnerability to a range of biotic and abiotic stresses which will be considerably exacerbated by climate change. Additional barriers include a general lack of capacity at all levels, from policy to practice, and a general market failure that fails to capture adequately the ecosystem services benefits and returns from maintenance of fruit and nut tree biodiversity in natural and agricultural landscapes, as well as the potential niche markets that could exist for improved farmer livelihoods and economic development.

This particular project has been selected to address the drivers of environmental degradation and climate vulnerabilities in Armenia due to its comprehensive approach. By focusing on the restoration of degraded landscapes, promotion of indigenous fruit and nut tree crops, and conservation of endemic wild fruit-and nut

tree species, the project tackles multiple environmental challenges simultaneously. It aligns with international priority areas such as climate change, land desertification, and biodiversity conservation. Additionally, the project takes into account the unique biodiversity of Armenia and the development dynamics of anthropogenic ecosystems, ensuring the project's relevance and effectiveness in the local context.

The relevant stakeholders in the project include government agencies responsible for environmental management and agriculture, local cooperatives and forest branches, local communities, in particularly woman and youth, private sector actors, academic (research and education) institutions, and civil society organizations.

Stakeholders from the governmental and private sector – including women and youth - are expected to be engaged in the project. Women and youth representatives will be identified by the local self-governing bodies in the project sites to cooperate and interact with other actors of the project. Gaps in gender activities will be identified and implemented by the project.

To ensure gender sensitive aspects are included into all project actions and properly implemented, the project will hire gender experts in focused regions. A key gender expert will be a member of the project management unit to coordinate gender local gender experts.

National government agencies (Ministry of Environment (ME); Ministry of Territorial Administration and Infrastructure (MTAI); “HAYANTAR” (ArmForest) State Non-Commercial Organization of the Ministry of Environment, Eco-Patrol Services of the Ministry of Environment and the Ministry of Economics) together with Regional Administration Bodies (Tavush and Lori Provinces and 8 Municipalities and enlarged community of Vanadzor, Stepanavan, Gyumri, Ijevan, Sevan, Yerevan, Khoy and Kapan) will play a crucial role in providing policy support, creating an enabling environment, and mobilizing resources. Local cooperatives and forest branches (Tavush Province, “Arfood” Agricultural Production Cooperative, Agronomists of Municipalities and communities engaged in urban greening activities, 17 local forestry branches of HAYANTAR) will carry out land and forest restoration activities and support farmers and forest dwellers in value addition activities.

Local communities, farmers and forest dwellers are essential for the implementation and maintenance of sustainable land and forest management practices, they will benefit from the establishment of demonstration plots, technologies for value adding, and establishment community nurseries and forest mother tree plots. Test and validate practices for quality seed production, harvesting standard in forests, planting and seedlings and ensure that information systems are adapted to their local needs for land and forest restoration, value addition and business planning for agritourism. Women and youth will provide leadership at local regional and national levels to mainstream women and youth into the decision-making processes and value addition activities. Manage demonstration plots and forest mother tree sites, participate and promote gender and youth inclusive training and leading Horticultural clubs and business entrepreneur activities.

The private sector (Spayka LLC, Green Farmer LLC, and BMMBplus GmbH Germany) will contribute through investments, technology transfer, and value chain development. Academic institutions include the Yerevan City Botanical Garden and Vanadzor City Botanical Garden Institute of Botany after A. Takhtajyan, Armenian National Agrarian University, Vanadzor and Sisian City branches of the Armenian National Agrarian University based in Lori and Syunik Regions, Ijevan Branch of Yerevan State University, “Gavar State University” based in Gavar City of Gegharkunik region, “M. Nalbandyan State University” of Shirak based in Gyumri City, High Schools in Ijevan and Noyemberyan Cities of Tavush region, Sevan City of Gegharkunik region, Sisyan City of Syunik region Vanadzor and Alaverdi Cities of Lori region, Gyumri City of Shirak region, and The Raffaella Foundation, USA, will provide scientific expertise, training and knowledge sharing including for high school training for youth to become young horticulturist. Civil society organizations/NGO (WWF Armenia, “Armenian Forests”, “My Forest Armenia”, “Armenia Tree Project” and SHEN) will support the identification of new areas of land restoration; Planting trees in communal and forest

land areas; Training local population on land and forest restoration ; Capacity building and public awareness; Support value addition activities; and Ensure gender and youth equity at community level in project activities and contribute to awareness-raising, capacity building, and advocacy for sustainable practices.

The role of each stakeholder is detailed further in Section B: Project Description below and in Appendix 5: Attachment 5c: Stakeholder Engagement Plan together with their responsibility by activities in Appendix 8: Detailed Workplan.

The proposed project is built on significant investments of the Government of Armenia and international donors in natural resources management, including agrobiodiversity conservation, supporting ecosystem services, land and forest restoration, food security and safety as well as value chain development for sustainable livelihoods. The Armenia’s Sustainable Development Strategy (SDS) for 2012-2030^[25]²⁵ defines priority areas ensuring sustainable economic growth, targeted social policy for improving livelihoods, improving the effectiveness of governance, environment health and sustainable management of natural resources. With adopting, the Agriculture Development Strategy (ADS) for 2015-2025^[26]²⁶ Government of Armenia accepts the concept of sustainable development and achieving a good balance between economic development, environmental protection and other social aspects. The protection of environment and natural landscapes, agrobiodiversity conservation, development of agro-tourism and organic agriculture are in the list of the Strategy’s objectives. The Forest Program of the Republic of Armenia^[27]²⁷ sets out an ambitious goal to increase the area of forest-covered lands up to 266.5 thousand ha or 20.1% of the total country’s territory through reforestation and afforestation of degraded areas. The Program highlights that “reforestation and afforestation should be carried out by science-based approaches considering proper forest species composition, forest growing conditions and applying advanced technologies”. The National Strategy and Action Program to Combat Desertification recognizes that land degradation is a driver of vulnerability to climate change The National Action Plan on Combatting Desertification in Armenia^[28]²⁸ calls for improvement of land use planning and creating economic incentives for sustainable natural resource management.

The baseline of the area of the project’s intervention includes several ongoing initiatives supported by the international development agencies including, the EU Horizon FRUITDIV project 'Using the hidden potential of the wild diversity of fruit tree species for sustainable agriculture' (2024-2028) ^[29]²⁹, the WWF/BMZ project “Biodiversity and sustainable local development” (2024-2030) ^[30]³⁰, WB/GEF “ReSILAND: Armenia resilient landscapes project” (2023-2028)^[31]³¹, the WWF/SDC project “Living landscapes for market development in Armenia” (2022-2025)^[32]³², the FAO/GCF project “Forest resilience of Armenia, enhancing adaptation and rural green growth via mitigation” (2021-2029) ^[33]³³, and the WWF/BMZ project “Promotion

of eco-corridors in South Caucasus” (2022-2025)^[34]^[34]. The project will work in close cooperation with these international development initiatives.

The proposed project will apply the lessons learnt from previous GEF projects, including the GEF/UNDP project “Adaptation to climate change impacts in mountain forest ecosystems of Armenia” (2008-2014)^[35]^[35], GEF/UNDP project “Developing institutional and legal capacity to optimize information and monitoring system for global environmental management in Armenia” (2008-2013)^[36]^[36], GEF/UNEP project “Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization” (2016-2018)^[37]^[37]. The project will also be adapting the Diversity Assessment Tool for Agrobiodiversity and Resilience (DATAR) developed within the GEF/IFAD project “Cross-cutting capacity building, knowledge services and coordination project for the Food Security Integrated Approach Pilot Program”(2017-2022)^[38]^[38].

The project will also utilize relevant data from the Climate Change Information Center that has been established under GEF/ UNDP project “Country study on climate change” (1995-2008)^[39]^[39] and the database established under GEF/UNEP project “*In-situ* conservation of crop wild relatives through enhanced information management and field application” (2004-2010)^[40]^[40].

Furthermore, the Ministry of Environment of Armenia, as the executing agency of this project, will seek to use all available expertise and data on planning, rehabilitation, protection and sustainable management of forest and agricultural ecosystems in the project sited during the project implementation.

Water use permits is one of the measures implemented in Armenia to ensure sustainable water resources management as well as to guarantee access to water when is needed. The Ministry of Environment issues water use permits, which enables to define maximum permissible water intake and discharge and ensure water resources efficient management and protection in Armenia.^[41]^[41] Water use and methods are strictly overseed by the Ministry of Environment. New innovative methods are priority to consider and apply.

Project Cost-Effectiveness

Effective mainstreaming depends on reaching out in relevant and realistic ways to the overall concerns with economic development, improvement of rural livelihoods, food security. The basic assumptions of the project with regard to cost-effectiveness are that the sustainable management and conservation of fruit and nut tree biodiversity and its mainstreaming into land and forest restoration is best achieved 1) through bringing together partners from local to regional and national levels from environment, agriculture, national and regional economic development sectors; 2) through farmer and community led activities and community-based management; 3) building a framework for linking formal and informal sectors; 4) building on existing institutional mechanisms and developing adequate proposals for policies and regulations for the conservation and sustainable use of fruit tree diversity in land and forest restoration; and 5) taking advantage of

international expertise in key areas of agro-biodiversity management, sustainable restoration of lands and forests and of local experience in the NGOs, governmental and academic sector for supporting capacity building processes.

The project is expected to be cost-effective, in the first instance, as a result of its ability to bring together partners from the environment, agriculture, national and regional economic development sectors. Representatives from the different Ministries will be contributing to the project by participating to the Project Steering Committee, bringing in their own different perspectives, experiences and skills and ensuring that the agro-biodiversity, land and forest restoration, as well as improvement of local livelihoods agenda is addressed in ways that reflect the experience, interests and concerns of the widest possible range of stakeholders. The involvement of different Ministries and government departments and research institutes (see Appendix 5c. Stakeholders Engagement Plan and Appendix 7. Project Implementation Arrangements and Coordination) will maximize the technical cost effectiveness of the project's activities. The project will create the opportunities for realistic appreciation of trade-offs between production and conservation and for the identification of opportunities for win-win solutions that improve livelihoods, secure the maintenance of agro-biodiversity, sustainable land and forest resources use and to buffer against unpredictability in terms of temperature, rainfall, pests and pathogens.

A central element of the project's approach is the emphasis placed on the development of farmer and community led activities. The involvement of local authorities such as Community and Regional Municipalities, Community-Based Organizations and the use of and participatory community-based approaches will ensure that the outputs reflect the realities of the rural situation rather than being developed as a response to national policies or possibly inappropriate options that come from ungrounded research. This approach will ensure that the agro-biodiversity, land and forest restoration outputs are firmly based on and connected to the realities of rural production and the needs of the farmers and rural communities involved to improve their livelihoods (income, health, food security and ecosystem services). The importance of improving income is explicitly recognized in the project and provides the necessary framework for ensuring that the different agro-biodiversity conservation and ecosystem services improvement activities are secured through their beneficial effects for the communities who undertake them.

Through involvement of local and national NGOs, the project will provide an appropriate cost-effective framework for linking formal and informal sectors. The different NGOs involved will support farmers and local communities through strengthening local institutions and through their work to secure adequate market returns from the production of value-added agricultural products and marketing ecosystem services (agro- and ecotourism). They will also play an important wider role in ensuring that project outputs become more widely known and recognized in Armenia, both by the public and by those involved in developing and implementing policy.

The cost-effectiveness of the investment will be supported through the development of a set of proposed policies and regulations, which already take account of the perspectives of the different stakeholders involved in execution. Instead of a single sector approach in which e.g. the concerns of the agriculture sector or environmental sector are foremost, the project execution framework ensures that policies and regulations that are identified can reflect the perspectives of different stakeholders from local groups to national ones and from different environmental, economic development and agricultural sectors.

The involvement of a selected group of international organizations, with expertise in key areas of agro-biodiversity maintenance and use and in the issues of forest and land restoration as well as sustainable production, will ensure that Armenia has direct access to some of the best developed procedures, protocols and methodologies currently available. The involvement of international partners also provides a cost-effective way in which the project can bring benefits to the global community and to other countries exploring the demands to improve the livelihoods of rural communities and maintain agrobiodiversity and ecosystems.

- [1] Country report to the FAO international technical conference on plant genetic resources: <https://www.fao.org/fileadmin/templates/agphome/documents/PGR/SoW1/Europe/ARMENIA.pdf>
- [2] Prospects of utilization of non-wood forest products in Armenia: <https://www.fao.org/3/y4496e/Y4496E08.htm>
- [3] Biodiversity of Armenia: <https://www.beck-shop.de/fayvush-biodiversity-of-armenia/product/35760502>
- [4] Wild Plant Harvest in Armenia: <https://ace.aua.am/files/2020/09/RWPH-Literature-review-Eng-final-1.pdf>
- [5] Fourth National Report to the Convention on Biological Diversity Republic of Armenia: <https://www.cbd.int/doc/world/am/am-nr-04-en.pdf>
- [6] People and Nature in Armenia: <https://biodivers-southcaucasus.org/uploads/files/KAP%20AM.pdf>
- [7] GEF Trust Fund: https://www.raed.am/images/pdf/GEF_FD241219.pdf
- [8] Agriculture <https://docs.wfp.org/api/documents/WFP-0000020456/download/>
- [9] Climate Risk Country Profile https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15765-WB_Armenia%20Country%20Profile-WEB_0.pdf
- [10] Climate Risk Country Profile-Armenia: https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15765-WB_Armenia%20Country%20Profile-WEB_0.pdf
- [11] Climate change and agriculture country note: <https://documents1.worldbank.org/curated/en/750371468208161919/pdf/733320WP0CN0Ar0disclosed0100220120.pdf>
- [12] Biodiversity assessment for Armenia: https://ace.aua.am/files/2019/05/2000-USAID-Chemonics-Biodiversity-Assessment-for-Armenia_eng.pdf
- [13] FRA 2020 report: Armenia, <https://www.fao.org/3/ca9966en/ca9966en.pdf>.
- [14] https://ace.aua.am/files/2019/05/2000-USAID-Chemonics-Biodiversity-Assessment-for-Armenia_eng.pdf
- [15] Specific trees and Bushes of Armenia and their role in daily life: <https://www.ecokayan.com/armenia/travel/explore/trees-and-bushes-of-armenia-and-their-role-in-daily-life>
- [16] https://www.eeas.europa.eu/sites/default/files/documents/Country%20Gender%20Profile_%20ARMENIA_ENG.pdf
- [17] https://unsdg.un.org/sites/default/files/2021-03/Armenia_Cooperation_Framework_2021-2025_0.pdf
- [18] https://eca.unwomen.org/sites/default/files/2023-07/armenia_wps_nap_resource_book.pdf
- [19] Biodiversity Assessment for Armenia. USAID: https://ace.aua.am/files/2019/05/2000-USAID-Chemonics-Biodiversity-Assessment-for-Armenia_eng.pdf
- [20] Fifth National Report of the Republic of Armenia to the Convention of Biological Diversity <https://www.cbd.int/doc/world/am/am-nr-05-en.pdf>
- [21] <https://www.thegef.org/projects-operations/projects/1259>
- [22] Agroecoarm: <http://agroecoarm.com/2016/08/02/211/#:~:text=According%20to%20a%20recent%20study,species%20native%20to%20the%20country>
- [23] Biodiversity Assessment for Armenia: https://ace.aua.am/files/2019/05/2000-USAID-Chemonics-Biodiversity-Assessment-for-Armenia_eng.pdf
- [24] National center for biotechnology information: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8223759/>

[25] UN FAO:

<https://www.fao.org/documents/card/en?details=ca8709hy><https://www.fao.org/documents/card/en?details=ca8709hy>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8223759/> <https://idl-bnc-idrc.dspacedirect.org/server/api/core/bitstreams/4a9dc43d-124b-4956-8a72-54f9ae5379ae/content>

[26] Armenian development strategy: <https://policy.asiapacificenergy.org/node/1492>

[27] National Forest Program of the Republic of Armenia (RA Governmental Decision N1232, July, 2005)
<https://faolex.fao.org/docs/pdf/arm190700E.pdf>

[28] UN Carter to combat desertification: <https://www.arlis.am/DocumentView.aspx?DocID=77828>

[29] Exploiting the Untapped potential of Fruit tree Wild Diversity for Sustainable Agriculture: <https://cordis.europa.eu/project/id/101133964>

[30] Biodiversity and sustainable local development in Armenia: <http://env.am/en/news/project-biodiversity-sustainable>

[31] <https://www.thegef.org/projects-operations/projects/11046>

[32] Living Landscapes for Market Development in Armenia: <https://sda.am/en/projectportfolioeng/living-landscapes-for-market-development-in-armenia-project/?lang=en>

[33] Forest resilience of Armenia, enhancing adaptation and rural green growth via mitigation:
<https://www.greenclimate.fund/sites/default/files/document/sap014-fao-armenia.pdf>

[34] Eco-corridors foundCaucasus: <https://www.wwfcaucasus.org/?6845216/eco-corridors-fund-for-the-caucasus-launches-phase-ii>

[35] <https://www.thegef.org/projects-operations/projects/3417>

[36] <https://www.thegef.org/projects-operations/projects/2800>

[37] <https://www.thegef.org/projects-operations/projects/5483>

[38] <https://www.datar-par.org/>; <https://www.thegef.org/projects-operations/projects/9140>

[39] <https://www.thegef.org/projects-operations/projects/285>

[40] <https://www.thegef.org/projects-operations/projects/1259>

[41] <https://ecoportal.am/wp/water-use-permits/?lang=en>

B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

The project objective: "To contribute to landscape restoration by harnessing indigenous fruit and nut tree biodiversity to improve environment and ecosystem services, support food security and safety, and enhance livelihoods in Armenia" is guided by the 'drivers', 'assumptions', and 'logical pathways' of the theory of change needed to achieve this ultimate objective. The Figure 1 below presents the **path of change** describing enabling conditions, behavioral change and impact.

The Project's **Theory of Change**, presented in Figure 2 below, is based on the premise that indigenous nuts and fruit trees have economic and environmental benefits that by engaging with farmers, agrobiodiversity can be better conserved

and restoration needs can be complemented with economic benefits. The project's proposed interventions/activities (drivers) build on the baseline conditions which already exist, described above under A. Project Rational, and seek to drive those additional steps and processes required to achieve further incremental results.

The Project Theory of change begins with the strengthening of the enabling environment, through the development and enhancement of through coherent institutional frameworks and policies, together with the monitoring and assessment of the use of fruit and nut tree diversity for restoration to through **Outcome 1.1 (Component 1)**: National strategies, and policies that support enhancing the use of local agrobiodiversity for land and ecosystem restoration are adopted and **Outcome 1.2 (Component 1)**: Institutional and Financial support at national and regional levels for the use of fruit and nut tree biodiversity for land restoration and mitigating climate change. Second, behavioral changes will occur through **Outcome 3.1 (Component 3)**: Trained policy makers, smallholders and local communities in pilot sites support sustainable conservation and utilization of locally important fruit and nut tree resources in land and ecosystem restoration taking gender and age equity into account, and **Outcome 3.2 (Component 3)**: Local communities and farmers benefit from increased availability of nutritionally rich food products (fruits and nuts) and marketing of ecosystem services (eco- and agro-tourism) produced by restored lands and forest ecosystems and supported by national and provincial governments. Behavioral change will also be supported through improved knowledge management and effective communication under **Outcome 2.2 (Component 2)** for information systems developed and available at local regional and national levels available and used by public and private sectors leading to increase in investments use of fruit and nut tree diversity for land restoration. Finally, achievement of impact and the attainment of goals of Land Restoration and Ecosystem Service Improvement through Use of Fruit and Nut Tree Biodiversity in Armenia through adoption and scaling up of gender and youth targeted practices such as supporting women and youth in establishment and running tree nurseries to supply quality and diverse planting material for land restoration activities, establishment of fruit and nut crops products processing initiatives, development of eco-agritourism business, will be achieved through a combination of **Outcome 2.1 (Component 2)**: Area restored with use of local inter- and intra-specific (varietal) diversity of fruit and nut tree species increased, together with the institutional and financial support from **Outcome 1.2** and the capacity built under **Outcome 3.1** and **Outcome 3.2**. Details for the measurable indicators, Outputs and Activities to achieve the projects' Outcomes are described in Appendix 3: Project Logframe, and Appendix 8: Detailed Workplan.

Figure 1. Path of Change.

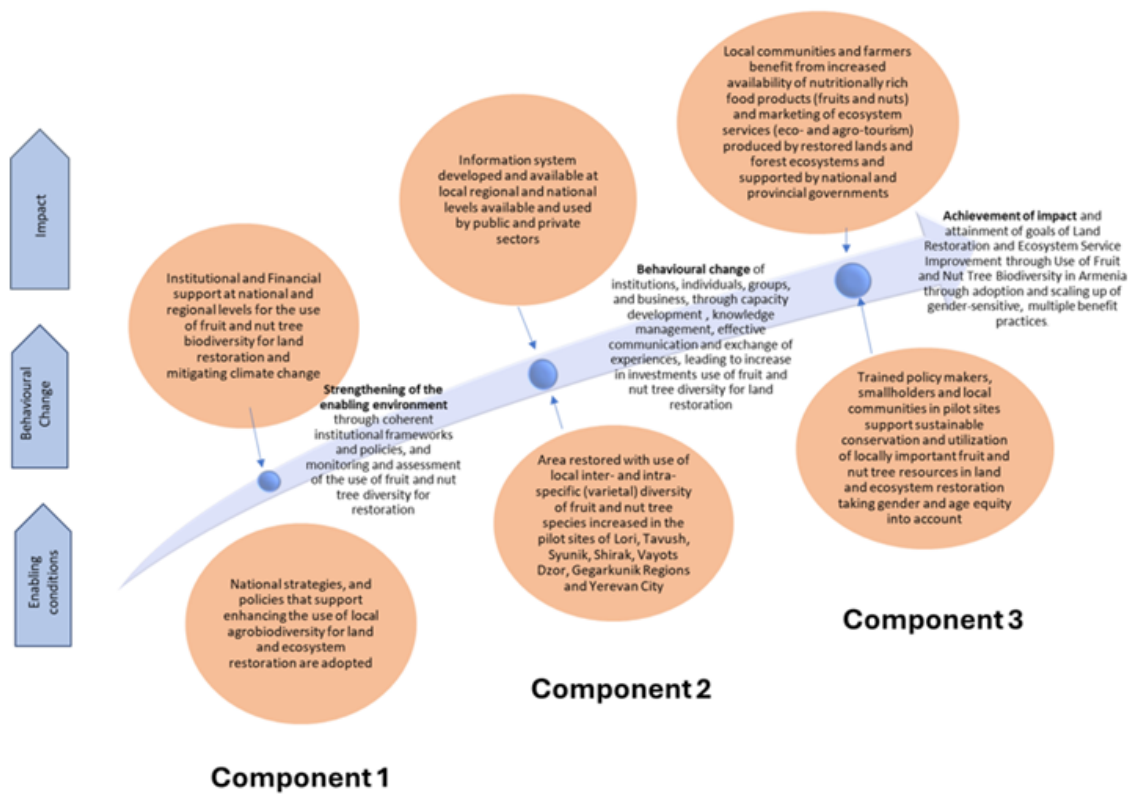
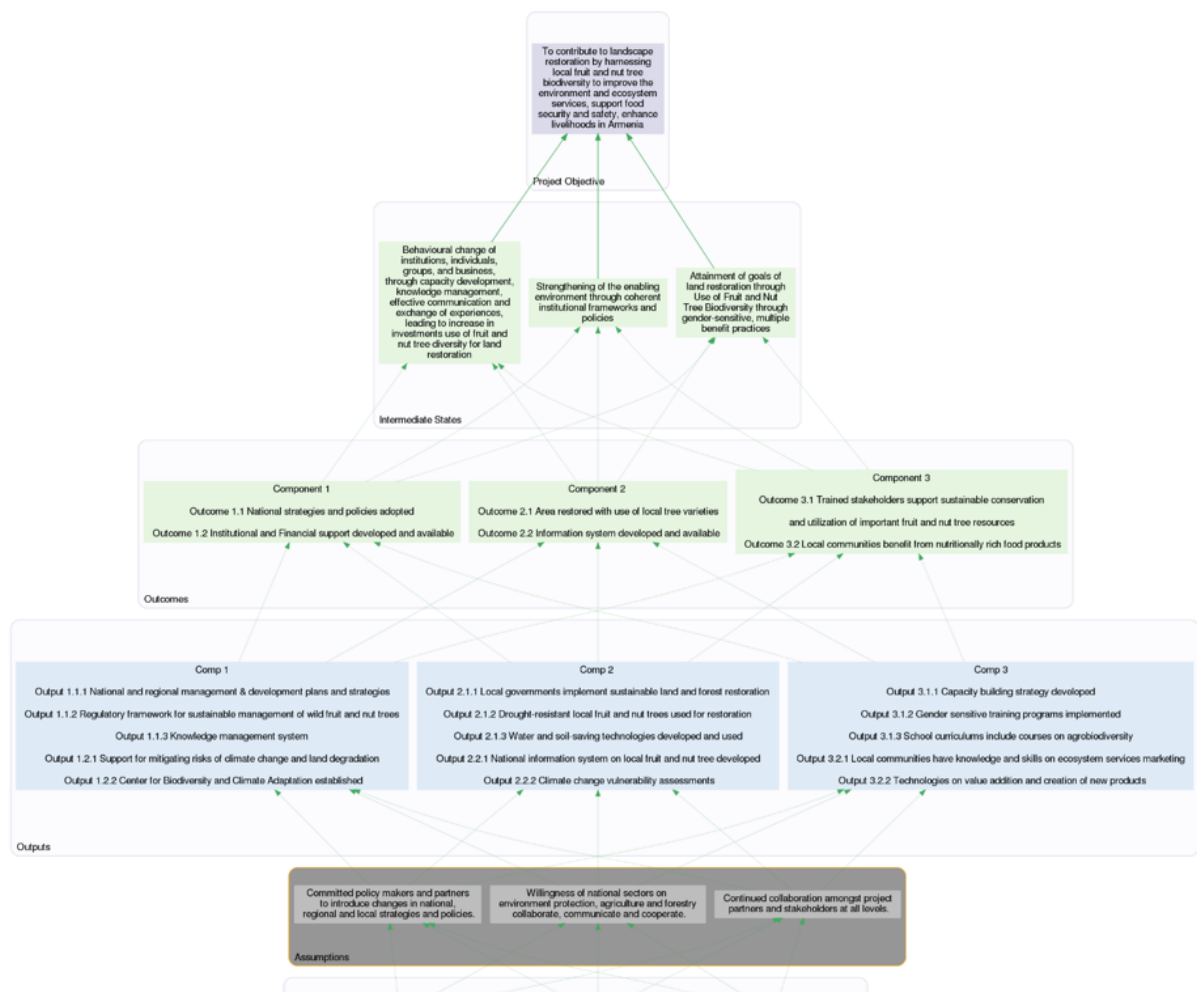


Figure 2. Theory of Change



All project actions will be gender and youth sensitive and inclusive.

The project's approach is carried out through activities and outputs of under following three thematic components

Component 1: Policies and institutions to sustainably manage agrobiodiversity for restoration.

Output 1.1: National and regional (provincial) management / development plans and strategies revised to include the use of fruit and nut tree biodiversity to mitigating the risks of climate change, reduce land degradation, and promote soil and water resources conservation, ecosystem services, food security and food safety. This output is developed through gender inclusive workshops, review of currently policies, and the development of national and regional maps and strategies. The planned Output 1.1.1, which involves revising national and regional management/development plans and strategies to incorporate fruit and nut tree biodiversity for mitigating climate change risks, reducing land degradation, and promoting soil and water resources conservation, ecosystem services, food security, and food safety, will be effectively delivered through a series of coordinated activities. Initially, a comprehensive review of current national and regional management/development plans and strategies will be conducted to identify gaps in utilizing fruit and nut tree biodiversity for various purposes such as land restoration, soil and water conservation, and food security. Subsequently, policy briefs will be produced based on the findings of this review, succinctly presenting the identified gaps and the potential benefits of integrating fruit and nut tree biodiversity into existing plans and strategies. Following this, gender-inclusive workshops will be organized at both national and regional levels,

engaging policymakers to present and deliberate on the outcomes of the policy study. This interactive platform ensures that the relevance and significance of incorporating fruit and nut tree biodiversity are well-understood and appreciated by decision-makers. Building on the insights gained from these workshops, concrete proposals and maps will be developed, highlighting specific areas suitable for restoration using local fruit and nut tree species. These proposals will align with the objectives of mitigating climate change, restoring land and forests, conserving soil and water resources, and enhancing ecosystem services, food security, and food safety. Another gender-inclusive workshop will then be convened to present and discuss the developed proposals and maps with national and regional policymakers, ensuring that stakeholders have a clear understanding of the proposed actions and their potential impact on various aspects of sustainability and resilience. Finally, the finalized proposals and maps will be formally submitted to national and regional governments for inclusion in their respective management/development plans and strategies, solidifying the integration of fruit and nut tree biodiversity into the overarching frameworks guiding governance and development initiatives. Through this systematic approach, the planned output will be delivered effectively, contributing to the enhancement of environmental sustainability and food security at both national and regional levels.

Output 1.1.2. Harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species, quality and diverse seedlings supply standards developed and available. This output is achieved through the review of current standards, gender and age inclusive workshops and the proposals for new quality standards for collection of seeds of wild fruit and nut tree species to be submitted to the National Body for Standards and Metrology. The Output 1.1.2, which entails the development and availability of harvesting standards and other regulatory frameworks for the sustainable management of wild fruit and nut tree species, as well as quality and diverse seedling supply standards, will be effectively delivered through a series of structured activities. Initially, the existing regulatory framework and practices regarding the harvesting of wild fruits and nuts will be meticulously reviewed to identify gaps related to their sustainability. Building upon the insights gained from this review, standards for the harvesting of wild fruit and nut tree species products will be developed to ensure sustainable practices are upheld. Simultaneously, a review will be conducted on the quality standards and certification procedures for planting material of fruit and nut tree crops currently applied in the project sites. Ground-based standards and procedures will then be developed based on this review, tailored specifically for use by farmers and local communities in the project sites, thereby ensuring the supply of high-quality and diverse seedlings. To ensure the relevance and effectiveness of the developed standards and procedures, a workshop will be organized with relevant stakeholders, providing a platform for collaboration and input. Through this workshop, the developed standards and certification procedures will be presented, discussed, and finalized, incorporating valuable feedback from stakeholders. Subsequently, the finalized harvesting standards will be submitted to the National Body for Standards and Metrology, ensuring their integration into the national regulatory framework. Similarly, the quality standards for planting material will also be submitted to the National Body for Standards and Metrology, ensuring uniformity and adherence to quality benchmarks across the industry. Furthermore, quality standards for the collection of seeds of wild fruit and nut tree species for forest restoration purposes will be developed. These standards will be crucial in maintaining the genetic diversity and ecological integrity of wild fruit and nut tree populations. Once developed, these standards will also be submitted to the National Body for Standards and Metrology for official endorsement. By systematically carrying out these activities, the intended output will be achieved efficiently, promoting sustainable management techniques for wild fruit and nut tree species, guaranteeing the accessibility of seedlings, and playing a part in the preservation and rehabilitation of forest ecosystems.

Output 1.1.3. The Ministry of Environment develops and implements a knowledge management system to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity. The output is achieved through the adaptation of the DATAR (Diversity Assessment Tool for Agrobiodiversity and Resilience) to national and local needs, followed by training of trainers to use the tool, and the development of knowledge products, including portfolios of fruit and nut tree varieties and forms for

degraded land and forest restoration, and demonstration plots for management practices for restoration of both land and forest areas. The planned Output 1.1.3, which involves the development and implementation of a knowledge management system by the Ministry of Environment to advance innovation, integration, transformation, and scaling up of fruit and nut tree biodiversity utilization, will be efficiently executed through a series of targeted activities. Firstly, the Diversity Assessment for Agrobiodiversity and Resilience (DATAR) tool will be adapted to local needs, ensuring its relevance and applicability in the context of fruit and nut tree biodiversity. Subsequently, stakeholders, including both men and women, will be trained on the use of DATAR to promote innovation, integration, transformation, and scaling up of fruit and nut tree biodiversity utilization. This training will empower stakeholders to leverage DATAR effectively in decision-making processes, facilitating informed interventions for biodiversity conservation, efficient land and forest management, and sustainable livelihoods across all project sites. Moreover, technical publications, posters, fliers, and educational videos will be developed to enhance access to knowledge on the diversity of local fruit and nut tree crops and best practices in land and forest restoration. These educational materials will cater to farmers, local communities, forest officers, and extension services, facilitating the dissemination of crucial information and promoting the adoption of sustainable practices. In addition, a Portfolio of intra-specific biodiversity of local fruit and nut tree crops adapted for use in land and forest restoration will be developed for each project site. This portfolio will serve as a comprehensive resource, providing insights into the diverse range of local fruit and nut tree species suitable for restoration efforts. Furthermore, demonstration plots will be established to showcase the use of advanced technologies for forest protection, aimed at preventing illegal logging of wild fruit and nut trees in forest areas. Similarly, demonstration plots will be set up along intercommunal roads to showcase the planting of drought-tolerant local fruit and nut trees, effectively mitigating soil erosion. Through the systematic execution of these activities, the Ministry of Environment will be enabled to establish a robust knowledge management system that promotes innovation, integration, transformation, and scaling up of the use of fruit and nut tree biodiversity. This system will play a pivotal role in advancing sustainable practices, enhancing biodiversity conservation, and fostering resilience in land and forest ecosystems.

Output 1.2.1. Institutional and financial support for selected regions (marzes) increased for mitigating risks of climate change and land degradation through planting fruit and nut trees and other tree species in deforested areas. Achieving this output includes running Public Awareness campaigns for government officials on necessity of increasing government support for increasing forest coverage in degraded forest and land areas and agrobiodiversity conservation, establishing in project sites gender inclusive Inter-sectoral Platform on Forest and Land Resources Management to facilitate communication and collaboration on land and forest restoration actions, and developing develop cross-sectoral plans on land and forest restoration with use of indigenous fruit and nut tree species with proposals on funds allocation in project sites. Through a series of structured activities, Output 1.2.1 will effectively enhance institutional and financial support for selected regions (marzes) to address climate change risks and land degradation by promoting the planting of fruit and nut trees and other tree species in deforested areas. Initially, public awareness campaigns will be conducted targeting government officials, emphasizing the imperative need to bolster government support for increasing forest coverage in degraded forest and land areas, as well as for the conservation of agrobiodiversity. This campaign aims to cultivate a shared understanding among decision-makers regarding the critical role of afforestation in mitigating climate change and preserving biodiversity. Concurrently, an in-depth review of the institutional framework governing biodiversity, forest, and land resources management will be undertaken to identify gaps in inter-institutional communication, collaboration, and coordination at provincial levels within the project sites. This review will inform the establishment of gender-inclusive Inter-sectoral Platforms on Forest and Land Resources Management in project sites, fostering enhanced communication and collaboration among relevant stakeholders. Furthermore, an assessment of the current financial support for land and forest restoration, specifically focusing on the utilization of local biodiversity, will be conducted at provincial levels within the project sites. Building upon this review, cross-sectoral plans on land and forest restoration will be developed, specifically emphasizing the use of local fruit and nut tree species. These plans will include detailed proposals on funds allocation, ensuring that adequate financial resources are directed towards

targeted restoration efforts. By systematically implementing these activities, Output 1.2.1 will effectively strengthen institutional and financial support for selected regions, enabling them to effectively mitigate climate change risks and combat land degradation through strategic afforestation initiatives. Through improved coordination, communication, and allocation of resources, these efforts will significantly enhance environmental resilience and promote sustainable land management practices.

Output 1.2.2. Center for Biodiversity and Climate Adaptation Knowledge which is an ecological Hub for various environmental scientific and public awareness programs is established with sustainable financing in peri-urban forest area. Achieving this output involved signing an Agreement with relevant authorities on providing their financial support to Centers for Biodiversity and Climate Adaptation Knowledge, and Equip Center for Biodiversity and Climate Adaptation Knowledge with equipment, technical and public awareness materials for its functioning and providing service on increasing public awareness and dissemination knowledge. Output 1.2.2 aims to establish a Center for Biodiversity and Climate Adaptation Knowledge, serving as an ecological hub for various environmental scientific and public awareness programs, with sustainable financing in a peri-urban forest area through implementing the following activities. The first step involves carefully selecting sites suitable for the establishment of Centers for Biodiversity and Climate Adaptation Knowledge. These sites will be strategically chosen to ensure accessibility, relevance to the local community, and ecological significance within peri-urban forest areas. Once the sites are identified, agreements will be signed with relevant authorities to secure their commitment to providing financial support for the establishment and operation of the Centers. This financial backing is crucial for ensuring the sustainability and long-term viability of the Centers' activities. Following the agreements, the Centers will be equipped with necessary equipment, technical resources, and public awareness materials to facilitate their functioning effectively. This includes tools for scientific research, educational materials for public outreach programs, and infrastructure for hosting various environmental activities. By systematically implementing these activities, Output 1.2.2 will deliver on its objective of establishing a Center for Biodiversity and Climate Adaptation Knowledge in peri-urban forest areas. With sustainable financing and equipped with necessary resources, these Centers will serve as vital hubs for advancing scientific understanding, promoting public awareness, and fostering environmental stewardship within their respective communities.

Component 2: Agrobiodiversity planting materials, information, and management practices.

Output 2.1.1. Local governments in Armenia implement sustainable land and forest restoration through indigenous fruit and nut trees in degraded communal areas outside the pilots. Achieving this output includes organizing gender inclusive workshops to discuss with the stakeholders, including local governments and local communities, men and women farmers, opportunities for the efficient use of land resources using fruit and nut tree varietal diversity, establishing demonstration plots, cross site visits of local communities, communities working with government to develop local restoration plans, and diversity fairs with fruit and nut tree planting materials recommended for restoration. The planned Output 2.1.1, which aims to ensure sustainable land and forest restoration through the utilization of local fruit and nut trees in degraded communal areas outside the pilot sites in Armenia, will be effectively delivered through a comprehensive set of activities. Firstly, gender-inclusive workshops will be organized to facilitate discussions among stakeholders, including local governments, local communities, and both male and female farmers. These workshops will serve as platforms to explore opportunities for the efficient utilization of land resources by leveraging the varietal diversity of fruit and nut trees. Subsequently, demonstration plots will be established in selected sites identified during the Pre-Project Phase (PPG), showcasing sustainable land and forest restoration practices using local fruit and nut trees. These plots will serve as tangible examples of effective restoration methods, providing inspiration and guidance to local communities. To further disseminate knowledge and encourage adoption of best practices, visits to the demonstration plots will be organized for local communities outside the pilot areas. These visits will allow for the sharing of experiences and insights on land and forest restoration using local fruit and nut tree species. Moreover, assistance will be provided to local governments in the development of restoration plans for degraded communal areas. These plans will

leverage the specific and intra-specific diversity of local fruit and nut trees, tailoring restoration efforts to the needs and resources of each community. Lastly, Diversity Fairs will be organized, showcasing planting materials of recommended fruit and nut tree varieties for use in the restoration of degraded lands and forests. These fairs will serve as opportunities for communities to access high-quality planting materials and gain valuable insights into restoration options. By systematically carrying out these activities, Output 2.1.1 will be effectively achieved, enabling local governments and communities to implement sustainable land and forest restoration projects utilizing the wide variety of indigenous fruit and nut tree species found in Armenia.

Output 2.1.2. Drought-resistant indigenous fruit and nut trees species and varieties are identified and used for restoration of degraded lands and deforested ecosystems. Activities include identifying intra-specific diversity of indigenous fruit and nut tree crops for their tolerance to drought from farmer knowledge and previous research results, establishment of mother tree orchards root stock for wild fruit and nuts and community nurseries for cultivated varieties for which at least 50% are management by women, multiplication of quality seeds and sapling, and the establishment of two green houses for producing planting material of fruit and nut tree crops with closed root systems (in containers) together with technical manuals. Output 2.1.2, which focuses on the identification and utilization of drought-resistant local fruit and nut tree species and varieties for the restoration of degraded lands and deforested ecosystems, will be delivered through the following activities. Initially, efforts will be directed towards identifying intra-specific diversity of local fruit and nut tree crops known for their tolerance to drought. This identification process will draw upon farmer knowledge and previous research results, ensuring that the selected species and varieties are well-suited for land and forest restoration in the project sites. To enhance the effectiveness of the identification process, international tools such as 'Diversity for Restoration (D4R)' for forest lands and DATAR for degraded agricultural lands will be adapted to local needs and applied. These tools provide systematic approaches for assessing and selecting plant species and varieties based on their suitability for restoration purposes. Furthermore, mother tree collections will be established for cultivated fruit and nut crops, along with seed banks for wild fruit and nut tree species. These collections and banks will serve as vital repositories of genetic diversity, ensuring a sustainable supply of quality and diverse planting material for land and forest restoration efforts. Protocols for seed management will be developed to govern the operations of the seed banks and mother tree collections, ensuring the preservation and maintenance of genetic integrity. Additionally, an analysis of the existing planting material flow network will be conducted, identifying gaps in the quality control system and engaging key actors to address these deficiencies. To supplement the supply of planting material, seed harvesting plots will be established in forest areas, focusing on producing quality rootstock and seedling material. Technical manuals and guidelines will be developed to facilitate the collection of wild fruit and nut tree species seeds, ensuring the production of high-quality planting material. Multiplication systems for planting materials will be established, involving collaboration with communities, plant breeders from research institutes, and informal breeders to maximize diversity and quality standards. Additionally, greenhouses will be set up for producing planting material with closed root systems, further enhancing the quality and viability of the material.

Output 2.1.3. Water and soil-saving technologies surrounding fruit and nut trees are used in land and forest ecosystem restoration activities. Achieving this output includes identify water and soil saving technologies best adapted for land and forest restoration in the project sites based on local and international knowledge, establishing demonstration plots, organizing visits of farmers, forest dwellers and local communities ensuring that at least 50% or participants are female, and develop manuals and guidelines on water and soil saving technologies for fruit and nut trees. Output 2.1.3, centered on the application of water and soil conservation technologies around fruit and nut trees in land and forest ecosystem restoration efforts, will be efficiently accomplished through the following activities. Initially, efforts will be made to identify water and soil-saving technologies best suited for land and forest restoration in the project sites. This identification process will draw upon both local knowledge and international best practices, ensuring that the selected technologies are well-adapted to the specific environmental conditions of the project areas. Subsequently, plots will be established for the demonstration of these water and soil-saving technologies in action within the project sites.

These demonstration plots will showcase practical examples of how these technologies can be effectively applied in land and forest restoration activities. To facilitate knowledge transfer and capacity building, visits will be organized for farmers, local communities, forestry officers, and extension services to the demonstration plots. These visits will provide stakeholders with firsthand exposure to the application of water and soil-saving technologies, fostering learning and adoption of these practices. Furthermore, manuals and guidelines will be developed on water and soil-saving technologies for land and forest restoration. These resources will serve as valuable reference materials for farmers, local communities, forestry officers, and extension services, providing step-by-step guidance on the implementation of these technologies in restoration efforts.

Output 2.2.1. A National database and information system on indigenous fruit and nut tree species recommended for use in land and forest restoration practices is established and available for use by public organizations, private sector and local communities. Achieve this output includes establishing an Information Sharing System on planting material sources, market information and capacity building opportunities at the Biodiversity and Climate Adaptation Knowledge Center, including Establish National a database on indigenous fruit and nut tree species for restoration. Output 2.2.1 will be delivered through the following activities. To begin, an in-depth analysis of the existing information network will be conducted. This analysis will pinpoint key sources of information on intra-specific fruit and nut tree species biodiversity, planting material sources, technologies, practices, capacity building, and market information necessary for effective land and forest restoration. Following the analysis, an Information Sharing System will be set up within Biodiversity and Climate Adaptation Knowledge Centers. This system will serve as a centralized platform for sharing critical information on planting material sources, market trends, and capacity building opportunities, ensuring accessibility and dissemination of valuable knowledge. In parallel, a national database specifically focusing on local fruit and nut tree species recommended for land and forest restoration will be established. This database will compile comprehensive information on recommended species, including their characteristics, ecological suitability, and management practices. Furthermore, protocols will be developed and implemented to ensure free access to the National database and Information Sharing System for public organizations, the private sector, and local communities. These protocols will promote inclusivity and transparency, enabling stakeholders from various sectors to benefit from the wealth of information available. Through the systematic execution of these activities, Output 2.2.1 will provide easy access to essential information, this initiative will facilitate informed decision-making and enhance the effectiveness of restoration practices nationwide.

Output 2.2.2. Climate change vulnerability and land degradation maps, maps of vulnerable zones and mining sites developed and available for making decisions on combating desertification, biodiversity conservation, climate change mitigation and adaptation. Actions include analyzing national and provincial reports on land degradation and climate change, mining and open and closed mining dams and identify missing data to create maps for the project sites, develop maps with areas vulnerable for land and forest degradation, biodiversity loss, climate change affects, for making decisions on combating desertification, biodiversity conservation, climate change mitigation and adaptation. Initially, a thorough analysis of national and provincial reports on land degradation, climate change, and mining activities will be conducted under Output 2.2.2. This analysis will identify missing data necessary for creating comprehensive maps for the project sites, ensuring that all relevant information is accounted for. Subsequently, efforts will be made to collect the missing data identified during the analysis phase. This will involve gathering information on degraded lands and forests, areas vulnerable to climate change impacts, and locations of mining sites that could potentially lead to land and forest degradation and biodiversity loss. Based on the collected data, maps will be developed highlighting areas vulnerable to land and forest degradation, biodiversity loss, and climate change impacts. These maps will provide valuable insights for decision-making processes related to combating desertification, conserving biodiversity, and implementing climate change mitigation and adaptation measures. Finally, the developed maps will be made available through an Information Exchange System, ensuring accessibility to stakeholders involved in land and forest management. By providing access to this valuable information,

decision-makers will be empowered to take proactive measures to address land degradation, conserve biodiversity, and mitigate the impacts of climate change effectively. By implementing these activities, essential maps for decision-making on land and forest management will be available, which will contribute to efforts to combat desertification, conserve biodiversity, and enhance climate change resilience.

Component 3: Capacity building at all levels to assess manage and benefit from the use of fruit and nut tree diversity.

Output 3.1.1. Gender and age responsive national capacity building strategy for all stakeholder groups dealing with agrobiodiversity conservation, land and forest ecosystems management. Activities to achieve this output include developing gender and age responsive national capacity building strategy based on training needs assessment in all project sites, organizing gender and age inclusive workshops, and conducting gender and age inclusive trainings, exchange visits and other capacity building activities for all stakeholder groups (farmers, local communities, NGOs, extensions workers, policy and decisions makers, etc.). Firstly, a comprehensive gender and youth inclusive capacity building strategy will be developed, informed by a thorough assessment of training needs across all project sites. This strategy will be tailored to address the specific requirements and challenges faced by different stakeholder groups. Subsequently, workshops will be organized with various stakeholder groups to discuss and refine the gender and youth inclusive national capacity building strategy. These workshops will provide a platform for collaborative input and ensure that the strategy reflects the diverse perspectives and needs of all stakeholders. Once finalized, the national capacity building strategy will be disseminated among relevant stakeholders, ensuring widespread awareness and buy-in. This dissemination phase is crucial for garnering support and engagement from all sectors involved in agrobiodiversity conservation and ecosystem management. Following the development and dissemination of the strategy, gender and youth inclusive trainings, exchange visits, and other capacity building activities will be conducted for all stakeholder groups. These activities will focus on imparting knowledge and skills related to the sustainable management of local fruit and nut tree genetic resources, with a particular emphasis on their role in land and forest restoration and ecosystem service health. By equipping stakeholders with the necessary knowledge and skills, this initiative will contribute to more effective and sustainable practices in these critical areas.

Output 3.1.2. Age and gender equitable training programs established for forestry and city gardening workers developed and implemented on resilience and adaptation practices with use of fruit and nut tree biodiversity. Review gaps and conduct gender and age inclusive training for forestry and city gardening workers, organizing round tables and exchange visits with forestry and city gardening workers (ensuring participation of women and youth) to raise their awareness on the role of indigenous wild fruit and nut tree species in providing ecosystem services and land/forest restoration and on Quality Standards for collection of seeds of wild fruit and nut tree species. Output 3.1.2, focused on establishing youth and gender inclusive training programs for forestry and city gardening workers on resilience and adaptation practices using fruit and nut tree biodiversity, will be effectively delivered through a structured series of activities. Initially, existing training programs for forestry and city gardening workers will be reviewed to identify gaps related to resilience and adaptation practices, as well as gender and youth inclusion. This review will serve as the foundation for developing more comprehensive and inclusive training programs. Following the review, gender and youth inclusive training programs and materials will be developed based on the national capacity building strategy. These programs will be tailored to address the specific needs and challenges faced by forestry and city gardening workers, with a focus on utilizing local fruit and nut tree biodiversity for resilience and adaptation practices. Subsequently, round tables will be organized with forestry and city gardening workers, ensuring the active participation of women and youth. These round tables will raise awareness among workers about the important role of local wild fruit and nut tree species in providing ecosystem services and facilitating land and forest restoration. Furthermore, gender and youth inclusive training workshops and courses will be conducted for forestry and city gardening workers in each project site. These training sessions will provide hands-on experience and practical knowledge on using quality standards for the

collection of seeds of wild fruit and nut tree species, ensuring the sustainability of planting material. Additionally, forestry and city gardening workers will be trained on growing planting material of fruit and nut tree species with closed root systems, enhancing their capacity to propagate and maintain these valuable species. Finally, exchange visits to demonstration plots of forestry and city gardening workers will be organized, allowing for the sharing of land and forest restoration practices based on fruit and nut tree biodiversity use among different project sites. Through these activities, inclusive training programs for forestry and city gardening workers will equip them with the knowledge and skills needed to effectively utilize fruit and nut tree biodiversity for resilience and adaptation in their respective fields.

Output 3.1.3. High Schools, technical colleges, and universities curriculum include courses and club activities to develop and use knowledge and leadership skills in agrobiodiversity conservation, land and ecosystem restoration activities is enhanced through capacity building activities of the project. Achieving this output includes reviewing existing curriculum for High Schools, technical colleges and universities, developing curriculum for universities and course materials for high schools, submit Course materials to academic council of the technical college and university for approval, establish Clubs of Young Foresters/Horticulturists and equip them with tools and training manuals required for Clubs running, of which at least 50% are lead by girls, and establish school orchards where school students learn about indigenous fruit and nut tree species biodiversity and technologies on their management and conservation. Output 3.1.3 aims to enhance the inclusion of courses and club activities in the curriculum of high schools, technical colleges, and universities to develop knowledge and leadership skills in agrobiodiversity conservation, land, and ecosystem restoration activities. This objective will be achieved through a series of targeted activities. Initially, the existing curriculum for high schools, technical colleges, and universities will be reviewed to identify gaps related to agrobiodiversity conservation, land and forest restoration, and the ecosystem services provided by local agrobiodiversity, with a focus on fruit and nut tree species. Following the review, curriculum on land and forest restoration incorporating the use of local fruit and nut tree species will be developed specifically for high schools. Additionally, course materials on agrobiodiversity conservation, land and forest restoration, and ecosystem services provided by local fruit and nut tree species will be developed for inclusion in the curriculum of colleges and universities. Once developed, the course materials will be submitted to the academic councils of the technical colleges and universities for approval, ensuring their integration into the formal education system. Furthermore, high schools in the project sites will be selected for the establishment of Clubs of Young Foresters/Horticulturists. These clubs will be equipped with the necessary tools and training manuals to facilitate their activities. Trainings will be organized at the Clubs of Young Foresters/Horticulturists, providing students with practical knowledge and skills related to agrobiodiversity conservation, land and forest restoration, and the management and conservation of local fruit and nut tree species.

Additionally, school orchards will be established where students can learn about local fruit and nut tree species biodiversity and the technologies involved in their management and conservation, further enhancing their understanding and appreciation of these valuable resources.

Output 3.2.1. Farmers and local communities in the project sites have knowledge and skills in value adding, ecosystem services marketing through trainings, round tables and other project activities on building capacity and raising awareness. The activity includes the development and dissemination of public awareness material, developing training manuals on adding value technologies and ecosystem services marketing, and organize gender and age inclusive round tables on public awareness for value addition and marketing. To begin, public awareness materials will be developed and disseminated through various channels such as fliers, posters, television interviews, social media, and YouTube videos within Output 3.2.1. These materials will highlight the importance of value adding to local fruit and nut tree products and ecosystem services marketing, particularly in the context of eco- and agro-tourism. Additionally, training manuals on value adding technologies and ecosystem services marketing, focusing on eco- and agro-tourism, will be developed for use by local communities and farmers. These manuals will serve as practical resources, providing step-by-

step guidance on implementing value adding practices and marketing strategies. Furthermore, gender and youth inclusive round tables will be organized to raise awareness among farmers and local communities on value adding technologies and marketing ecosystem services. These round tables will facilitate discussions and knowledge sharing, ensuring that all stakeholders are informed and engaged in the process. Moreover, gender and youth inclusive round tables will be conducted to explore opportunities for the development of agro and eco-tourism businesses in forest and agricultural lands restored with the use of local fruit and nut tree species. These discussions will identify potential avenues for economic development and empowerment within the local communities.

Output 3.2.2. Technologies on value addition and creation of new products, and eco- and agro-tourism based on local fruit and nut tree species promoted and used to benefit local communities. This output is achieved through conducting participatory market chain analysis to study the demand for indigenous fruit and nut tree crop products, selecting with men and woman farmers most cost-effective fruits and berries processing technologies available at the local market, developing jointly with commercial companies innovative methods to create and market local fruit and nut crops products which contain their varietal diversity, and training local communities (with special attention to women headed households and youth) on development of the business plans for establishment and running eco-and agro-tourism business in the areas restored with use of indigenous fruit and nut tree crops. Initially, a participatory market chain analysis will be conducted to comprehensively study the demand for products derived from local fruit and nut tree crops under Output 3.2.2. This analysis will provide valuable insights into market trends and consumer preferences, guiding subsequent decisions on value addition and product development. Following the analysis, the most cost-effective processing technologies for fruits and berries available in the local market will be selected. These technologies will be instrumental in efficiently processing and adding value to local fruit and nut tree crop products. Additionally, sites will be selected and support provided for the establishment of fruits, berries, and nuts processing shops within the communities. These facilities will serve as hubs for value addition activities, creating employment opportunities and enhancing economic prosperity at the local level. Furthermore, gender-inclusive training sessions will be organized for farmers and local community representatives, employing a 'learning-by-doing' approach in the production of value-added fruit and nut crop products. These trainings will empower participants with practical skills and knowledge, enabling them to diversify their product offerings and increase their income potential. Moreover, innovative methods will be developed and applied jointly with commercial companies to create and market local fruit and nut crop products that showcase their varietal diversity. For example, packages containing a variety of fruits and nuts will be created and sold, highlighting the richness of local biodiversity. Lastly, local communities, with a focus on women-headed households and youth, will be trained on the development of business plans for establishing and operating eco- and agro-tourism ventures in areas restored with the use of local fruit and nut tree crops. This training will empower communities to leverage their natural resources for sustainable tourism development, fostering economic growth and community resilience.

The project is expected to generate global environmental benefits through improved management of landscapes, restoration of degraded landscapes, and conservation of globally significant fruit and nut tree biodiversity. The project will achieve these global environmental benefits through the restoration of an area over 10,000 hectares of degraded lands in Armenia. This achievement will contribute both towards GEF 8 Conserving and Sustainable using Biodiversity Core Indicator 4 — Area of landscapes under improved practices target of 108 million hectares; excluding protected areas and GEF 8 Sustainably Managing and Restoring Lands Core Indicator 3 — 12 million hectares of land that will be placed under restoration.^{[1]⁴²}

The relevant stakeholders in the project include government agencies responsible for environmental management and agriculture, local cooperatives and forest branches, local communities, in particularly woman and youth, private sector actors, academic (research and education) institutions, and civil society organizations.

The roles of each stakeholder contributing to the implementation of the project, and how each stakeholder will benefit and ensure that the global environmental benefits of land restoration, ecosystems services, and agrobiodiversity conservation will endure, is detailed in table below (Appendix 5: Attachment 5c: Stakeholder Engagement Plan) and their specific role in each activity is detailed in Appendix 8: Detailed Workplan.

PROJECT PARTNERS AND COLLABORATORS	
<i>Stakeholders</i>	<i>Expected Responsibilities</i>
National Governmental Agencies	
Ministry of Environment (ME)	<p>The ME will be the main Executing Agency of the project. ME is the GEF Political and Operational Focal Point Agency. ME is the GEF Focal Point Agency for UNCCD, UNFCCC and CBD Central body of executive power that elaborates and implements the state policy in the field of environmental protection and rational use of natural resources. Oversees project development and overall implementation plan and coordinates with other Ministries and project proponents. ME will play a crucial role in guiding the elaboration of policy and regulatory instruments under the planned project. ME will ensure youth and gender sensitive project implementation.</p> <p>Components 1,2 and 3.</p>
GEF National Focal Point	<p>GEF focal point agency, has the responsibility for general coordination of GEF funded projects and leading works to promote implementation of climate change mitigation/adaptation policies and measures and green economy.</p>
Ministry of Territorial Administration and Infrastructure (MTAI)	<p>MTAI has the mandate for oversight of modification and modernization of the country's water supply and sanitation and road networks as well as coordination and monitoring of spatial planning in Armenia. MTAI also sets infrastructure development policies for Armenia. MTAI manages Local Government Administration Branches and local self-governing bodies (communities) including self-governing body of Yerevan Municipality. The MTAI is also the central body of executive authority that develops and implements the policy of the Government of the Republic of Armenia in the field of territorial administration and infrastructure management. In close collaboration with ME, the MTAI will support project implementation in project regions, participate in decision making process and development of public awareness materials. Through its regional government offices participates in project management and regional decision-making process. ME will ensure youth and gender sensitive project implementation.</p> <p>Components 1, 2 and 3.</p>

<p>Ministry of Economy (MoE) of the Republic of Armenia</p>	<p>In the Republic of Armenia, the main responsibilities of agricultural development lie with the Ministry of Economy. The Ministry of Economy of the Republic of Armenia with the current structure was formed as a result of the unification of the Ministry of Economic Development and Investments of the Republic of Armenia and the Ministry of Agriculture. The Ministry will be consulted concerning all project actions related to land and agrobiodiversity restoration and expected to contribute on activity formulation and involved in supporting capacity building activities and on the ground restoration with communities, value adding, and promoting business plans for agritourism. ME will ensures youth and gender sensitive project implementation.</p> <p>Components 2 and 3.</p>
<p>“HAYANTAR” (ArmForest) State Non-Commercial Organization of the Ministry of Environment</p>	<p>Ensures the sustainable use and restoration, reproduction, use, inventory, management of forests, increase of forest productivity and fertility of forestlands, sustainable use of forest resources. HAYANTAR will carry out the procurement, growing and sale of planting material (seedlings, seedlings), support processing and sale of biological resources collected as a result, agricultural land production, processing and sale of food, provision of services related to leisure and tourism, consultancy and provision of information. Ensure the participation in project activities of its 17 forestry branches in forest restoration activities. HAYANTAR will participate in the establishment of greenhouses, fruit and nut tree collection, fruit and nut tree processing centers and tree/seedlings planting activities, value addition and agrotourism, and development of related policy recommendations.</p> <p>Components 1,2, and 3</p>
<p>Eco-Patrol Services of the Ministry of Environment</p>	<p>The Eco Patrol Services of the ME takes care of land safeguarding and from illegal logging and forest fire. During the project, it will support forest protection and restoration measures in close collaboration with other government and non-government partners.</p> <p>Components 1,2 and 3.</p>
<p>Regional Government and Municipalities</p>	
<p>Provincial Government Administration Offices of Lori and Tavush Provinces (provinces)</p>	<p>Provincial government administration offices are responsible for implementation of regional policies of the government of the Republic of Armenia and coordinate activities of territorial services of executive bodies between local citizens and community level authorities, on the one hand, and the central government, on the other. Heads of provincial government administration offices are nominated by the prime minister, subject to approval by the parliament.</p>

	<p>Provincial Government Administration Offices of Lori and Tavush Regions (provinces) will assist the project in communication with local communities in the project sites, development and implementation of project activities on restoration of degraded lands and ecosystems in consultation and collaboration with local communities, promoting policies on use of local agrobiodiversity in provincial and community plans on sustainable land and forest management, engagement of local communities in sustainable land and forest ecosystems restoration and protection. They will participate and support as well as engage local colleges, universities and schools in public awareness campaigns of the project. Involvement of provincial government administration offices in Lori and Tavush regions (provinces) in project planning and implementation will ensure support of the project from the government side, its success and sustainability.</p> <p>Components 2 and 3.</p>
<p>Stepanavan Municipality Vanadzor Municipality Gyumri Municipality Ijevan Municipality Sevan Municipality Khoy Enlarged Community Kapan Municipality</p>	<p>Amongst other municipal services that are being provided, functions of the municipalities that are relevant to this project and can be considered as project beneficiaries, since they are nearest cities to project pilot sites Mayors of Municipalities are elected bodies. Region will be main partners and key decision makers in all stages of the project development.</p> <p>Participation in the in the process of trees/seedlings planting activities on communal lands and implementation of Public Awareness activities.</p> <p>Components 2 and 3.</p>
<p>Yerevan Municipality</p>	<p>Two project sites are in the administrative borders of Yerevan City Mayor of the Municipality is elected body but since Yerevan City has also a status of province, this municipality as itself is under the structure of Ministry of Territorial Administration and Infrastructure. Selected Forest Areas are under the management of ‘‘HAYANTAR’’ SNCO.</p> <p>Provide permits and linkages to communities for land and forest restoration activities proposed in forest areas within the borders of Yerevan City. Participation in training and public awareness activities</p> <p>Components 1,2, 3.</p>
Academic/Education/ Research Institutes	
<p>Institute of Botany after A. Takhtajyan, NAS RA with its Yerevan Botanical Garden and Vanadzor Botanical Garden located in Lori region and Botanical Garden of Sevan City located in Gegharkunik region</p>	<p>Scientific institution, which manages Yerevan, Sevan and Vanadzor Botanical Gardens with over 1650 different species and cultivars. The Institute implements scientific studies in the fields of biodiversity, taxonomy, geobotany, ecology, paleobotany, plant introduction, conservation of genetic resources, etc.</p>

	<p>The IB will host the Project: Center for Biodiversity and Climate Adaptation Knowledge. They will support the project in providing scientific and technical inputs and collaboration in research and in the development of methods and approaches. Will be invited to participate in project consultations, seminars, conferences and workshops and to assist with development and delivery of training. Will support provision of additional diversity to project sites where needed. Collaborate in the development of outreach materials and the dissemination and up-scaling of Project outputs through peer reviewed scientific publications. Will contribute to identification of major knowledge gaps and through the development of research proposals.</p> <p>Components 1, 2 and 3.</p>
<p><i>High Schools in:</i></p> <p>Ijevan and Noyemberyan Cities of Tavush Region;</p> <p>Vanadzor and Alaverdi Cities of Lori Region;</p> <p>Gyumri City of Shirak Region;</p> <p>Sevan City of Gegharkunik Region;</p> <p>Sisyan City of Syunik Region;</p>	<p>High schools are educational organizations with a purpose for preparing youth for the future. High school faculty and administrators will be consulted for curriculum development to include courses and club activities to develop and use knowledge and leadership skills in agrobiodiversity conservation, land and ecosystem restoration activities. Support training of young horticulturalists and establishment of Clubs of Young Foresters/Horticulturists and equip them with tools and training manuals required for Clubs running.</p> <p>Components 2 and 3.</p>
<p><i>Universities:</i></p> <p>Vanadzor and Sisian City branches of the Armenian National Agrarian University based in Lori and Syunik regions.</p> <p>Ijevan Branch of Yerevan State University (YSU Ijevan branch) based in Tavush region</p> <p>Gavar State University based in Gavar City of Gegharkunik region</p> <p>M. Nalbandyan State University of Shirak based in Gyumri City of Shirak region</p>	<p>Universities are Educational Scientific Institution with a purpose for preparing specialists in multidisciplinary sectors from which project focuses on the following four departments: 1. Tourism, 2. Environment and Environmental Use, 3. Biology and 4. Geography. Universities will support the project in providing scientific and technical inputs and collaboration in research and in the development of methods and approaches. Will be invited to participate in project consultations, seminars, conferences and workshops and to assist with development and delivery of training. They will support the provision of additional diversity to project sites where needed. Collaborate in the development of outreach materials and the dissemination and up-scaling of project outputs through peer reviewed scientific publications. They will contribute to the identification of major knowledge gaps and through the development of research proposals.</p> <p>Engagement in the following studies:</p> <ul style="list-style-type: none"> · Soil origin, classification, geographic prevalence studies, · Agro-industrial, soil science and agrochemical soil mapping, · Micro and macro food element assurance studies of indicators of fertility of land resources, · Studies on soil fertility conservation and ensuring model of optimal reproduction, crop fertilization systems, acquiring

	<p>new fertilizers, experimenting and explorations of fertilizing indicators,</p> <ul style="list-style-type: none"> · Study of soil erosion and anti-erosion measures development, Development of new technologies of salt-affected and saline sodic soils melioration, · Contaminated Land Investigation, · Developing new technologies by eco-biological ways to create virus free plant materials. <p>Component 2 and 3</p>
Local Cooperatives and Forest Branches	
Tavush Province, “Arfood” Agricultural Production Cooperative	<p>Established in 2018 within framework of “Tavush Region Integrated and Balanced Economic Development” project, co-funded by European Union and RA Government. The cooperative is located in Getahovit village. It aims to develop natural dried fruit production in Tavush region. The cooperative produces dried apricots, peaches, plums, persimmons, pears, etc. Beneficiaries of “Arfood” cooperative are more than 100 horticultural farms in Berd, Noyemberyan and Ijevan regions, who sell the raw material to the cooperative. The cooperative will support value addition activities from the use of fruit and nut trees.</p> <p>Components 2 and 3.</p>
Agronomists of Municipalities and communities engaged in urban greening activities	<p>Agronomists of the Municipalities will be responsible for planning urban tree planting activities and organizing them as well as being responsible of care and sanitary cuttings of them.</p> <p>Components 2 and 3.</p>
17 local forestry branches of HAYANTAR	<p>Forestry branches will carry out forest restoration activities including planting forests, growing seedlings in green housed and in open nursery lands; forest care including sanitarian tree cutting and avia spraying care, as well as identification of new forest areas, training, and capacity building with communities.</p> <p>Component 2 and 3.</p>
NGOs	
WWF-Armenia	<p>WWF-Armenia in collaboration with ME will act as a co-executing agency. WWF-Armenia will manage the project to ensure that project meets its objectives and achieves expected outcomes. WWF-Armenia has undergone UNDP Partner Capacity Assessment (PCAT) including Harmonized Approach to Cash Transfers (HACT) Micro-Assessment). WWF will prepare letters of agreements with The ME for disbursing funds according to the rules and procedures of UNEP/GEF and WWF. WWF will provide administrative support to the PMU and project partners; Be responsible for the recruitment of international and national consultants who will provide technical</p>

	<p>support to the project; Participate in Inception meeting, Technical Advisory Committee (TAC), Project Steering Committee (PSC) meetings, midterm and final review of the project.</p> <p>Component 2 and 3.</p>
<p>“Armenian Forests” Environmental NGO</p>	<p>“Armenian Forests” Environmental NGO is engaged in promotion of sustainable forest development, forest restoration and monitoring. The NGO works closely with local communities and forest dwellers on their involvement in sustainable management of forest resources, planting trees in deforested areas. It organizes regular training for local communities and forest dwellers on technologies of sustainable management of wood and non-wood forest resources and forest ecosystems.</p> <p>Providing data related to fruit and nut tree species, soils, climate change, water needs and methods of irrigation and policy for Components 2 and 3. Will be engaged in sharing their experience and participating in the processes on drafting agricultural and forest related policies and legal acts, drafting PA materials and organization PA campaigns, grafting guidelines and standards on forest and land remediation and care “Armenian Forests” Environmental NGO will be involved in data collection and development of plans on forest ecosystems restoration and monitoring in the project sites, round tables with local communities on discussion of the land and forest ecosystems restoration plans developed by the project, finalization of these plans based on comments received from local communities and other stakeholders.</p> <p>During drafting agricultural and forest related policies and legal acts, as well as drafting PA materials “Armenian Forests”, environmental NGO from each project region will engage women, youth representatives as well as representatives of national minority population from project regions.</p> <p>Component 2 and 3.</p>
<p>“My Forest Armenia” NGO</p>	<p>“My Forest Armenia” NGO is aiming by empowering local communities and under the guidance of scientists and forest experts sustainably increase forest coverage, thus decreasing carbon in the atmosphere, combatting soil erosion and desertification; and preserving biodiversity through the use of endemic tree species. The NGO implements numerous projects on reforestation and afforestation, establishment of forest tree nurseries, supporting forest trees seed supply systems.</p> <p>They will participate in the identification of new areas of land restoration and planting trees in communal and forestland areas. They will be engaged in training local population on the sustainable use especially NWFPs of forest and tree resources and land restoration as well as activities and capacity building and public awareness. “My Forest Armenia” NGO will deal with</p>

	<p>engagement of local communities in land and forest restoration activities of the project, building capacity of local communities in tree nursery management, development of community-based land and forest restoration plans.</p> <p>Components 1, 2 and 3.</p>
<p>“Armenia Tree Project” (ATP) NGO</p>	<p>The mission of ATP is to promote Armenia's socioeconomic development through reforestation, the use of trees to promote economic self-sufficiency, improving the Armenian standard of living while protecting the environment. Its urban and community tree planting programs work with cities and local neighborhoods to replant in public spaces such as in parks, school grounds and other public properties. In rural areas, farmers grow seedlings in their backyards for tree planting projects in northern Armenia Assist local communities in planting and using trees to improve their livelihoods and protect the global environment.</p> <p>ATP will provide data related to the tree species to be used and soil conditions as well as enhance local communities to be involved in project planting activities and new knowledge dissemination for Components 2 and 3. ATP will be involved in land restoration and reforestation activities of the project (support local communities in tree propagation, establishment and running tree nurseries, community green zones establishment), forest planting and development of strategy on sustainable use of forest resources, education and awareness.</p> <p>Components 2 and 3.</p>
<p>SHEN NGO</p>	<p>SHEN NGO aims to promote the social and economic development and empowerment of remote and vulnerable communities. SHEN NGO has significant experience in addressing the gender dimensions of agricultural livelihoods in rural Armenia and implements projects in almost all marzes (administrative provinces) of Armenia ensuring 30 percent involvement of female beneficiaries as minimum.</p> <p>Planning for gender preferences, harvesting, identification of new communal available forest areas for forest restoration. They will participate in identification of new areas of planting trees and be engaged in training local population on the sustainable use especially NWFPs of forest and tree resources. The NGO will participate in the development of Forest Subtractions on harvesting and production of Forest Non-Wood products.</p> <p>Components 2 and 3.</p>
<p>REC Caucasus Armenia Branch</p>	<p>REC Caucasus has been established:</p> <ol style="list-style-type: none"> 1. to serve environmental stakeholders within and outside the South Caucasus region: national and local governments, NGOs, media, business, local communities, science, international community, teachers, students, children, etc.

	<p>2. to contribute to the improvement of the Caucasus environment by facilitating introduction and implementation of global, European, regional and national environmental policies.</p> <p>3. to provide a gateway for dialogue, networking and cooperation among environmental stakeholders and partners at global, regional, national and local levels.</p> <p>Upon request from the national and local government administration offices, local self-government offices, IB, ANAU and other project partners, will provide technical support in organizing meetings, seminars and training workshops. It will participate in the development of harvesting standards and their submission to the ME.</p>
Private Sector	
<p>“Spayka” LLC, “Green Farmer” LLC</p>	<p>Private companies holding greenhouses and nurseries and specialized in breeding fruit and nut trees as well as other agricultural biodiversity varieties demanded by national markets.</p> <p>Will be engaged in sharing their experience and methods of harvesting local seeds, growing seedlings and planting materials as well as processing.</p> <p>Component 2 and 3.</p>
Farmers and Forest Dwellers	
<p>Farmers and Local communities</p>	<p>Farmers and local communities are the main beneficiaries of the project. They will provide their lands for establishment of mother orchards and tree nurseries, plots for demonstration of technologies for value adding and use of local fruit and nut tree biodiversity in land restoration. They will participate with their products in farmers’ fairs. They will test and validate practices for quality planting material production, share their knowledge and skills in management of local fruit and nut tree biodiversity, ensure that information system established by the project are adapted to their local needs for land restoration.</p> <p>Component 1, 2 and 3.</p>
<p>Forest Dwellers</p>	<p>Forest Dwellers are the main beneficiaries of the project. They will participate in establishment of seed plots for collection of quality seeds of wild fruit and nut trees species, establishment of tree nurseries for growing seedlings of wild fruit and nut tree species for further use in communal forest restoration initiatives. They will also participate in establishment and management of greenhouses in growing seedlings of wild fruit and nut tree species in containers. This technology will help to increase survival of planted seedlings in the dry deforested areas. Forest dwellers will provide their knowledge in the development of Harvesting Standards of wild fruits and nuts and Quality Standards of collection of seeds of wild fruit and nut tree species. They will participate with products of wild fruit and nut tree species in farmers’ fairs. They will share their knowledge and</p>

	<p>skills in management of wild fruit and nut tree biodiversity, ensure that information system established by the project are adapted to their local needs for communal forest restoration.</p> <p>Component 1, 2 and 3.</p>
Vulnerable Groups	
Youth/Children	<p>Youth will be involved in clubs of Young Foresters/Horticulturists established and function in selected project sites. They be encouraged to help in curriculum development and practical exercises in their schools to use local fruit and nut tree biodiversity land and forest restoration. Youth will also be trained in seed and sapling multiplications and reforestation activities, and in business planning for adding value and agrotourism activities. By the end of the project, it is envisioned that youth will be taking part in local decision-making forum dealing with enhancing the benefits from local fruit and nut tree diversity.</p> <p>Components 2 and 3.</p>
Women	<p>Women will actively be involved in all project activities, with quotas described in the Gender Action Plan (Appendix 5: Attachment 5a) A gender focal point will be hired by the project and a woman and youth expert for each project site. Women will participate in gender inclusive workshop with national and regional level policy makers (governments) to present and discuss the developed proposals and maps on land and forest restoration, in training activities for information systems, harvesting standards, quality seed production, management of community nurseries, management of mother tree plots, value addition, and agro-tourism activities.</p> <p>Components 1, 2, and 3.</p>
International Organizations	
United Nations Environmental Programme (UNEP)	<p>UNEP will be the GEF Implementing Agency (IA) for the project. A task manager will be appointed to oversee the implementation of the project, assisted by a support staff. UNEP will provide overall coordination of the activities of national, and any international partners; technical and scientific expertise and enhancement of regional and international cooperation. UNEP will be responsible for the overall project supervision to ensure consistency with GEF and UNEP policies and procedures and will provide guidance on linkages with related UNEP and GEF-funded activities. UNEP will also monitor implementation of the activities undertaken during the execution of the project and will provide the overall coordination and ensure that the project is in line with the UNEP Medium-Term Strategy and its Programme of Work (PoW), as approved by the UNEP Governing Council.</p>
The Raffaella Foundation (RF)	<p>The RF will provide technical leadership and overall technical support for the planning and implementing of project activities in</p>

	<p>close collaboration with the Ministry of Environment and WWF. The RF will lead the Technical Advisory Committee (TAC) and serve as a member of the Project Steering Committee. The RF will support the Project Management Unit (PMU) and project partners to develop the Armenian national and local knowledge management system to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity; The RF will also act to ensure gender and youth equitable training and capacity building and monitoring and evaluation (M&E) and monitor the availability of indigenous cultivated fruit and nut tree diversity to meet communities social environmental constraints for land restoration and will communicate project results and good practices the global audience through its communication platforms.</p> <p>Components 1, 2, and 3.</p>
BMMBplus GmbH	<p>BMMBplus GmbH is a private company supporting project management, especially in the field of technology, education and environmental protection, export and import, trade, as well as the production and development of goods of various kinds, in particular building materials, machinery, equipment, tools, solar modules, LED products and products in the field of renewable energies. Permission-free consulting services and technology transfer. Its role in the project will be providing financing to the Project in Armenia for procurement of modern forest protection technologies and greenhouses, as well as equipment for fruit and nuts collection and processing.</p>

Knowledge management is a core of the proposed project and all its components include outputs and activities on knowledge generation, management and exchange in thematic areas of conservation of biodiversity of fruit and nut tree species and its mainstreaming in forest and land restoration actions. The project will use existing knowledge gained within the previous GEF project implemented by GEF agencies including UNEP/GEF project “In-situ conservation of crop wild relatives through enhanced information management and field application” (2004-2009)^[2]⁴³ and UNEP/GEF project “Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization” (2016-2018)^[3]⁴⁴. New knowledge will be generated through field and forest assessments, demonstration plots, cross site visits, and gender and youth inclusive round table discussions at national regional and local levels as detailed in Appendix 8 (Detailed workplan). The information will be curated through a knowledge management system implemented by the Ministry of Environment to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity (Output 1.1.3).

The project will use the Diversity Assessment Tool for Agrobiodiversity and Resilience (DATAR) (www.datar-par.org) developed through the GEF: Cross-cutting capacity building, knowledge services and coordination project for the Food Security Integrated Approach Pilot Program - GEF project 9140^[4]⁴⁵, to building capacity at national level in Armenia in multiple languages to link diversity assessment to gender and

age equitable pro poor development and land restoration practices (Activities 1.1.3.1/2/3/ and Activity 2.1.2.2.). Use of DATAR includes ensuring that all information collected and used follows protocols of free prior informed consent from local communities. Furthermore, the establishment of the Center for Biodiversity and Climate Adaptation Knowledge, as an ecological Hub for various environmental scientific and public awareness programs with sustainable financing in peri-urban forest area will also serve to store and share knowledge (Output 1.2.1).

Explain how this project will improve or develop national policies and strategies, including an improved alignment of existing policies ([policy coherence](#)).

The project will contribute to the development of a number of national policies and strategies, which are currently lacking and are essential for sustainable management of biodiversity, land and forest resources. The project will develop proposals and maps with areas for restoration with use of local fruit and nut tree species to be incorporated in national and regional (provincial) management/development plans and strategies (Output 1.1.1). The project will also develop standards on harvesting of wild fruit and nut tree species products, Quality Standards planting material of fruit and nut tree crops, Quality Standards for collection of seeds of wild fruit and nut tree species for forest restoration purposes (Output 1.1.2), and cross-sectoral plans on land and forest restoration with use of local fruit and nut tree species with proposals on funds allocation in the project regions (Output 1.2.1).

The project's success depends on human, institutional and technical capacities at national, regional and site levels. Gender and age actions designed to build capacity at national, regional and local levels, are clearly spelled out in the Appendix 8: Project Detailed Workplan. The project intends through capacity building activities, collaborating with international national and local government and non- government organizations on thematic issues of the project on agrobiodiversity conservation, land and forest restoration, value adding and ecosystem service marketing approaches to improve institutional capacity of selected partner institutions, leading to an increased level of efficient, effective, and sustainable performance. In addition, the Biodiversity Knowledge Centre will be established to share the information on sustainable natural resources management and to provide trainings to all stakeholder groups including policy makers, farmer and local communities, forest officers, NGOs and CSOs.

The project will receive co-financing to strengthen the institutional capacity of forestry sector in sustainable management of forest resources through providing equipment, trainings, establishment of demonstration plots, greenhouses for growing tree seedlings for use in restoration. The Raffaella Foundation (USA) will help to build and improve the expertise of policy makers, researchers, farmers and local communities in the application of advanced technologies in assessment of agrobiodiversity status and threats linked to implementing gender and age equitable science and ground-based interventions for conservation, improved livelihoods and ecosystem health. Farmers, forest dwellers and local communities will improve their technical skills on the sustainable management of fruit and nut tree biodiversity both in wild and cultivated ecosystems. This will include gender and age inclusive capacity to supply quality and diverse planting material for fruit and nut crops, value adding technologies, and ecosystem services marketing (eco- and agri-tourism).

All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review. In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget.

The TE will typically be initiated after the project’s operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process.

The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

M&E Workplan and Budget

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Inception Meeting (M&E part)	Ministry of Environment, Project Team, Steering Committee, UNEP	0,00	15,000	Within 2 months of project start-up
Inception Report (M&E part)	Project Coordinator, Project Team	0,00	3,000	1 month after project inception meeting
Measurement of project progress and performance indicators	Project Task Manager (UNEP) & Project Coordinator (Ministry of Environment), Project Team; Consultants	0,00	7,000	Annually
Baseline measurement of project outcome indicators, GEF Core indicators	Project Coordinator, Project Team, Technical consultants, Gender Focal Point (GFP), Project Task Manager (UNEP)	0,00	7,000	Project inception
Mid-point measurement of project outcome indicators, GEF Core indicators	Project Coordinator, Project Team, Technical consultants, Gender Focal Point (GFP), Project Task Manager (UNEP)	0,00	7,000	Mid-Point
End-point measurement of project outcome indicators, GEF Core indicators	Project Coordinator, Project Team, Technical consultants, Gender Focal Point (GFP), Project Task Manager (UNEP)	0,00	8,000	End Point
Monitoring of Environmental and Social Safeguards (ESS) Risks	Project Coordinator, Project Team, Technical consultants, Gender Focal Point (GFP), Project Task Manager (UNEP)	0,00	8,000	Annually
Semi-annual Progress/ Operational Reports to UNEP	Project Task Manager (UNEP) & Project Coordinator (Ministry of Environment)	0,00	2,000	Within 1 month of the end of reporting period (i.e. on or before 31 January and 31 July)
Project Steering Committee (PSC) meetings and National Steering Committee meetings	Project Coordinator (Ministry of Environment) (secretariat), A representative of UNEP Implementing Agency, A representative of Ministry of Environment, National GEF	0,00	15,000	Once a year minimum

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
	Focal Point for Armenia, MTAI (Member of SC)			
Reports of PSC meetings	Project Coordinator (Ministry of Environment)	0,00	3,000	Annually
Project Implementation Review (PIR) report	Project Task Manager (UNEP) & Project Coordinator (Ministry of Environment)	0,00	3,000	Annually, part of reporting routine
Monitoring visits to field sites	Project Coordinator (Ministry of Environment), Project Team; Consultants	0,00	12,000	As appropriate
Mid Term Review/Evaluation	Project Coordinator (Ministry of Environment), Ministry of Environment, PMU, External consultant(s), UNEP	25,000	17,000	At mid-point of project implementation
Terminal Review/Evaluation (<i>whether a project requires a management-led review or an independent evaluation is determined annually by UNEP's Evaluation Office</i>)	UNEP EO	30,000	20,000	Typically initiated after the project's operational completion
Audit	Project Executing Agency	0,00	15,000	
Project Operational Completion Report	Project Coordinator (Ministry of Environment), Ministry of Environment, Financial Manager(s)	0,00	15,000	Within 2 months of the project completion date
Co-financing report (including supporting evidence for in-kind co-finance)	Project Coordinator (Ministry of Environment), Ministry of Environment, Financial Manager(s)	0,00	5,000	Within 1 month of the of the end of reporting period (i.e. on or before 31 January and 31 July)
Publication of Lessons Learnt and other project documents	Project Coordinator (Ministry of Environment), Consultants for lessons learnt evaluation.	0,00	10,000	Annually, part of Semi-annual reports & Project Final Report
Total M&E Budget Plan		55,000	180,000	

Gender-related results will be thoroughly monitored and reported, and the gender experts will be engaged in all steps.

Sustainability

Continuation and institutionalization of outcomes and benefits after the completion of a project is ensured through the following activities. The revision of national and regional management and development plans and strategies to include the use of fruit and nut tree biodiversity will institutionalize fruit and nut trees into national and regional planning for restoration (Output 1.1.1). This includes, the establishment in project sites of gender inclusive Inter-sectoral Platforms on Forest and Land Resources Management to facilitate communication and collaboration on land and forest restoration actions (Activity 1.2.1.3) and the establishment of the Center for Biodiversity and Climate Adaptation Knowledge, which is an ecological Hub for various environmental scientific and public awareness with sustainable financing by the Institute of Botany (Output 1.1.2). Specific activities of the project are also dedicated to ensuring financial sustainability after the end of the project. These include the development of cross-sectoral plans on land and forest restoration with use of indigenous fruit and nut tree species with proposals on funds allocation in project sites (Activity 1.2.1.5).

The sustainability of the project will be secured by the involvement, training and empowerment of smallholders in project activities. Smallholders are the targets of the awareness-raising and capacity-building programme as detailed in the Appendix 5: Attachment 5c: Stakeholder Engagement Plan and the Appendix 8: Project Detailed Workplan, and the main beneficiaries of the land restoration and value addition

technologies. By providing rural households will locally adapted fruit and nut tree biodiversity, farmers and forest dwellers will reduce their need to purchase chemical inputs and water, creating cost savings and positively impacting on the health of both the farmers, forest dwellers and the ecosystem, in turn leading to increased productivity, increased incomes and/or family food security. As key stakeholders (regional and local governments, private sector, civil society) see the impact, diversity-rich methods will become incorporated into local extension programmes and part of government funding (Activity 1.2.1.5). Advocacy, as part of project activities, will be carried out with school and tertiary institutions teaching, thus creating a scaling up pathway to embed enabling policy support in local and national governance frameworks (laws, regulations, decrees, policy changes, amendments,). The project provides preferential access to women and youth to training and communication materials to develop an improved their capacity to invest and benefit from land restoration technologies, value adding to fruit and nut tree products and agrobiodiversity tourism and ecotourism activities.

Uptake and Scaling up

Uptake of the project results and practices involves modalities of scaling up of project results, interventions and practices, through (i) **Adaptation** of interventions to new geographical areas, (ii) the **Diffusion** of interventions when an existing intervention is scaled up by communicating it to new stakeholders and by improving the collaboration and partnership among various stakeholders, (iii) through **Replication**, when an existing intervention is scaled up to new stakeholders at different sites, (iv) through **Value addition**, when an intervention is scaled up so that the same people, performing the same task, can earn more and obtain access to new market opportunities, and through (v) **Temporal Scaling up**, when an intervention which is supposed to be introduced for a limited amount of time is scaled up over a longer time frame.^{[5]⁴⁶}

Uptake and scaling up of project activities and interventions will be carried out through the adaptation of management practices, and availability for fruit and nut tree planting materials, to other geographical areas outside of the target project sites as shown in Appendix 7: Project Institutional Arrangement and Coordination. Uptake will also be catalyzed through the diffusion of existing intervention by communicating these practices to new stakeholders through the collaboration and partnership among various stakeholders described in the Communication section below and found in the Appendix 5: Attachment 5c: Stakeholder Engagement Plan. Gender equitable replication of project activities will also be achieved through providing methods to identify and establish seed harvesting plots in forest areas for producing quality rootstock and seedling material (Activity 2.1.2.6), the establishment of community nurseries to supply quality and diverse planting material of indigenous fruit and nut tree crop, and establishment of demonstration plots on water and soil saving technologies (Activity 2.1.2.9), where least 50% of which are headed by women. Uptake through value addition will occur as farmers and forest dwellers (particularly women and youth) benefit from value added products through processing indigenous fruit and nut tree products and ecosystem services (eco- and agro-tourism) marketing (Activities 3.2.1.3; 3.2.1.4). Temporal scaling up is ensured through curriculum and course development in universities (Activity 3.1.3.1), and Youth Clubs in high schools (Activity 3.1.3.1), together with the establishment of school orchards where school students learn about indigenous fruit and nut tree species biodiversity and technologies on their management and that ensure 50% students are girls to engage young people further in the project (Activity 3.1.3.6). These activities also contribute to the sustainability of the project described above.

Replicability

The project will catalyse replication by partners and stakeholders of key methods developed during the project. These include harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species and quality and diverse seedlings supply standards (Activity 1.1.2); the DATAR tool adapted for local communities to assess and promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity in land and forest restoration (Activity 1.1.3.2); advanced technologies (tools and equipment) on forest protection to prevent illegal logging of wild fruit and nut trees in forest areas (Activity 1.1.3.6); demonstration plots on planting drought tolerant indigenous fruit and nut trees along the intercommunal roads to prevent soil erosion (Activity 1.1.3.7), establishment of mother tree collections for cultivated fruit and nut crops and seed banks for wild fruit and nut tree species (growth points) (Activity 2.1.2.3); fruit and nut tree processing shops (Activity 3.2.2.3.); jointly with commercial companies promotion of innovative methods to create and market local fruit and nut crops products (Activity 3.2.2.5) , and business plans for establishment and running eco-and agro-tourism business in the areas restored with use of indigenous fruit and nut tree crops (Activity 3.3.2.6). Furthermore, project activities also include the development and application of protocols providing free access for public organizations, private sector and local communities to the National database and Information Sharing System (Activity 2.2.1.4).

Communication strategy

Communication strategy includes the involvement of all stakeholders in consultation process. The project management team will organize the inception workshop, validation workshop and other bi-lateral meetings as detailed in the Project Work Plan (Appendix 8). A project inception meeting with key stakeholders will take place. The project inception meeting will include relevant ministries, departments, and agencies of the government. Co-financiers, private enterprises, academic institutes, and civil society groups, with gender equity in the participation. The inception meeting will raise awareness of the project and the issues of restoring degraded lands and forests with indigenous fruit and nut biodiversity. The inception meeting will also be a key step in establishing communication and networking approaches to be used throughout the project duration, providing an opportunity for diverse project partners to interact as a first knowledge-sharing event. The Project Management Unit will work closely with key project stakeholders, including National government, three regional governments and, eight Municipalities (local governments), the Technical Advisory Committee, academic institutions, cooperatives and local forest branches, farmers, women and youth as a key source of information and feedback.

Civil society structures have a key role to play in the communication activities, as well as in raising public awareness. Round tables organized with forestry and city gardening workers, ensuring participation of women and youth (Activity 3.1.2.3) will raise awareness on the role of indigenous wild fruit and nut tree species in providing ecosystem services and land/forest restoration.

All communication and public awareness materials will be disclosed to the public via a variety of communication materials including brochures, flyers, posters, radio, and social media. The ME will update its website regularly (at least on a quarterly basis) with key project updates and reports on the project's environmental and social performance both in English and Armenian. Project will continue to use agroecoarm.com website established in the framework of an earlier UNEP/GEF project in Armenia, "Enhancing Livelihoods in Rural Communities through Mainstreaming and Strengthening Agricultural Biodiversity Conservation and Utilization" (2016-2018) for all outputs to be available on-line.

For wider global communication, the Raffaella Foundation (RF) Website will be used to communicate project outputs and best practices to a wider global audience. The RF will also ensure the translation in Armenian of its open-source free IT platform DATAR (Diversity Assessment Tool for Agrobiodiversity Research) (Activity 1.1.3.1), that is already available in Russian, Chinese, Arabic, Spanish, French and English to

support both national information management and cross country information exchange on best practices for the assessment and management for fruit and nut tree biodiversity.

[1] https://www.thegef.org/sites/default/files/documents/2022-01/GEF_R.08_15_GEF-8%20Programming%20Scenarios%20and%20Global%20Environmental%20BenefitsTargets_Jan.05_0.pdf

[2] <https://www.thegef.org/projects-operations/projects/1259>

[3] <https://www.thegef.org/projects-operations/projects/5483>

[4] <https://www.thegef.org/projects-operations/projects/9140>

[5] Bernis-Fonteneau, A.; Alcadi, R.; Frangella, M.; Jarvis, D.I. Scaling Up Pro-Poor Agrobiodiversity interventions as a Development Option. *Sustainability* 2023, 15, 10526. <https://doi.org/10.3390/su151310526>

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

Institutional Arrangement and Coordination

The Ministry of Environment (ME) of the Republic of Armenia will serve as the main project Executing Agency. The ME will establish close cooperation for implementing its execution with the Ministry of Territorial Administration and Infrastructure (MTAI) and the WWF-Armenia. The MTAI will oversee all activities done outside of the borders of Forestry branches of ME. Payments for project activities will be made by the WWF-Armenia upon instructions received from UNEP and based on the instruction signed by the Project Coordinator on the name of the ME.

WWF-Armenia will serve as Co-executing agency in charge with establishing and enhancing cooperation with national and international project partners. WWF has operated in Armenia since 2002 and as of November 2006, WWF-Armenia has been registered as an official branch of WWF International as a part of WWF Caucasus Programme Office. WWF-Armenia will provide appropriate administrative support to the project as required by the Ministry of Environment and project partners, in accordance with the objectives and key activities detailed in the work plan (Appendix 8: Detailed Project Workplan) and detailed in Appendix 7: Project Implementation Arrangements and Coordination.

A PSC will be set up made up of members of the ME, WWF-Armenia the MTAI, the Raffaella Foundation, and male and female representatives of national and regional project government and non-government agencies, academic institutions and community representatives. The Chair of the PSC will be appointed by Ministry of Environment within its membership. The PSC will meet once in a year: at the start, mid-term and end of the project. The Executing Agencies (ME and WWF-Armenia as co-executing agencies) will select a national project coordinator to oversee the implementation of the full project, who will lead the Project Management Unit (PMU) and provide secretariat support to all PSC meetings, including recording of minutes and distribution of the minutes at least two weeks in advance of the next meeting to all participants and invited observers.

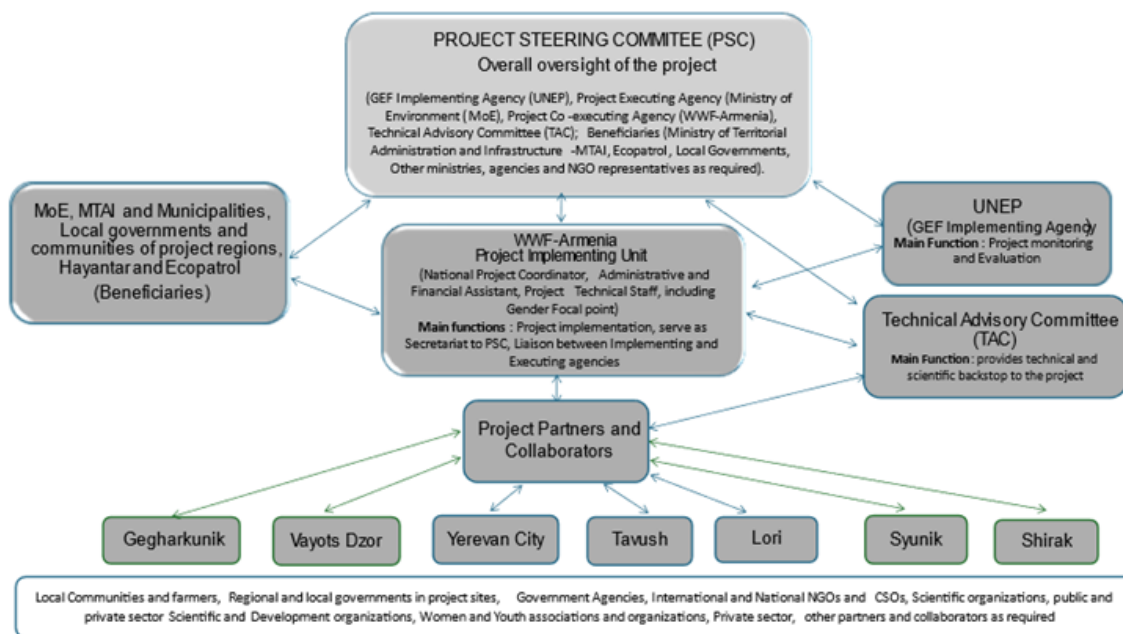
A Technical Advisory Committee (TAC) will be established to facilitate cooperation at policy, technical and local levels and will provide international level expertise and support, as required, to the project team,

Project Coordinator and the PSC. TAC composition will be inter-sectoral and multi-stakeholder, with equal representation of men and woman and include youth. The Raffaella Foundation will lead the TAC. TAC members will be comprised of representatives of environment, agriculture, local government (land, crops, forest, water, gender and community development), International and national NGO and civil society organizations. Its meetings will be organized by the Project Coordinator in consultation with the ME, WWF-Armenia, the MTAI and the needs of regional and local project partners.

Site Coordinators (SCs) will be appointed by the Project Coordinator in each project site and will be responsible for coordination of the project activities at the site level, sharing cross-site experiences, maintenance of relationship between the project team and local governments at regional (provincial) and community levels, as well as management of forest enterprises in the project sites. SCs will develop together with PMU annual work plans and budgets; and giving inputs to preparing project’s progress reports along with necessary refinement of the workplan and budget; implementing project activities on sites, ensuring feed-back from farmers and local communities, building relationship between farmers, local communities and the project team, organizing farmers’ training and cross site visits. SCs will help to ensure that lessons learned are shared among the sites and with national and global level operation.

The proposed project management structure is presented in the following Figure 3.

Figure 3. Project management structure.



Specific Terms of Reference for the PSC, PMU, TAC, and SC are found in Attachment 5e (TORs for key project staff).

Will the GEF Agency play an execution role on this project?

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

The proposed project will closely cooperate and share lessons with the other ongoing projects and initiatives in Armenia:

- (i) FAO/GCF project “Forest resilience of Armenia, enhancing adaptation and rural green growth via mitigation” (2021-2029)[\[1\]⁴⁷](#). The project supports implementation of several forest restoration interventions pursuing both climate change mitigation and adaptation targets through adaptation of ecosystems by enhancing the forestry sector’s capacity to produce adaptive seedlings and adaptive plantations processes, reducing drivers of degradation and providing the adequate management practices to central and local stakeholders.
 - (ii) WWW/SDC project “Living landscapes for Market Development in Armenia” (2022-2025)[\[2\]⁴⁸](#), which is aimed at preservation of livelihoods of the rural population in selected areas through the protection and economically sustainable use of natural resources and climate change adaptation and mitigation.
 - (iii) WWF/BMZ project “Promotion of Eco-corridors in South Caucasus” (2022-2025)[\[3\]⁴⁹](#). The main objective of the project is conservation and sustainable use of biological diversity without reducing the income of the local rural population. This will be achieved through long term “Conservation Agreement” established with stakeholders, who manages the land (community representatives/municipalities, CBOs). This Agreement will develop with the participation of the beneficiaries and based on land use plans (specific plans for management of natural resources as forest, wildlife or pasture, or more general conservation or urban plans, depending on the needs identified in specific target communities).
 - (iv) WWF/BMZ project “Biodiversity and Sustainable Local Development” (2024-2030) [\[4\]⁵⁰](#) The aim of the project is strengthening protection of biodiversity and the sustainable use of natural resources in particularly species-rich natural areas of Armenia and improving the socio-economic situation of the population in the neighboring communities.
 - (v) EU Horizon FRUITDIV program 'Using the hidden potential of the wild diversity of fruit tree species for sustainable agriculture' (2024-2028)[\[5\]⁵¹](#). The objective of this program is monitoring, characterization, use, and conservation of the diversity of fruit tree CWR, with a particular emphasis on wild apple, pear and plum species.
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(vi) WB/GEF “ReSILAND: Armenia Resilient Landscapes Project” (2023-2028)[6]⁵², which is aimed to increase the area under sustainable landscape management in selected locations and promote sustainable economic activities to communities in targeted Landscapes in Armenia.

[1] Forest resilience of Armenia, enhancing adaptation and rural green growth via mitigation: <https://www.greenclimate.fund/sites/default/files/document/sap014-fao-armenia.pdf>

[2] Living Landscapes for Market Development in Armenia: <https://sda.am/en/projectportfolioeng/living-landscapes-for-market-development-in-armenia-project/?lang=en>

[3] Eco-corridors foundCaucasus: <https://www.wwfcaucasus.org/?6845216/eco-corridors-fund-for-the-caucasus-launches-phase-ii>

[4] Biodiversity and sustainable local development in Armenia: <http://env.am/en/news/project-biodiversity-sustainable>

[5] Exploiting the Untapped potential of Fruit tree Wild Diversity for Sustainable Agriculture: <https://cordis.europa.eu/project/id/101133964>

[6] <https://www.thegef.org/projects-operations/projects/11046>

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
10000	10000	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
10,000.00	10,000.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
20000	20000	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
20,000.00	20,000.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,000	5,000		
Male	5,000	5,000		
Total	10,000	10,000	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The project will contribute to GEF-8 Core Indicator 3: Area of land and ecosystems under restoration; Core Indicator 4: Area of landscapes under improved practices (hectare); and Core Indicator 11: People benefiting from GEF-financed investments disaggregated by sex.

Core Indicators targets were identified in close collaboration with project stakeholders and are based on the baseline assessment.

Core Indicator 3: Area of land and ecosystems under restoration (10,000 hectare) will cover degraded areas of urban and peri-urban land and forests in Yerevan City, Lori and Tavush. The area was estimated based on land cover maps developed by “HAYANTAR” State Non-Commercial Organization, the department of Ministry of Environment of Armenia, responsible for forest and land restoration and forest management. The estimated areas for restoration and their location were clarified based on the National Forest Management Plans. The same approach was applied for calculation.

Core Indicator 4: Area of landscapes under improved practices (20,960 hectare). This is the area in Syunik, Gegharkunik, Lori, Tavush, Shirak and Vayots Dzor regions of Armenia. The same approach as for Core Indicator 3 was applied to calculate the area for this Core Indicator.

Core Indicator 11: The number of direct beneficiaries (10,000) was estimated based on number of farmers, forest dwellers and other stakeholders whose livelihoods in the project sites depends on forest resources, forest ecosystem services and agriculture products. Gender breakdown of beneficiaries is 5,000 men and 5,000 women.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Climate change or other environmental events can remove diversity and lead to expansion of desert and arid zones in Armenia. The project is targeted to increase area of land and forest restored with locally adapted fruit and nut tree biodiversity as a risk management strategy against unpredictable changes in precipitation and temperatures. Emphasis will be placed on the active participation of local communities in the identification and implementation of adaptation measures. The project design measures are aimed at increasing the resilience and adaptability of important agro- and forest ecosystems in Armenia to adapt to climate change. ME in its structure has Climate information Center as well as Hydrometeorology and Monitoring Center through which ME monitors all changes.

Environmental and Social	Low	Commitment to the use of local fruit and nut tree varieties for restoration to all gender and age groups for farmers and forest dweller communities will not be the same. To mitigate this, Equal representation of both men and women is foreseen during the implementation phase. Part of the social and environmental safeguards to be applied at screening and implementation of investments in sustainable agriculture commodities. The project addresses gender equality issues in the Gender Action Plan.
Political and Governance	Low	Armenia has a stable government system in place.
INNOVATION		
Institutional and Policy	Low	National stakeholders have expressed a strong desire for this project and project development will rely on significant representative partnerships comprised of stakeholders at all levels.
Technological	Low	The project was designed by national and international experts with over 20 years of project design for GEF projects involving the use of agrobiodiversity, land and forest restoration and policy, capacity building, and creating enabling institutional and policy environments
Financial and Business Model		
EXECUTION		
Capacity	Low	The Stakeholder analysis to prepare the stakeholder engagement plan (Appendix 5: Attachment 5c) demonstrated the high national institutional capacity. The project has built in activities and Outputs to ensure sustainability (Activity 1.2.1.3; Output 1.1.2; Activity 1.2.1.5).
Fiduciary	Low	The project has selected the WWF-Armenia for Financial Management and Procurement. WWF-Armenia has undergone UNDP Partner Capacity Assessment (PCAT), including its Harmonized Approach to Cash Transfers (HACT) Micro-Assessment.
Stakeholder	Low	The consultative process and review of documents for developing the SEP in relation to the implementation of the project components, the roles of each stakeholder in each thematic component, in project management responsibilities, and in project monitoring and evaluation, were approved by all stakeholders.
Other		n/a
Overall Risk Rating	Low	The project was characterized as Low risk.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

The project is aligned with Objective 1 of the GEF-8 Biodiversity Focal Area “to improve conservation, sustainable use, and restoration of natural ecosystems” and contributes to its Programming Directions: (i) sustainable use of biodiversity, and (ii) “opportunities to restore areas to ensure the persistence of globally significant biodiversity” through specific targeted activities aimed at development and promoting sustainable wild fruit and nut trees species management and harvesting strategies and practices and mainstreaming of local fruit and nut tree biodiversity in degraded land and forest restoration. The project also contributes to Objective 2 of the GEF-8 Land Degradation Focal Area “reverse land degradation through landscape restoration” and its Programming Directions: “(i) restore agro-ecosystem services and avoid the reduction of trees and vegetative cover, and (ii) restore forests, avoid forest loss and degradation, including sustainable forest management (SFM) through development of inter-sectoral land use and restoration planning, soil and water conservation enhancing practices, diversification of income sources through promoting value adding technologies and ecosystem services marketing (agri- and ecotourism).[\[1\]](#)⁵³

The project contributes to the following targets of the Kunming-Montreal Global Biodiversity Framework[\[2\]](#)⁵⁴:

Target 2: Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

On April 22, 2021, the Government of Armenia approved NDC (Nationally Determined Contribution) of Armenia revised under the Paris Agreement for 2021-2030[\[3\]](#)⁵⁵. According to the revised actions, Armenia has undertaken a commitment to increase the country's forest cover to 12.9% until 2030. This means that 50 thousand hectares of new forest must be planted. To achieve the target Armenia needs to improve professional skills, develop its nursery economy to grow seedlings preferably in containers. The country will have to grow about 15 million seedlings a year. Project by its capacity building actions on land and forest restoration, enhancement of establishment of new greenhouses is in line with the government objective under the Paris Agreement for 2021-2023[\[4\]](#)⁵⁶.

Target 5: Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.

The Project is going to develop the Standards regulating harvesting of wild fruit and nuts and thus will contribute to sustainable use of harvesting and trade of wild species, preventing overexploitation and minimize unfavorable impacts on wild plant species.

Target 9: Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.

The Project by its capacity building activities is going to contribute to the establishment of sustainable management and use of wild species.

Target 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agro-ecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

Project by its capacity building activities is going to contribute the use of new environmentally safe approaches of land restoration that can be used under agriculture.

Target 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent, in accordance with national legislation.

Project by its capacity building activities is going to contribute improved gender equity by specifically targeting women for management and leadership positions at community levels and in educational, scientific, and policy institutions.

Target 22: Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for all. Project will ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

Target 23: Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

Project by its capacity building activities and Gender Action Plan is going to contribute to the following outcomes:

1. Integration of gender equality and women's empowerment across all SDGs and the entire 2030 Agenda, systematic mainstreaming in the implementation of its three dimensions, economic, social and environmental, an all-of-government approach including in development assistance activities and initiatives,
2. Inclusion of all key stakeholders, particularly civil society, women's movements, youth organizations and the private sector for movement building, transforming social norms and addressing the needs of all women and girls.

Relevance to the UNEP Programme of Work

The project supports all three pillars of UNEP's Medium-Term Strategy for 2022—2025^{[5]⁵⁷} responding to three planetary crises - climate change, biodiversity and nature loss, pollution and waste. The project promotes the use of locally adapted fruit and nut tree biodiversity for land and forest restoration. The increased biomass of indigenous fruit and nut tree biodiversity on degraded lands and forests directly relevant to mitigating climate change and conserving biodiversity. In addition, as described above in the Project Rational, the use of locally adapted diverse planting materials also reduces the need for agricultural inputs such as pesticides, fertilizer, water and energy, thus supporting reduced pollution.

Relevance to Regional, National or Subnational Priorities

The project's objective and components are consistent with national policy:

- (i) *Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020-2030* ^{[6]⁵⁸} targets to sustainable, innovative, high value-added agriculture in a harmony with the environment, ensuring sustainable management of natural resources, producing organic products and improving livelihoods of people in rural areas.
- (ii) Armenia's *Agriculture Development Strategy for 2015-2025*^{[7]⁵⁹} accepts the concept of sustainable development and achieving a good balance between economic development, environmental protection and other social aspects. The protection of the environment and natural landscapes, development of agro-tourism and organic agriculture and conservation agriculture are in the list of the Strategy's objectives along with areas directly related to agrobiodiversity conservation.
- (iii) The *Intended Nationally Determined Contribution (INDC) of Armenia (2021)* ^{[8]⁶⁰} commits increase of the country's forest cover to 12.9% until 2030.
- (iv) The Government of the Republic of Armenia with Resolution No. 725-L of May 6, 2021, approved the *Program for the Land Degradation Neutrality in the Republic of Armenia*^{[9]⁶¹}. The Program targets combating land degradation by achieving the neutrality status of land degradation (balancing degradation and restoration). The main actions to achieve the target are: 1) to stop the degradation of agricultural land by switching to agro ecological principles (including the best available 'organic' technologies); 2) to promote reforestation, afforestation of degraded lands, improvement of forest areas; 3) to contribute to

the improvement of forestry management through the development of new management plans and sustainable use of forest resources; 4) to improve the management of pasturelands of the republic.

- (v) The *Armenian Sustainable Development Program* (2008) [\[10\]⁶²](#) includes strategies for both environmental protection and development of sustainable livelihoods through support to agriculture and value-adding approaches.
- (vi) The *Law for the Republic of Armenia on Organic Agriculture* (2008) [\[11\]⁶³](#) recognizes the main principles of organic agriculture, which are in line with the proposed project, including the creation of favorable environment for the preservation of agrobiodiversity as a result of selective breeding of plants and livestock, as well as reduction of risks caused by human activity.
- (vii) *National Forest Policy and Strategy (NFPS, 2004)* [\[12\]⁶⁴](#), *National Forest Program (NFP, 2005)* [\[13\]⁶⁵](#), and *Forest Code (2005)* [\[14\]⁶⁶](#) aim at developing a framework for long-term sustainable forest management, protection and restoration by implementing institutional and legal reforms, introducing international forest management and certification standards and forest evaluation criteria. The *National Forest Policy and Strategy* makes the rehabilitation of degraded forestlands and protection of existing forests a priority for Armenia. The *Forest Code* also gives special attention to communal ownership of forests. Communal forests are supervised by local self-governing authorities and special incentives stimulate the sustainable management of forests by the local communities. Armenia, amongst 145 countries, signed the *Glasgow Leaders' Declaration on Forests and Land Use* [\[15\]⁶⁷](#), which commits Armenia, in a non-binding way, to conserve, restore and sustainably manage its forests.
- (viii) The *2002 National Action Programme to Combat Desertification in Armenia* [\[16\]⁶⁸](#) calls for improved land use planning and improvement of economic mechanisms for natural resource management. The Program also supports implementation of the 10-years' UNCCD Strategic Plan and Framework [\[17\]⁶⁹](#) especially Strategic Objective 2: To improve the condition of affected ecosystems, particularly Expected impact 2.1: Land productivity and other ecosystem goods and services in affected areas are enhanced in a sustainable manner contributing to improved livelihoods; and Strategic Objective 3: To generate global benefits through effective implementation of the UNCCD, specifically Expected impact 3.1: Sustainable land management and combating desertification/land degradation to the conservation and sustainable use of biodiversity and the mitigation of climate change.
- (ix) *National Biodiversity Strategy and Action Plan (NBSAP) of Armenia* [\[18\]⁷⁰](#) defines the strategic directions in conservation and use of biodiversity, including enhancement of biodiversity and ecosystem conservation and restoration of degraded habitats, elimination of the main causes of biodiversity loss through regulation of inter-sector relations and public awareness raising and enhancement of scientific

research, knowledge management and capacity building in the field of biodiversity conservation and sustainable use of natural resources. The Action Plan provides the activities formulated by the country to achieve the objectives of the Strategy.

None country policy that might contradict with intended outcomes of the project have been identified.

[1] GEF-8 Programming Directions (April, 2022) https://www.thegef.org/sites/default/files/documents/2022-04/GEF_R.08_29_Rev.01_GEF8_Programming_Directions.pdf#page=126&zoom=100,92,130

[2] Kunming-Montreal Global Biodiversity Framework (December, 2022) <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>

[3] NDC <https://unfccc.int/NDCREG>

[4] Paris Agreement <https://unfccc.int/process/the-paris-agreement/status-of-ratification>

[5] For people and planet: the United Nations Environment Programme strategy for 2022–2025 to tackle climate change, loss of nature and pollution <https://wedocs.unep.org/bitstream/handle/20.500.11822/35162/Doc3%20Reve1%20EnglishK2100501.pdf?sequence=1&isAllowed=y>

[6] The Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020-2030: <https://www.mineconomy.am/en/page/1467>

[7] Perspective Strategic Development Program 2014-2015 of RA: <https://www.gov.am/files/docs/1322.pdf>

[8] Decision of the Government of RA: <https://unfccc.int/sites/default/files/NDC/2022-06/NDC%20of%20Republic%20of%20Armenia%20%202021-2030.pdf>

[9] Integrated drought management in Armenia: <https://www.droughtmanagement.info/portal/wp-content/uploads/2022/08/Armenia-IDMP-Final-Report-June-2022.pdf>

[10] The Armenian Sustainable Development Program https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/armenia/ndp_armenia.pdf

[11] The Law for the Republic of Armenia on Organic Agriculture: https://members.wto.org/crnattachments/2008/tbt/arm/08_2072_00_et.pdf

[12] National Forest Policy and Strategy: https://unece.org/fileadmin/DAM/timber/meetings/20170913/National_Forest_Policy_Armenia.pdf

[13] National Forest Program of the Republic of Armenia <https://faolex.fao.org/docs/pdf/arm190700E.pdf>

[14] Forest Code of the Republic of Armenia <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC072651/>

[15] The Glasgow Leaders' Declaration on Forests and Land Use <https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

[16] Approve Strategy and National Action Plan to Combat Desertification in the Republic of Armenia: <https://www.unccd.int/sites/default/files/naps/NAP%2520AND%2520STRATEGY%2520TO%2520COMBAT%2520DESERTIFICATION%2520IN%2520ARMENIA.pdf>

[17] 10-years' UNCCD Strategic Plan and Framework <https://www.unccd.int/sites/default/files/relevant-links/2017-01/Strategy-leaflet-eng.pdf>

[18] National Biodiversity Strategy and Action Plan (NBSAP) of Armenia (2016-2020) <https://www.cbd.int/doc/world/am/am-nbsap-v2-en.pdf>

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Yes

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement.

Yes

Select what role civil society will play in the Project

Consulted only;

Member of Advisory Body; Contractor; **Yes**

Co-financier; **Yes**

Member of project steering committee or equivalent decision-making body ; **Yes**

Executor or co-executor; **Yes**

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in section B project description?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
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UNEP	GET	Armenia	Biodiversity	BD STAR Allocation: BD-1	Grant	706,425.00	67,110.00	773,535.00
UNEP	GET	Armenia	Land Degradation	LD STAR Allocation: LD-2	Grant	1,265,165.00	120,190.00	1,385,355.00
Total GEF Resources (\$)						1,971,590.00	187,300.00	2,158,890.00

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount (\$)

50000

PPG Agency Fee (\$)

4749

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNEP	GET	Armenia	Biodiversity	BD STAR Allocation: BD-1	18,301.00	1,739.00	20,040.00
UNEP	GET	Armenia	Land Degradation	LD STAR Allocation: LD-2	31,699.00	3,010.00	34,709.00
Total PPG Amount (\$)					50,000.00	4,749.00	54,749.00

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
UNEP	GET	Armenia	Biodiversity	BD STAR Allocation	773,535.00
UNEP	GET	Armenia	Land Degradation	LD STAR Allocation	1,385,355.00
Total GEF Resources					2,158,890.00

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-2	GET	706,425.00	6659000
LD-2	GET	1,265,165.00	22000000
Total Project Cost		1,971,590.00	28,659,000.00

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environment, Ecopatrol Service	In-kind	Recurrent expenditures	3000000
Recipient Country Government	Hayantar State Non-Commercial Organization	In-kind	Recurrent expenditures	2000000
Private Sector	BmmBplus	Grant	Investment mobilized	21739000
Recipient Country Government	National Academy of Sciences, Institute of Botany	In-kind	Recurrent expenditures	800000
Civil Society Organization	Armenian Forest Environmental NGO	In-kind	Recurrent expenditures	40000
Civil Society Organization	Raffaella Foundation	In-kind	Recurrent expenditures	45000
Civil Society Organization	Rafaella Foundation	Grant	Investment mobilized	65000
Civil Society Organization	WWF-Armenia	Grant	Investment mobilized	525000
Civil Society Organization	WWF-Armenia	In-kind	Recurrent expenditures	445000
Total Co-financing				28,659,000.00

Please describe the investment mobilized portion of the co-financing

Total co-financing in amount of 28,659,000 USD is secured by the project including 6,330,000 USD in-Kind and 22,329,000 USD as Grant.

Ecopatrol Service of the Ministry of Environment of the Republic of Armenia will provide 3,000,000 USD in-Kind through its operation budget. This co-financing will support the project activities on quality standards development, establishment of demonstration plots on use of advanced technologies (devices and equipment) on forest protection to prevent illegal logging of wild fruit and nut trees in forest areas, supplying the Center for Biodiversity and Climate Adaptation Knowledge with technical and public awareness materials for its functioning and providing service on increasing public awareness and knowledge on forest restoration measure with use of wild fruit and nut tree biodiversity in the project sites, development of maps with areas for restoration purposes, organization of public awareness and capacity building workshops and meetings. This co-financing will be provided through its operational budget.

Co-financing from “HAYANTAR” (ArmForest) SNCO in amount of 2,000,000 USD in-Kind will support activities on reforestation, forest biodiversity conservation, production of fruit and nut tree saplings in its nurseries for use in restoration of degraded lands and forests in the project sites through its annual operational budget. Staff of “HAYANTAR” (ArmForest) SNCO regional offices will provide support in organizing public awareness campaign, capacity building and consultation meetings with local communities, smallholder farmers, forest dwellers, local governments and civil organizations in the project sites.

Private Company “BMMB plus GmbH” will provide co-financing in amount of 21,739,000 USD as Grant for supporting activities on restoration of lands and forests, promoting forest products processing technologies, establishment of greenhouses for growing seedlings in containers, establishment of wild fruits and nuts harvesting and processing points, development of public awareness materials and organizing public awareness raising events, conducting trainings on sustainable forest management, advanced technologies on forest guarding, providing equipment to the forestry sector for the efficient afforestation actions, adding value to forest resources products in the project sites.

National Research Institute of Botany will provide co-financing to the project as recurrent expenditures (in-kind) in amount of 800,000 USD through its annual operational budget and scientifically support the project activities on assessment of drought resistant fruit and nut tree species for use in restoration of degraded lands and deforested areas, development of technical guidelines, conducting capacity building workshops, establishment and maintenance of Biodiversity and Climate Knowledge Centre, project M&E.

"Armenian Forests" Environmental NGO will provide co-financing in amount of 40,000 USD as recurrent expenditures (In-Kind) to support project activities on capacity building on sustainable forest management and forest restoration through its staff time and premises in organizing capacity building workshops and consultation meetings in the project sites.

The International Foundation “The Raffaella Foundation” (USA) will provide co-financing in amount of 110,000 USD including recurrent expenditure (in-kind) in amount of 45,000 USD and 65,000 USD as Grant to (i) support national, regional and local partners in the development, application, and capacity building to use, a gender and youth inclusive knowledge management system to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity, and (ii) to support backstopping of the implementation of the Gender Action Plan.

WWF-Armenia will provide co-financing in amount of 970,000 USD including 445,000 USD as recurrent expenditures (in-kind) and 525,000 USD as Grant for project’s activities on promoting drought-resistant local fruit and nut trees species and varieties in restoration of degraded lands and deforested ecosystems, capacity building activities of the project, M&E and hosting project management unit (PMU).

In addition, farmers in the Lori and Tavush project sites will provide their orchards and land plots for organizing project’s training workshops, exchange visits, establishment of demonstration sites and scientific trials as well as will share with their traditional knowledge and skills in maintenance of indigenous fruit and nut tree crops under the stress-factors of local environment.

During its life the project will continue to seek the opportunities of attracting co-financing from small private sector (small-scale commercial enterprises) to ensure sustainability of the project's interventions.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	4/29/2024	Victoria Luque		victoria.luque@un.org
Project Coordinator	4/29/2024	Ersin Esen		ersin.esen@un.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Hakob Simidyan	Minister, GEF Operational focal point for Armenia	Ministry of Environment	6/7/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* Relevant Programme of Work (PoW) Outcomes	Relevant SDG target(s) and indicators
To contribute to landscape restoration by harnessing local fruit and nut tree biodiversity to improve the environment	<u>Indicator 1:</u> At least in 2 project sites government strategies and policies support enhancing use of local agrobiodiversity in land and	International and national studies report that currently 86% (approx. 3 million hectares) of Armenia's agricultural and forest land areas are degraded and exposed to desertification. National	End of project Target Government strategies and policies to support enhancing use of local agrobiodiversity in land and ecosystem	Policy documents Statistic data on area planted with fruit and nut tree species in the project sites and outside. Restoration plans and maps with use	<u>Assumption</u> : Political and institutional framework is supportive for land and forest restoration	<i>Insert the Outcome(s) and indicator(s) from the Programme of Work to which this project</i>	<i>Insert relevant SDG target and indicator</i>

<p>and ecosystem services, support food security and safety, enhance livelihoods in Armenia</p>	<p>ecosystem restoration.</p> <p><u>Indicator 2:</u> Area restored with use of local inter- and intra-specific (varietal) diversity of fruit and nut tree species in the pilot sites (10,000 ha)</p> <p><u>Indicator 3:</u> At least 50% of stakeholders who gained knowledge and skills in agrobiodiversity and environment friendly land and forest restoration, value adding technologies to fruit and nut tree products and marketing ecosystem services (eco- and agro-tourism). are female.</p>	<p>government of Armenia supports land and forest ecosystem restoration and sustainable management. However, lack of inter-sectoral cooperation, involvement of civil organizations and NGOs at all levels, lack of knowledge, skills, access to innovative technologies and approaches, lack to planting material adapted to harsh environment of degraded lands tackle these efforts.</p>	<p>restoration submitted to the Ministry of Environment and to the Ministry of Territorial Administration and Infrastructure and adopted.</p> <p>Degraded areas, restored with use of local fruit and nut tree biodiversity.</p> <p>Gender equitable skilled stakeholders at all levels to implement national agenda on restoration of degraded lands and forest ecosystems.</p> <p>Knowledge, innovative technologies and approaches on sustainable use of local fruit and nut tree biodiversity in restoration of degraded lands and forest ecosystems available.</p> <p>Mid-Point Target</p> <p>Existing policy, institutional and financial framework reviewed and gaps are identified.</p> <p>Information for development of restoration plans and area maps collected for all project sites.</p> <p>Capacity building programs developed.</p>	<p>of fruit and nut tree species and their varieties.</p> <p>Project's database on trainings, workshops, round tables, exchanges visits.</p> <p>Information Sharing System and Statistics on its access.</p>	<p>actions through use of local fruit and nut tree biodiversity.</p> <p><u>Risk:</u></p> <p>Shortage of co-financing support at all levels due to future global financial crises</p> <p>Changes in government infrastructure (reforming of ministries and public agencies) can prevent timely adoption of the submitted government policy proposals.</p> <p>Unpredicted nature disasters (mudslides, flood, and earthquakes) can destroy the established plantations of young trees in the degraded lands and forests.</p>	<p><i>directly contributes</i>¹¹⁷¹</p>	
Project Outcome	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Relevant PoW Outcome	Relevant SDG target(s)

						(s) and indicator (s) ^{[2][72]}) and indicators
<p>Outcome 1.1.</p> <p>National strategies and policies that support enhancing the use of local agrobiodiversity for land and ecosystem restoration are adopted</p>	<p><u>Indicator 1:</u> At least 2 regional (provincial) management plans/strategies revised to include restoration of degraded lands and forest through use of local fruit and nut tree biodiversity</p> <p><u>Indicator 2:</u> At least 2 Standards on Harvesting wild fruits and nuts and at least 2 Quality Standards on supply quality and diverse planting material of fruit and nut tree species available.</p> <p><u>Indicator 3:</u> A Web platform to promote knowledge sharing on innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity in land and forest restoration is updated and maintained by “Hayantar” (Armforest) SNCO of Ministry of Environment and accessed by users</p>	<p>National, provincial and local levels strategies and policies do not include articles and provisions that support enhancing the use of local agrobiodiversity for land and forest ecosystem restoration available at national, provincial and local levels.</p> <p>No standards available on wild fruits and nuts harvesting.</p> <p>No quality standards available for planting material of fruit and nut tree crops.</p> <p>Web portal maintained by Ministry of Environment does not include information on fruit and nut tree species, management practices and sources of planting material to be used for land and forest restoration</p>	<p>End of project Target</p> <p>National, regional (provincial) and local management plans/strategies revised.</p> <p>Quality standards available for use by stakeholders.</p> <p>A Web platform to promote knowledge sharing on innovation, integration, transformation and scaling up is updated and accessible for users.</p> <p>Mid-Point Target</p> <p>Relevant national and regional (provincial) and local management / development plans and strategies, regulatory frameworks, quality standards and knowledge management system are reviewed and gaps in use of fruit and nut tree biodiversity in land restoration, soil and water resources conservation, ecosystem services, food security and food safety are identified.</p>	<p>Revised policy documents</p> <p>Standards</p> <p>Reports on consultation meetings to finalize the proposed policy revisions</p> <p>Reports on statistics of accessing the web portal by users.</p>	<p><u>Assumption</u> :</p> <p>Willingness of national sectors on environment protection, agriculture and forestry collaborate, communicate and cooperate.</p> <p>Committed policy makers and partners to introduce changes in national, regional and local strategies and policies.</p> <p><u>Risk:</u></p> <p>Shortage of co-financing support at all levels due to future global financial crises</p>	<p><i>Insert relevant PoW Outcome(s) and indicator(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Outcome 1.2.</p> <p>Institutional and Financial</p>	<p><u>Indicator 1:</u> Total 150 public awareness materials are produced and public awareness</p>	<p>Government approved a number of national programmes on planting of trees in all parts of Armenia</p>	<p>End of project Target</p> <p>Cross-sectoral coordination, communication</p>	<p>Reports on PA campaign and PA materials.</p> <p>Cross-sectoral coordination</p>	<p><u>Assumption</u> :</p> <p>Willingness of national sectors on</p>	<p><i>Insert relevant PoW Outcome(s) and</i></p>	<p><i>Insert relevant SDG target and</i></p>

<p>support at national and regional levels for the use of fruit and nut tree biodiversity for land restoration and mitigating climate change</p>	<p>campaigns run to increase knowledge and understanding of government officials on role of local fruit and nut tree biodiversity in land and forest ecosystems restoration, need on inter-sectoral collaboration and increase of government support to restoration activities</p> <p><u>Indicator 2:</u> At least 10% increase in funds allocation for planting local fruit and nut tree species in provincial management plans/strategies of 2 project sites (10% increase per each project site).</p>	<p>including a pan-Armenian large-scale tree planting program (2020) according to which 10 million trees must be planted around the whole Armenia. However, implementation of all these programs lack inter-sectoral collaboration, coordination and communication for efficient achieving the goals in increasing forest and trees coverage in Armenia up to 12.9% by 2030 (currently forest coverage is 11.54%). Financial support lacks at provincial and local levels to planting high value crops as fruit and nut trees on degraded land and forest areas, which contribute not only to land and forest ecosystems restoration but also to food security and food safety.</p>	<p>and cooperation in land and forest restoration with use of local fruit and nut tree species established at national and regional levels.</p> <p>Financial support to land and forest restoration with use of local fruit and nut tree species increased.</p> <p>Mid-Point target</p> <p>Public awareness materials are produced and public awareness campaigns implemented.</p> <p>Inter-sectoral meetings to discuss joint actions on land and forest ecosystems restoration with use of fruit and nut tree biodiversity organised.</p>	<p>mechanisms established</p> <p>Reports on Inter-sectoral meetings</p> <p>Cross-sectoral plans on land and forest restoration and funding plans</p>	<p>environment protection, agriculture and forestry collaborate and cooperate.</p> <p>Committed policy makers and partners work together to promote new approach on land restoration</p> <p><u>Risk:</u></p> <p>Lack of co-funds available for local governments to support restoration programmes due to forecast global financial crisis.</p>	<p><i>indicator (s)</i></p>	<p><i>indicator</i></p>
<p>Outcome 2.1.</p> <p>Area restored with use of local inter- and intra-specific (varietal) diversity of fruit and nut tree species increased in the pilot sites of Lori, Tavush, Syunik, Shirak, Vayots Dzor, Gegarkunik Regions and Yerevan City</p>	<p><u>Indicator 1:</u> 20% increase in number of varieties and genotypes of fruit and nut tree species supplied by planting material multiplication system for restoration of degraded lands and deforested ecosystems.</p> <p><u>Indicator 2:</u> At least 3 forest management and provincial land management plans prepared and adopted in the project sites with application of water and soil saving technologies on area of 4,500 ha.</p>	<p>Characterization and evaluation of locally adapted fruit and nut tree varietal diversity with the capacity to evolve and adapt to local conditions of degraded lands and forest ecosystems limited on projects sites.</p> <p>Limited number of fruit and nut tree species and varieties are available in planting material supply system and used for forest and land restoration in each project pilot site.</p> <p>No approved and research-based document or regulation on the quality of fruit and nut tree species</p>	<p>End of project Target</p> <p>3 local communities at and outside the pilots have and implements plans to restore degraded communal lands and forests through use of local fruit and nut trees.</p> <p>System (tree nurseries) that supply quality and diverse planting material for restoration actions is set up.</p> <p>Gender inclusive innovative and biodiversity-based land and forest ecosystems restoration</p>	<p>Portfolio of local fruit and nut trees species and varieties for restoration of degraded lands and deforested ecosystems.</p> <p>National database with information on functional traits and characteristics of fruit and nut tree species and varieties.</p> <p>List of tree nurseries, seed plots, seed banks with reports on supply with quality and diverse planting material.</p> <p>Technical guidelines.</p> <p>3 community land restoration plans</p>	<p><u>Assumption</u> :</p> <p>Continued collaboration amongst project partners and stakeholders at all levels.</p> <p>Willingness of local communities and farmers to adopt and apply biodiversity and environment friendly technologies</p> <p><u>Risk:</u></p> <p>Land use policy preventing long-term</p>	<p><i>Insert relevant PoW Outcome(s) and indicator (s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

		<p>planning material and harvesting wild fruits and nuts are available to support sustainable management of land and forest resources.</p>	<p>approaches and technologies are available and applied in the project sites.</p> <p>Mid-Point target</p> <p>Drought-resistant local fruit and nut trees species and varieties for restoration of degraded lands and deforested ecosystems are identified.</p> <p>Technical guidelines on fruit and nut tree multiplication and management drafted.</p>	<p>in 3 project site communities.</p>	<p>land lease/private ownership</p> <p>Shortage of planting material for use in restoration</p>		
<p>Outcome 2.2. Information system developed and available at local regional and national levels available and used by public and private sectors</p>	<p><u>Indicator 1:</u> A National database and information system on local nut and fruit tree species biodiversity recommended for use for the purposes of land and forest restoration practices is established and available for use by public organizations, private sector and local communities.</p> <p><u>Indicator 2:</u> At least 5 area maps (one for each project site) of vulnerable zones to climate change and lands degradation, and mining sites for restoration with use of fruit and nut tree crops are developed and accessible for stakeholders for making decisions on restoration actions.</p>	<p>No common National database connected to any publicly used information system on local forest tree and shrub species, high-value non-timber forest resources, fruit and nut tree species exist in Armenia.</p> <p>Maps of vulnerable zones to climate change, lands degradation and mining sites are available in “Forest Atlas of Armenia” However; these maps do not provide information on inter- and intra-specific diversity of nut and fruit trees to be used for restoration.</p>	<p>End of project Target</p> <p>National Database and Information System is developed and available.</p> <p>Maps developed and accessible for public and private stakeholders.</p> <p>Mid-Point target</p> <p>Information for National Database and Information System is collected.</p> <p>Data for development of maps collected.</p>	<p>National Database and Information System</p> <p>Maps of vulnerability zones for restoration with use of nut and fruit tree biodiversity</p> <p>Reports on statistics of accessing the National Database and Information System by users.</p>	<p><u>Assumption</u> : Continued productive collaboration amongst project partners and stakeholders at all levels.</p> <p><u>Risk:</u></p> <p>Shortage of co-financing support at all levels due to future global financial crises</p>	<p><i>Insert relevant PoW Outcome(s) and indicator(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

<p>Outcome 3.1.</p> <p>Trained policy makers, smallholders and local communities in pilot sites support sustainable conservation and utilization of locally important fruit and nut tree resources in land and ecosystem restoration taking gender and youth inclusion into account</p>	<p><u>Indicator 1:</u> At least 500 people (policy makers, representatives of smallholders and local communities) in pilot sites, of which 50% are women and youth trained and support sustainable conservation and utilization of locally important fruit and nut tree resources in land and ecosystem restoration.</p> <p><u>Indicator 2:</u> At least 500 forestry and city gardening workers of which 50% are female and youth trained on resilience and climate change adaptation practices with use of local fruit and nut tree biodiversity.</p> <p><u>Indicator 3:</u> At least 50 school students of which 50% are girls increased their knowledge and leadership skills in use of agrobiodiversity in sustainable land and forest ecosystem management through participation in Clubs of Young Foresters/Horticulturists.</p>	<p>No gender and youth inclusive issues integrated into national capacity building strategy, including for sectoral personnel (i.e. forestry and green gardening workers, etc.).</p> <p>No comprehensive educational and training courses organized to increase awareness on agrobiodiversity in sustainable land and forest ecosystem management</p>	<p>End of project Target</p> <p>Gender and youth inclusive capacity building activities are integrated into national policy on biodiversity conservation, land and forest management.</p> <p>Policy makers, smallholders and representatives of local communities, of which 50% are female and youth in pilot sites trained.</p> <p>Mid-Point target</p> <p>Gender and youth inclusive capacity building strategy developed.</p> <p>Training materials and curriculums are produced.</p>	<p>Gender and youth inclusive capacity building strategy.</p> <p>Training materials and curriculums.</p> <p>Reports on capacity building events with lists of participants disaggregated by gender and youth participants.</p> <p>Database on capacity building events.</p>	<p><u>Assumption</u> : Continued productive cooperation of the various education, research, extension services, mass media operating in Armenia in promoting gender and youth inclusive and sustainable actions on conservation and utilization of locally important fruit and nut tree.</p> <p><u>Risk:</u></p> <p>Gender stereotypes on role in and capacity of women and youth to contribute to livelihoods at national and local levels.</p>	<p><i>Insert relevant PoW Outcome(s) and indicator(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Outcome 3.2.</p> <p>Local communities and farmers benefit from increased availability of nutritionally rich food products</p>	<p><u>Indicator 1:</u> At least 2,000 farmers and local community representatives, of which 50% are women and youth trained on value adding technologies and marketing ecosystem services (agro- and eco-</p>	<p>No Innovative restoration technologies on value adding to fruit and nut crop products and for ecosystem services (agro- and eco-tourism) marketing applied in the project sites.</p>	<p>End of project Target</p> <p>Farmers and local community representatives of which 50% are women and youth trained and have skills and knowledge to create new agrobiodiversity</p>	<p>Reports on capacity building events with lists of participants disaggregated by gender and youth.</p> <p>Gender and youth inclusive training programs and manuals.</p>	<p><u>Assumption</u> : Willingness of communities to collaborate and adopt biodiversity and environment friendly technologies</p>	<p><i>Insert relevant PoW Outcome(s) and indicator(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

(fruits and nuts) and marketing of ecosystem services (eco- and agro-tourism) produced by restored lands and forest ecosystems and supported by national and regional (provincial) governments	tourism) provided by local fruit and nut tree species. <u>Indicator 2:</u> At least 50 local stakeholders, of which 50% are women and youth trained on development of business plans for running eco-and agro-tourism business.		rich products and run eco- and agro-tourism business. Mid-Point target Gender and youth inclusive training programs and manuals on adding value technologies and ecosystem services marketing (eco- and agro-tourism) developed.	Reports on evaluation of received knowledge and skills during training workshops.	and develop eco-, agro-tourism. <u>Risk:</u> Local market barriers preventing enter of new actors, that promote eco-, agro-tourism.		
Project Outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Relevant PoW Direct Outcome(s)	Relevant SDG target(s) and indicators
Output 1.1.1. National and regional (provincial) management / development plans and strategies revised to include the use of fruit and nut tree biodiversity to mitigating the risks of climate change, reduce land degradation, and promote soil and water resources conservation, ecosystem services, food security and food safety.	<u>Indicator 1:</u> Policy briefs on review of current national policy (1) and regional (provincial) management / development plans and strategies (5) are produced. <u>Indicator 2:</u> At least 5 regional (provincial) management / development plans and strategies are revised and gaps in use of local fruit and nut tree biodiversity are identified (with participation of at least 50% of female experts). <u>Indicator 3:</u> Proposals and maps on restoration of degraded lands and forest through use of local fruit and nut tree biodiversity for a national and at least 2 regional (provincial) management plans/strategies are developed.	No national and regional management/development plans have area quotas of fruit and nut tree biodiversity planting. Armenia National Forest Atlas shows areas for restoration but does not include plant species recommended for restoration use. Land restoration plans for park forest (urban forests with special places for community people to go and rest) include use of wild fruit species in forest management plans but not in municipal plans.	End of project Target Proposals and maps on restoration of degraded forest and lands to national and regional governments for inclusion in national and regional (provincial) management / development plans submitted. Mid-Point target Review of current relevant national and regional (provincial) management / development plans and strategies completed.	Report on review of current relevant national and regional (provincial) management / development plans and strategies. Policy briefs. Report on workshop with national and regional level policy makers (governments) to review the drafted proposals and maps. Proposals and maps on restoration of degraded forest and lands.	<u>Assumption</u> : National and regional (provincial) governments are interested in and support land and forest restoration actions. <u>Risk:</u> Lack of funds at provincial and local levels to support land and forest restoration programmes	<i>Insert relevant PoW Direct Outcome(s)</i>	<i>Insert relevant SDG target and indicator</i>

<p>Output 1.1.2.</p> <p>Harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species, quality and diverse seedlings supply standards developed and available.</p>	<p><u>Indicator 1:</u> At least Standards on Harvesting wild fruits (1) and Standards on harvesting wild nuts (1) available.</p> <p><u>Indicator 2:</u> A Quality Standards (1) for production of diverse and quality seedlings of target wild fruit and nut species available.</p> <p><u>Indicator 3:</u> At least Quality Standards on collection of wild fruit tree seeds (1) and Standards on collection of wild nut tree seeds (1) for supply quality seedlings available.</p> <p><u>Indicator 4:</u> At least 2 Quality Standards on planting material: for cultivated fruit crops (1) and for nut tree crops (1).</p>	<p>There are no Standards available on wild fruits and nuts harvesting.</p> <p>There are no Quality Standards available for production of quality and diverse planting material of wild fruit and nut tree species.</p> <p>There are no Quality Standards available on collection of wild nut tree seeds for growing quality seedlings.</p> <p>There are no Quality Standards available for production of planting material of cultivated fruit and nut tree crops.</p>	<p>End of project Target</p> <p>Harvesting and Quality Standards developed and submitted.</p> <p>Mid-Point target</p> <p>Gaps in regulation framework and quality control identified.</p> <p>Harvesting and Quality Standards drafted.</p>	<p>Report on review of the existing regulatory framework and practices on harvesting wild fruits and nuts.</p> <p>Report on review of the existing regulatory framework and practices on supply quality planting material.</p> <p>Report on workshop with relevant stakeholders to review the developed standards and certification procedure.</p> <p>Harvesting Standards (1)</p> <p>Quality Standards (6).</p>	<p><u>Assumption</u> :</p> <p>Willingness of stakeholders in sustainable management of fruit and nut tree biodiversity</p> <p><u>Risk:</u></p> <p>Bureaucratic procedure of review and entering into the force the regulatory proposals.</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 1.1.3.</p> <p>The Ministry of Environment develops and implements a knowledge management system to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity</p>	<p><u>Indicator 1:</u> Web platform of the Ministry of Environment include information on fruit and nut tree species, management practices and sources of planting material to be used for land and forest restoration.</p> <p><u>Indicator 2:</u> Diversity Assessment for Agrobiodiversity and Resilience (DATAR) tool used at least in 3 project sites.</p> <p><u>Indicator 3:</u> At least 200 specialists (of which 50% are female) of Ministry of</p>	<p>Web platform maintained by Ministry of Environment does not include information on fruit and nut tree species, management practices and sources of planting material to be used for land and forest restoration.</p>	<p>End of project Target</p> <p>A web platform with all documents and links to knowledge, technologies and practices available</p> <p>Mid-Point target</p> <p>Information for development of technical publications, posters, fliers and educational videos collected.</p> <p>Diversity Assessment for Agrobiodiversity and Resilience (DATAR) tool available for use in Armenia</p>	<p>Updated web platform.</p> <p>Report on training stakeholders in 3 project sites on use of DATAR.</p> <p>Technical publications, posters, fliers and educational videos to improve access to knowledge on diversity of local fruit and nut tree crops and practices on land and forest restoration</p> <p>Portfolio of intra-specific biodiversity of local fruit and nut tree crops.</p>	<p><u>Assumption</u> :</p> <p>Willingness and capacity of stakeholders to collaborate and exchange information.</p> <p><u>Risk:</u></p> <p>Lack of co-financing to support maintenance of the web portal</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

	<p>Environment and their departments and other stakeholders trained to apply DATAR tool to promote innovation, integration, transformation and scaling up of the use of fruit and nut tree biodiversity.</p> <p><u>Indicator 4:</u> At least 5 demonstration plots (of which 50% are led by women) on use of advanced technologies on forest protection established</p>						
<p>Output 1.2.1.</p> <p>Institutional and financial support for selected regions (<i>marzes</i>) increased for mitigating risks of climate change and land degradation through planting fruit and nut trees and other tree species in deforested areas</p>	<p><u>Indicator 1:</u> At least 150 public awareness materials developed and disseminated</p> <p><u>Indicator 2:</u> Inter-sectoral Platforms on Forest and Land Resources Management established in at least 4 project sites.</p> <p><u>Indicator 3:</u> At least 4 cross-sectoral plans on land and forest restoration with use of local fruit and nut tree species are developed at provincial level.</p> <p><u>Indicator 4:</u> at least 10% increase in funds allocation for planting local fruit and nut tree species in provincial management plans/strategies of the project sites.</p>	<p>Staff of forestry and communal greening workers face shortage to fulfil the country obligation on doubling area of forest and green zones</p> <p>No Inter-sectoral Platform on Forest and Land Resources Management to facilitate communication and collaboration on land and forest restoration action.</p> <p>No funds are allocated for land restoration in the budget of yearly provincial development plans.</p>	<p>End of project Target</p> <p>Increased yearly budget for land and forest restoration with use of fruit and nut tree biodiversity approved.</p> <p>Mid-Point target</p> <p>Public Awareness campaign implemented.</p> <p>Report on review of institutional framework and financial support for land and forest restoration with use of local biodiversity at provincial levels available.</p>	<p>Report on review of institutional framework and financial support.</p> <p>Public awareness materials on degraded forest and land areas and agrobiodiversity conservation targeted policy makers.</p> <p>Report on establishment of Inter-sectoral Platform on Forest and Land Resources Management</p> <p>Cross-sectoral plans on land and forest restoration with use of local fruit and nut tree species with proposals on funds allocation in project sites.</p>	<p><u>Assumption</u> :</p> <p>Policy makers at national, provincial and local levels are ready to collaborate.</p> <p><u>Risk:</u></p> <p>Lack of funds in municipality budget to support restoration actions.</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 1.2.2.</p>	<p><u>Indicator 1:</u> Center for Biodiversity and Climate Adaptation</p>	<p>There is no Center for Biodiversity and Climate Adaptation Knowledge which is</p>	<p>End of project Target</p>	<p>Agreement on establishment and providing financial support to Center</p>	<p><u>Assumption</u> :</p>	<p><i>Insert relevant PoW Direct</i></p>	<p><i>Insert relevant SDG target</i></p>

<p>Center for Biodiversity and Climate Adaptation Knowledge which is an ecological Hub for various environmental scientific and public awareness programs is established with sustainable financing in peri-urban forest area</p>	<p>Knowledge, which is an ecological Hub is established under the umbrella of the Institute of Botany of National Academy of Sciences and operational.</p>	<p>an ecological Hub in Armenia</p>	<p>Center for Biodiversity and Climate Adaptation Knowledge available.</p> <p>Mid-Point target</p> <p>Agreement on establishment of Center for Biodiversity and Climate Adaptation Knowledge, which is an Ecological Hub is signed.</p> <p>Information for establishment of Center for Biodiversity and Climate Adaptation Knowledge is gathered</p>	<p>for Biodiversity and Climate Adaptation</p> <p>Annual reports of Center for Biodiversity and Climate Adaptation on services provided</p>	<p>Farmers, local communities, private sector, extension service and forest sector are interested in access to knowledge on biodiversity friendly practices on land and forest restoration.</p> <p><u>Risk:</u></p> <p>Lack of co-funding opportunities</p>	<p><i>Outcome(s)</i></p>	<p><i>and indicator</i></p>
<p>Output 2.1.1.</p> <p>Local governments in Armenia implement sustainable land and forest restoration through local fruit and nut trees in degraded communal areas outside the pilots.</p>	<p><u>Indicator 1:</u> At least 7 demonstration plots (of which 50% are headed by women) on sustainable land and forest restoration through local fruit and nut trees.</p> <p><u>Indicator 2:</u> At least 7 local communities outside the pilots has communal areas restoration plans.</p>	<p>There is no adopted regional (provincial) and communal programmes on land and forest restoration with the use of local fruit and nut trees in degraded communal areas.</p>	<p>End of project Target</p> <p>Restoration activities in demonstrations plots implemented</p> <p>Mid-Point target</p> <p>Areas for demonstration plots identified.</p>	<p>Reports on PA workshops on opportunities for the efficient use of land resources using fruit and nut tree varietal diversity.</p> <p>List of workshops' participants disaggregated by gender and youth.</p> <p>Reports on demonstration plots establishment and operation.</p> <p>Reports on visits of local communities outside the pilots to the demonstration plots with List of participants disaggregated by gender and youth.</p> <p>Communal areas restoration plans</p>	<p><u>Assumption</u> :</p> <p>Communities outside the pilots want to use innovative methods for degraded communal lands and forest restoration.</p> <p><u>Risk:</u></p> <p>Lack of planning material of fruit and nut tree crops for use in restoration</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 2.1.2.</p>	<p><u>Indicator 1:</u> At least 5 mother tree collections (of which 50% are</p>	<p>No list for drought-resistant local fruit and nut trees species and varieties for use</p>	<p>End of project Target</p>	<p>Reports on establishment and running of mother tree collections</p>	<p><u>Assumption</u> :</p>	<p><i>Insert relevant PoW Direct</i></p>	<p><i>Insert relevant SDG target</i></p>

<p>Drought-resistant local fruit and nut trees species and varieties are identified and used for restoration of degraded lands and deforested ecosystems</p>	<p>headed by women) with cultivars of local fruit and nut tree species and 3 seed banks for wild fruit and nut species established.</p> <p><u>Indicator 2: A</u> Protocol for management of seed of wild fruit and nut tree species in the seed banks.</p> <p><u>Indicator 3: A</u> Protocol on management of mother trees of fruit and nut tree cultivars.</p> <p><u>Indicator 4: At</u> least 4 seed plots (of which 50% are managed by women) are established in the project sites.</p> <p><u>Indicator 5: At</u> least 2 nurseries (of which 50% are headed by women) supply quality and diverse planting material of local fruit and nut tree crops.</p> <p><u>Indicator 6: 2</u> greenhouses (of which 50% are managed by women) established and supply planting material with closed root systems (in containers).</p> <p><u>Indicator 7:</u> Portfolio of local fruit and nut tree crops varieties and genotypes available for at least 5 project sites.</p>	<p>in degraded land and forest restoration.</p> <p>Seed banks are available for ornamental flower plants supported by local NGO.</p> <p>No plots for harvesting seeds of wild fruit and nut tree species.</p> <p>Field collections of fruit and nut tree crops and varieties (genebanks) are available only with research institutes for cultivated fruit and nut crops</p> <p>Smallholder fruit and nut tree nurseries supplies planting material of improved varieties, which are not adapted for growing in dry degraded lands and forests</p> <p>Few greenhouses available for producing planting material of fruit and nut tree crops with closed root systems (in containers) and their capacity is not sufficient for ambitious national program on land and forest restoration in Armenia</p>	<p>Forest planting regional projects approved with their maps and species.</p> <p>Mother tree collections for cultivated fruit and nut crops.</p> <p>Seed banks for wild fruit and nut tree species (growth points).</p> <p>Seed harvesting plots in forest areas.</p> <p>Fruit and Nut tree nurseries</p> <p>Greenhouses for producing planting material of fruit and nut tree crops with closed root systems (in containers)</p> <p>Mid-Point target</p> <p>List of drought-resistant local fruit and nut trees species and varieties recommended for use in degraded land and forest restoration for each project site</p> <p>Sites for establishment of Mother tree collections, Seed banks, Seed harvesting plots in forest areas, Fruit and Nut tree nurseries, Greenhouses selected.</p> <p>Information for development technical manual/guidelines gathered.</p>	<p>with the list of supplied graft wood per varieties</p> <p>Reports on establishment and running of seed banks with the list of supplied seeds per species</p> <p>Reports on establishment and running of seed plots with the list of harvested amount of seeds per species</p> <p>Reports on establishment and running of fruit and nut tree nurseries with the list of supplied saplings per varieties</p> <p>Reports on establishment and running of greenhouses with the list of supplied saplings per varieties</p>	<p>Willingness of farmers, local communities, forest enterprises and provincial authorities to produce and supply quality and diverse planting material of fruit and nut tree crops</p> <p><u>Risk:</u></p> <p>Nature disasters; mudslides in fragile mountains ecosystems of Armenia</p>	<p><i>Outcome(s)</i></p>	<p><i>and indicator</i></p>
<p>Output 2.1.3.</p>	<p><u>Indicator 1:</u> At least 2 water and soil saving technologies per</p>	<p>No water and soil saving technologies identified in project pilot sites for land</p>	<p>End of project Target</p>	<p>Report on establishment and operation of water and soil saving</p>	<p><u>Assumption</u></p>	<p><i>Insert relevant PoW Direct</i></p>	<p><i>Insert relevant SDG target</i></p>

<p>Water and soil-saving technologies surrounding fruit and nut trees are used in land and forest ecosystem restoration activities</p>	<p>site are identified and are used in land restoration of project pilot sites.</p> <p><u>Indicator 2:</u> At least 4 demonstration plots (of which 50% are headed by women) on water and soil saving technologies established.</p> <p><u>Indicator 3:</u> At least 3 forest management and provincial land management plans include application of water and soil saving technologies developed.</p>	<p>and forest restoration areas</p>	<p>Water and soil saving technologies used in land and forest ecosystem restoration areas and included in forest management and provincial land management plans management.</p> <p>Mid-Point target</p> <p>Water and soil saving technologies identified</p>	<p>technologies demonstration plots</p> <p>Reports on visits of local communities' representatives to the demonstration plots with list of participants disaggregated by gender and youth.</p> <p>Forest management and provincial land management plans with application of water and soil saving technologies</p>	<p>Willingness of farmers, local communities, forest sector and provincial administrators to use water and soil saving technologies</p> <p><u>Risk:</u></p> <p>High cost for establishment and maintenance of water saving technologies</p>	<p><i>Outcome(s)</i></p>	<p><i>and indicator</i></p>
<p>Output 2.2.1.</p> <p>A National database and information system on local fruit and nut tree species recommended for use in land and forest restoration practices is established and available for use by public organizations, private sector and local communities</p>	<p><u>Indicator 1:</u> An Information Sharing System operational.</p> <p><u>Indicator 2:</u> National database on local fruit and nut tree species established.</p> <p><u>Indicator 3:</u> Protocol on access and use of National database on local fruit and nut tree species.</p>	<p>No centralized database and information sharing mechanism on local fruit and nut tree species recommended for use in land and forest restoration practices exist</p>	<p>End of project Target</p> <p>National database on local fruit and nut tree species recommended for use in land and forest restoration</p> <p>Information Sharing System on planting material sources, market information and capacity building opportunities maintained by Biodiversity and Climate Adaptation Knowledge Center</p> <p>Mid-Point target</p> <p>Protocol providing free access for public organizations, private sector and local communities to the National database and Information Sharing System.</p> <p>Information collected for establishment of a National database</p>	<p>Protocol on access to National database.</p> <p>National database.</p> <p>Information Sharing System.</p> <p>Report on statistics on users' accessing the National database and Information Sharing System.</p>	<p><u>Assumption:</u></p> <p>Willingness of stakeholders at national, provincial and local levels to collaborate, share and use information and practices on land and forest restoration practices</p> <p><u>Risk:</u></p> <p>Challenges in collection of information dispersed among different stakeholders</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

			and Information system				
<p>Output 2.2.2.</p> <p>Climate change vulnerability and land degradation maps, maps of vulnerable zones and mining sites developed and available for making decisions on combating desertification, biodiversity conservation, climate change mitigation and adaptation</p>	<p><u>Indicator 1:</u> At least 5 maps with areas vulnerable for land and forest degradation, loss of biodiversity, climate change affects developed.</p>	<p>No common map available on climate change vulnerability and land degradation maps, maps of vulnerable zones and mining sites</p>	<p>End of project Target</p> <p>Common maps are created in GIS format and available through Information Exchange System.</p> <p>Mid-Point target</p> <p>Sources of available information for maps development identified.</p> <p>Missing data for development of maps collected.</p>	<p>Datasets needed for development of maps.</p> <p>Common maps.</p>	<p><u>Assumption</u> :</p> <p>Willingness of local and national governments officials to provide data for developing inter-sectoral maps.</p> <p><u>Risk:</u></p> <p>Challenges in availability and access to information needed for development of common maps</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 3.1.1.</p> <p>Gender and youth responsive national capacity building strategy for all stakeholder groups dealing with agrobiodiversity conservation, land and forest ecosystems management.</p>	<p><u>Indicator 1:</u> A national capacity building strategy for all stakeholder groups dealing with agrobiodiversity conservation, land and forest ecosystems management.</p> <p><u>Indicator 2:</u> At least 500 persons (policy makers, smallholders and local communities' representatives, etc.) participated in the capacity-development trainings in pilot sites, of which 50% are female and youth.</p>	<p>Armenian National Gender Equality policy exists but does not include gender and youth inclusive capacity building strategies for stakeholder groups dealing with agrobiodiversity conservation, land and forest ecosystems management (at sector and community levels).</p>	<p>End of project Target</p> <p>Gender and youth inclusive trainings, exchange visits and other capacity building activities organized for all stakeholder groups</p> <p>Mid-Point target</p> <p>A national capacity building strategy developed for all stakeholder groups.</p>	<p>Report on consultation workshop with stakeholder groups to review a national capacity building strategy</p> <p>A national capacity building strategy for all stakeholder groups</p> <p>Report on trainings, exchange visits and other capacity building activities for all stakeholder groups with Lists of participants disaggregated by gender and age.</p>	<p><u>Assumption</u> :</p> <p>National and local stakeholders are interested in recognition of women and youth as crucial participants and contributors to agriculture and forest sectors at local, provincial and national levels.</p> <p><u>Risk:</u></p> <p>Stereotypes on role and contribution of women and youth in biodiversity conservation and natural</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

					resources management		
<p>Output 3.1.2.</p> <p>Youth and gender equitable training programs established for forestry and city gardening workers developed and implemented on resilience and adaptation practices with use of fruit and nut tree biodiversity</p>	<p><u>Indicator 1:</u> At least 20 gender and youth inclusive training programs at project site level developed for forestry and city gardening workers.</p> <p><u>Indicator 2:</u> At least 500 forestry and city gardening workers of which 50% are female and youth trained on resilience and adaptation practices with use of local fruit and nut tree biodiversity</p>	<p>No special gender and youth inclusive training programmes for forestry and city gardening workers exist</p>	<p>End of project Target</p> <p>Gender and youth inclusive round tables, workshops/courses, exchange visits organized for forestry and city gardening workers.</p> <p>Mid-Point target</p> <p>Gender and youth inclusive training programs for forestry and city gardening workers developed.</p> <p>Training materials on resilience and adaptation practices with use of local fruit and nut tree biodiversity developed.</p> <p>Public awareness materials on role of local wild fruit and nut tree species in providing ecosystem services and land/forest restoration developed.</p>	<p>Gender and youth inclusive training programs for forestry and city gardening workers.</p> <p>Training materials.</p> <p>Public awareness materials.</p> <p>Reports on public awareness round tables for forestry and city gardening workers with gender and youth disaggregated Lists of participants.</p> <p>Reports on capacity building workshops, trainings, exchange visits for forestry and city gardening workers with gender and youth disaggregated lists of participants.</p>	<p><u>Assumption</u> :</p> <p>National, regional and local governments interested having skilled and diverse staff.</p> <p><u>Risk:</u></p> <p>Stereotypes on role of women and youth in business running</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 3.1.3.</p> <p>High Schools, technical colleges, and universities curriculum include courses and club activities to develop and use knowledge and leadership skills in agrobiodiver</p>	<p><u>Indicator 1:</u> At least 3 High schools have curriculum on land and forest restoration with use of local fruit and nut tree species.</p> <p><u>Indicator 2:</u> At least 3 universities/ technical college included Course materials on agrobiodiversity conservation, land and forest restoration with use of local fruit</p>	<p>Departments on forestry and agronomy in technical colleges and universities exist but they do not have course materials on agrobiodiversity conservation, land and ecosystem restoration activities</p> <p>No Clubs for Young Agro- and Forest Biodiversity Conservationists exist for high school students.</p>	<p>End of project Target</p> <p>Course materials included in curriculum of selected technical college or universities</p> <p>Clubs of Young Foresters/Horticulturists established and function in selected project sites</p> <p>Mid-Point Target</p>	<p>Course materials for universities/ technical college</p> <p>Resolution of the academic council of the Technical college and university on course materials</p> <p>Curriculum for High schools</p> <p>Annual report on operations of Clubs of Young Foresters/Horticulturists with list of young participants</p>	<p><u>Assumption</u> :</p> <p>High schools, technical colleges and universities willing to adopt and apply innovative approaches and tools in their education processes.</p> <p><u>Risk:</u></p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

<p>sity conservation, land and ecosystem restoration activities is enhanced through capacity building activities of the project</p>	<p>and nut tree species, ecosystem services provided by local fruit and nut tree species in their curriculum.</p> <p><u>Indicator 3:</u> At least 3 Clubs of Young Foresters/Horticulturists are established in the project sites.</p> <p><u>Indicator 4:</u> At least 5 school orchards with local fruit and nut tree species and varieties are established.</p>		<p>Curriculum for of Young Foresters/Horticulturists developed</p> <p>Course materials for University and technical college curriculum developed.</p>	<p>disaggregated by gender and youth</p>	<p>Bureaucratic procedure and conservative approach in adaption of innovations.</p>		
<p>Output 3.2.1.</p> <p>Farmers and local communities in the project sites have knowledge and skills in value adding, ecosystem services marketing through trainings, round tables and other project activities on building capacity and raising awareness.</p>	<p><u>Indicator 1:</u> At least 30 public awareness materials developed for farmers and local communities and disseminated.</p> <p><u>Indicator 2:</u> At least 2 training manuals on adding value technologies and ecosystem services (eco- and agro-tourism) marketing developed.</p>	<p>Farmers and local community representatives lack knowledge and skills on value adding to fruit and nut tree species products and marketing the ecosystem services (eco- and agro-tourism) they provide</p>	<p>End of project Target Training, roundtables and capacity building events are organized</p> <p>Mid-Point Target Training and public awareness materials on adding value technologies and ecosystem services marketing (eco- and agro-tourism) developed for farmers and community representatives</p>	<p>Training materials.</p> <p>Public awareness materials.</p> <p>Reports on trainings, roundtables and capacity building events.</p> <p>Lists of training courses participants with disaggregated by gender and youth</p>	<p><u>Assumption</u> :</p> <p>Continued interest of the farmers and local communities in the use of agrobiodiversity contributing to improving their livelihoods</p> <p><u>Risk:</u></p> <p>Stereotypes on role of women and youth in business running</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
<p>Output 3.2.2.</p> <p>Technologies on value addition and creation of new products, and eco- and agro-tourism based on local fruit and nut tree species promoted and used to</p>	<p><u>Indicator 1:</u> At least 5 demonstration sites with technologies on new products creation, of which 50% are headed by women, established in the project sites.</p> <p><u>Indicator 2:</u> At least 50 local stakeholders, of which 50% are women and youth</p>	<p>Farmers have very limited access to technologies for creation value added products from fruit and nut tree biodiversity.</p> <p>Agro- and eco-tourism in the project sites does not exist.</p> <p>Farmers do not have knowledge and skills in the</p>	<p>End of project Target Farmers trained on technologies and business plan development for eco- and agro-tourism.</p> <p>Mid-Point Target Technologies and sites are identified for demonstration.</p>	<p>Reports on established demonstration sites.</p> <p>Technical publications on value adding technologies, eco- and agro-tourism.</p> <p>Guidelines on business plans development.</p>	<p><u>Assumption</u> :</p> <p>Young generation and women want to participate in capacity building programmes and start their business.</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>

benefit local communities	trained on development of business plans for running eco-and agro-tourism business.	development of business for eco-and agro-tourism.	Technical publications on technologies on value adding and creation of new products, eco- and agro-tourism for use by local communities and farmers developed. Guidelines for developing business plans for eco- and agro-tourism available.	Reports on trainings with list of participants disaggregated by gender and youth.	<u>Risk:</u> Stereotypes on role of women and youth in business running		
Output 4.1.1. Project progress reported timely	<u>Indicator 1:</u> Semi-annual technical reports submitted on time. <u>Indicator 2:</u> Quarterly financial reports are submitted on time. <u>Indicator 3:</u> Annual PIR, Co-financing and Inventory reports are submitted on time.	Project not yet implemented.	Project reports submitted on time. Project reports approved by the donor	Semi-annual technical reports. Quarterly financial reports. PIR reports. Co-financing reports. Inventory reports.	<u>Assumption</u> : Continued cooperation among all project partners. Sustainable Fund flow. <u>Risk:</u> Shortage of co-financing support at all levels due to future global financial crises	<i>Insert relevant PoW Direct Outcome(s)</i>	<i>Insert relevant SDG target and indicator</i>
Output 4.1.2. Mid-Term Review conducted	<u>Indicator 1:</u> Mid-term report submitted on time. <u>Indicator 2:</u> Mid-term review conducted on time.	Project not yet implemented.	Mid-Point Target Mid-Term Review conducted.	Project Mid-term report Mid-term Review report	<u>Assumption</u> : Continued cooperation among all project partners. Sustainable Fund flow. <u>Risk:</u> Shortage of co-financing support at all levels due to future global financial crises	<i>Insert relevant PoW Direct Outcome(s)</i>	<i>Insert relevant SDG target and indicator</i>

<p>Output 4.1.3.</p> <p>Terminal Review conducted</p>	<p><u>Indicator 1:</u> Final report submitted on time.</p> <p><u>Indicator 2:</u> Final review conducted on time.</p>	<p>Project not yet implemented.</p>	<p>End of project Target</p> <p>Final Review conducted.</p>	<p>Project Final report</p> <p>Final Review report</p>	<p><u>Assumption</u> :</p> <p>Continued cooperation among all project partners.</p> <p>Sustainable Fund flow.</p> <p><u>Risk:</u></p> <p>Shortage of co-financing support at all levels due to future global financial crises</p>	<p><i>Insert relevant PoW Direct Outcome(s)</i></p>	<p><i>Insert relevant SDG target and indicator</i></p>
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Age and sex-disaggregation information will be foreseen for activities involving educational institutions, data collection, capacity building events. Youth and gender-inclusive capacity building will be integrated into curricula/training/knowledge material to be produced under th

^[1]For projects with more than one relevant PoW outcome indicator, there should be at least one outcome indicator for each of the relevant PoW outcome indicators.

^[2]When a project is relevant to more than one PoW outcome indicator, provide outcomes and outputs for each indicator in order to enable budget details per output and PoW Outcome.

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
International Consultants	19,000.00	3,000.00	16,000.00
National Consultants	15,000.00	3,000.00	12,000.00
Travel	7,000.00	5,700.00	1,300.00
Meetings and Stakeholders consultations at national, regional and local levels	5,000.00	5,000.00	0.00

HACT assessment	4,000.00	0.00	4,000.00
Total	50,000.00	16,700.00	33,300.00

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Yerevan	40.17097713	44.53204098	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Tavush	40.80161079	45.11383416	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Lori	40.85557931	44.61972795	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Gegharkunik	40.6772277	45.14573224	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Shirak	40.87642288	43.98622955	

Location Description:

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.



(Adapted from Interactive Forest Atlas of Armenia <https://forestatlas.am/>)

Geo Name ID <i>Required field if the location is not an exact site</i>	Location Name <i>Required field</i>	Latitude <i>Required field</i>	Longitude <i>Required field</i>	Location Description <i>Optional text field</i>	Activity Description <i>Optional text field</i>
Yerevan City project site – 195 ha					
	Yerevan City, Norqi Antarner, 45 ha	44,53204098	40,17097713	In Yerevan City about 195 ha of deforested land, of which about 45 ha in Nork Marash district	
	Yerevan City Erebunu Antarner, 150 ha	44,53764177	40,11488792	In Yerevan City about 195 ha of deforested land, of which about 150 ha in Erebuni district	
Tavush project site - 4,556 ha					
	Tavush Province “Ijevan Forestry” branch, 4,556 ha	45,11383416	40,80161079	About 25,512 ha of land is under management of “Ijevan Forestry” branch of the “HAYANTAR” SNCO of the ME, of which about 4,556 ha is deforested land	
Lori project site – 5,249 ha					
	Lori Province, “Vanadzor Forestry” branch, 4,244 ha	44,61972795	40,85557931	4,244 ha of land is under management of “Vanadzor Forestry” branch of “HAYANTAR” SNCO	
	Lori Province, “Stepanavan Forestry” branch, 1,005 ha	44,46817318	40,92576906	6,665 ha of land is under management of “Stepanavan Forestry” branch of the “HAYANTAR” SNCO from which 1,005 ha is deforested land and easily accessible for project interventions and operations	
Direct cover:	10,000 ha				
Tavush Province - 7,377 ha					
	Tavush Province “Sev Qar” forest area	45,01309156	40,99182459	Forest area of Tavush Province has a total area 93,241, of which 7,337 ha is deforested land	
	Tavush Province “Noyemberyan” forest area	44,94127243	41,10335418		
	Tavush Province “Artsvaberd” forest area	45,36193345	40,81774073		
	Tavush Province, Ijevan City, Spitak Lich	45,120994	41,013053	40 ha of forest park in Ijevan City of Tavush Province	
Lori Province - 6,519 ha					
	Lori Province, “Jiliza” forestry area	44,68534217	41,18219909	Forest area of Lori Province is 64,319 ha, of which 6,519 ha is deforested land	
	Lori Province “Tumanyan” forestry area	44,72389532	41,03175472		
	Lori Province “Tashir” forestry area	44,31540397	41,15274086		
Gegharkunik Province – 1,517 ha					

Geo Name ID <i>Required field if the location is not an exact site</i>	Location Name <i>Required field</i>	Latitude <i>Required field</i>	Longitude <i>Required field</i>	Location Description <i>Optional text field</i>	Activity Description <i>Optional text field</i>
	Gegharkunik Province "Chambarak" forestry, 1,500 ha	45,14573224	40,6772277	Forest area of Gegharkunik Province has 8,379 ha, of which 1,500 ha is deforested lands	
	Gegharkunik Province, 17 ha forest park in Sevan City	44.961050	40.538121	17 ha of degraded City Forest Park of Sevan City	
Shirak Province -2,737 ha					
	Shirak Province, "Gyumri" forestry area	43,98622955	40,87642288	Forest area of Shirak Province is 4,737 ha from which 2,737 ha is deforested land	
Vayots Dzor Provinc -1,810 ha					
	Vayots Dzor Province, "Vayots Dzori" forestry	45,58353421	39,77094877	Forest area of Vayots Dzor Province is 15,046 ha, of which 7,390 ha are deforested lands. However, only 1,810 ha of it easily accessible will be covered by project's activities.	
Syunik Province - 1,000 ha					
	Syunik Province, "Kapan" Forestry 1,000 ha	46.300215	39.303803	During the GEF PIF development Syunik was not included as the project site since many international projects work there. However, during the PPG phase it was decided and agreed with UN Armenia house to include "Kapan" Forestry as the area of indirect impact of the project (more specifically, Capacity building and forest protection activities)	
Indirect cover:	20, 960 ha				

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

The following areas will be covered **by direct intervention of the project.**

In **Yerevan City project site** will cover **195 ha** of degraded forest areas, of which about 45 ha are located in Nork Marash district and about 150 ha in Erebuni district.

In **Tavush project site** the project will cover **7,377 ha** which are deforested lands in "Sev Qar", "Noyemberyan", "Artsvaberd" and "Spitak Lich" sites. In Tavush Province the total area of forestlands under the management of the "HAYANTAR" SNCO of the ME is 118,753 ha, of which about 11,933 ha is an area of deforested lands. In addition, in Tavush Province there are forestlands at area of 25,512 ha under management of "Ijevan Forestry" branch of the "HAYANTAR" SNCO of the ME located close to Ijevan town.

In Lori project site the project will cover **5,249 ha** of deforested lands, including **4,244 ha** in “Vanadzor” Forestry and **1,005 ha** in “Stepanavan” Forestry. In Lori Province of Armenia there is 101,212 ha of forestlands under the management of the “Lori Forestry” branch of the “HAYANTAR” SNCO, of which about 15,415 ha is area of deforested lands. There is also 30,228 ha in Lori Province under the management of “Vanadzor Forestry” of the “HAYANTAR” SNCO of the Ministry of Environment, of which about 3,660 ha is difficult to access. “Stepanavan Forestry” branch of the “HAYANTAR” SNCO is managing 6,665 ha of forestland in Lori Province, of which **1,005 ha** is deforested lands and is easily accessible for project activities implementation.

In total 10,000 ha of degraded forest ecosystems and lands will be covered by direct interventions of the project.

The project will also contribute **indirectly** to land and forest restoration activities in Armenia through organizing exchange visits, trainings and public awareness workshops, where stakeholders from other locations not directly covered by the project will be invited. These initiatives will be supported by HAYANTAR” SNCO of the ME. The area of indirect impact is the following:

1. “Sev Qar”, “Noemberyan”, “Artsvaber” forestry in **Tavush Province** that has total area 93,241 ha, of which **7,377 ha** is area of deforested lands, plus **40 ha** of forest park in Ijevan town in Tavush Province.
2. “Jiliza”, “Tumanyan” and “Tashir” forestry in **Lori Province** that has total area 64,319 ha, of which **6,519 ha** is area of deforested lands.
3. “Chambarak” forestry in **Gegharkunik Province** that has 8,379 ha, of which **1,500 ha** is area of deforested lands, plus **17 ha** of forest park area in Sevan town in **Gegarkunik Province**.
4. “Gyumri” forestry in **Shirak Province** that has 4,737 ha, of which **2,737 ha** is area of deforested lands.
5. “Vayots Dzor” forestry in **Vayots Dzor Province** that has 15,046 ha, of which 7,390 ha is area of deforested lands. However, of this 7,390 ha only **1,810 ha** will be considered as indirect area due to its accessibility.
6. “Kapan” Forestry in **Syunik Province** has 52,000 ha, of which the project considers only **1,000 ha** will be impacted indirectly through involvement in trainings and workshops on advanced approaches in forestlands management.

In total 20,960 ha of degraded forest ecosystems and lands will be indirectly impacted by the project.

Grand Total of direct and indirect coverage: 30, 960 ha.

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

11140 Annex F

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expenditure Category		1 Policy & Institutions	2 Agro Bio	3 Capacity Building	Subtotal	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total	2024	2025	2026	Total	Responsible Entity		
Salary and benefits / Staff costs: Project personnel	PERSONNEL COMPONENT														
	1100	Salary and benefits / Staff costs: Project personnel													
	1101	National Project Coordinator	0	0	0	0	0	72,450	72,450	24,150	24,150	24,150	72,450	ME	
	1102	Site Coordinator (in each project site - 3 people)	44,000	0	0	44,000	0	44,000	14,600	14,700	14,700	44,000	ME		
	1199	Sub-total	44,000	0	0	44,000	0	72,450	116,450	38,750	38,850	116,450			
	1300	Salary and benefits / Staff costs: Administrative Support													
	1301	Project Assistant	0	0	0	0	0	54,000	54,000	18,000	18,000	18,000	54,000	ME	
	1302	Finance Assistant	0	0	0	0	0	25,000	25,000	9,000	8,000	8,000	25,000	ME	
	1399	Sub-total	0	0	0	0	0	79,000	79,000	27,000	26,000	26,000	79,000		
	International Consultants	5500	International Consultants: Evaluation												
5501		Midterm Evaluation	0	0	0	0	20,000	0	20,000	0	20,000	0	20,000	UNEP	
5502		Terminal Evaluation	0	0	0	0	30,000	0	30,000	0	0	30,000	UNEP		
5503		Audit Service Fee	0	0	0	0	0	5,000	5,000	0	2,500	2,500	5,000	ME	
5599		Sub-total	0	0	0	0	50,000	5,000	55,000	0	22,500	32,500	55,000		
Local Consultants	1200	Local Consultants													
	1201	[1201-00] Agrobiodiversity Expert	0	36,000	0	36,000	0	0	36,000	12,000	12,000	12,000	36,000	ME	
	1202	[1201-01] Information System and Database Expert	0	36,000	0	36,000	0	0	36,000	12,000	12,000	12,000	36,000	ME	
	1203	[1201-02] Marketing and Agro and Eco-tourism Expert (International)	0	0	30,000	30,000	0	0	30,000	5,000	15,000	10,000	30,000	ME	
	1204	[1201-03] Gender Focal Point	12,000	12,000	12,000	36,000	0	0	36,000	12,000	12,000	12,000	36,000	ME	
	1205	[1201-04] Local Gender Experts (in each project site - 3)	10,000	10,000	10,000	30,000	0	0	30,000	7,000	11,000	12,000	30,000	ME	
	1206	[1201-05] Capacity Building Expert	0	0	30,000	30,000	0	0	30,000	10,000	10,000	10,000	30,000	ME	
	1207	[1201-06] Public Awareness Expert	15,000	15,000	0	30,000	0	0	30,000	10,000	10,000	10,000	30,000	ME	
	1208	[1201-07] Monitoring and Evaluation Expert	12,000	12,000	12,000	36,000	0	0	36,000	5,000	15,000	16,000	36,000	ME	
	1209	[1201-08] Policy Expert	36,000	0	0	36,000	0	0	36,000	5,000	15,000	16,000	36,000	ME	
	1299	Sub-total	85,000	121,000	94,000	300,000	0	0	300,000	78,000	112,000	110,000	300,000		
	Travel	1600	Travel on official business												
		1601	Travel Local	10,000	20,000	20,000	50,000	5,000	5,000	60,000	20,000	20,000	20,000	60,000	ME
1602		International Travel/Air Fair	5,000	5,000	5,000	15,000	0	0	15,000	5,000	5,000	5,000	15,000	ME	
1699		Sub-total	15,000	25,000	25,000	65,000	5,000	5,000	75,000	25,000	25,000	25,000	75,000		
Sub-contract to executing partner/ entity	SUB-CONTRACT COMPONENT														
	2100	Sub-contract to executing partner/ entity													
	2101	Development of national and regional (provincial) management / development plans and strategies to include the use of fruit and nut tree biodiversity in land and forest restoration (20 percent of the BL will be devoted for gender and youth responsive aspects)	51,000	0	0	51,000	0	0	51,000	20,000	20,000	11,000	51,000	ME	
	2102	Development of harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species (20 percent of the BL will be devoted for gender and youth responsive aspects)	40,000	0	0	40,000	0	0	40,000	15,000	15,000	10,000	40,000	ME	
	2103	Development of knowledge management system to promote innovation, integration, transformation and scaling up (20 percent of the BL will be devoted for gender and youth responsive aspects)	60,000	0	0	60,000	0	0	60,000	20,000	30,000	10,000	60,000	ME	
	2104	Development of measures on institutional and financial support for selected regions (20 percent of the BL will be devoted for gender and youth responsive aspects)	35,000	0	0	35,000	0	0	35,000	7,000	15,000	13,000	35,000	ME	
	2105	Establishment of Center for Biodiversity and Climate Adaptation Knowledge	26,500	0	0	26,500	0	0	26,500	10,000	10,000	6,500	26,500	ME	
	2106	Implementation of sustainable land and forest restoration by local governments	0	75,000	0	75,000	0	0	75,000	20,000	35,000	20,000	75,000	ME	
	2107	Identification and use of drought-resistant indigenous fruit and nut tree species and varieties for restoration of degraded lands and forests	0	132,440	0	132,440	0	0	132,440	51,000	54,000	27,440	132,440	ME	
	2108	Application of water and soil-saving technologies	0	45,000	0	45,000	0	0	45,000	20,000	15,000	10,000	45,000	ME	
	2109	Establishment of National database and information system on indigenous fruit and nut tree species	0	55,000	0	55,000	0	0	55,000	15,000	20,000	20,000	55,000	ME	
	2110	Development of maps on areas vulnerable for climate change and land degradation, maps of mining sites for restoration with use of fruit and nut tree biodiversity	0	50,000	0	50,000	0	0	50,000	15,000	25,000	10,000	50,000	ME	
	2111	Development of gender and youth responsive national capacity building strategy	0	0	25,000	25,000	0	0	25,000	15,000	10,000	0	25,000	ME	
	2112	Development of youth and gender equitable training programs for forestry and city gardening workers	0	0	38,000	38,000	0	0	38,000	15,000	15,000	8,000	38,000	ME	
	2113	Development of High Schools, technical colleges, and universities curriculum, courses and club activities	0	0	43,000	43,000	0	0	43,000	10,000	18,000	15,000	43,000	ME	
	2114	Development of knowledge and skills in value adding, ecosystem services marketing	0	0	32,000	32,000	0	0	32,000	10,000	11,000	11,000	32,000	ME	
	2115	Activities on promoting technologies on value addition and creation of new products, and eco- and agro-tourism business development	0	0	30,000	30,000	0	0	30,000	10,000	10,000	10,000	30,000	ME	
	2399	Sub-total	212,500	357,440	168,000	737,940	0	0	737,940	253,000	303,000	181,940	737,940		
	Trainings, Workshops, Meetings	TRAINING COMPONENT													
		3200	Trainings, Workshops												
		3201	Exchange visits to demonstration plots to share the knowledge	0	35,000	15,000	50,000	0	0	50,000	10,000	20,000	20,000	50,000	ME
		3202	Trainings for experts on DATAR	20,000	0	0	20,000	0	0	20,000	5,000	10,000	5,000	20,000	ME
		3203	Trainings for farmers and local communities	0	0	25,000	25,000	0	0	25,000	10,000	10,000	5,000	25,000	ME
3204		Trainings for foresters and city gardening workers	0	0	35,000	35,000	0	0	35,000	10,000	15,000	10,000	35,000	ME	
3205		Trainings for Clubs of Young Foresters/Horticulturists	0	0	15,000	15,000	0	0	15,000	5,000	5,000	5,000	15,000	ME	
3206		Trainings on value adding and agro-ecotourism development for farmers and local communities	0	0	35,000	35,000	0	0	35,000	10,000	15,000	10,000	35,000	ME	
3299		Sub-total	20,000	35,000	125,000	180,000	0	0	180,000	50,000	75,000	55,000	180,000		
3300		Meetings/Conferences													
3301		inception meeting	7,000	0	0	7,000	0	0	7,000	7,000	0	0	7,000	ME	
3302		Steering Committee meetings	0	0	0	0	0	3,500	3,500	1,500	1,000	1,000	3,500	ME	
3303		Site coordination meetings	2,000	1,000	2,000	5,000	0	1,200	6,200	2,300	1,700	2,200	6,200	ME	
3304		Technical meetings/workshops	18,000	4,000	4,000	26,000	0	0	26,000	5,000	10,000	11,000	26,000	ME	
3305		National partners meetings	0	10,000	0	10,000	0	0	10,000	3,000	3,000	4,000	10,000	ME	
3306		Conferences to share lessons learnt	0	10,000	0	10,000	0	0	10,000	0	0	10,000	10,000	ME	
3307		Farmers' Fairs	0	22,000	0	22,000	0	0	22,000	0	11,000	11,000	22,000	ME	
3308		Awareness Raising Events	15,000	15,000	10,000	40,000	0	0	40,000	10,000	20,000	10,000	40,000	ME	
3399	Sub-total	42,000	62,000	16,000	120,000	0	4,700	124,700	28,800	46,700	49,200	124,700			
Office Supplies	EQUIPMENT AND PREMISES COMPONENT														
	4100	Expendable equipment													
	4101	Office supplies	0	0	0	0	0	1,000	1,000	0	0	0	1,000	ME	
	4102	Tools for field work in the project sites	3,000	13,000	2,000	18,000	0	0	18,000	8,000	8,000	2,000	18,000	ME	
4399	Sub-total	3,000	13,000	2,000	18,000	0	1,000	19,000	9,000	8,000	2,000	19,000			
Goods	4200	Non-expendable equipment													
	4201	Computer equipment	6,000	15,000	0	21,000	0	2,000	23,000	23,000	0	0	23,000	ME	
	4202	Office equipment	0	0	0	0	0	1,000	1,000	1,000	0	0	1,000	ME	
	4203	Field equipment	62,400	43,100	0	95,500	0	0	95,500	95,500	0	0	95,500	ME	
4399	Sub-total	68,400	58,100	0	116,500	0	3,000	119,500	119,500	0	0	119,500			
Works	MISCELLANEOUS COMPONENT														
	5200	Works: Reporting costs													
	5201	Technical publications	25,500	35,500	20,500	81,500	0	0	81,500	16,500	45,000	20,000	81,500	ME	
	5202	Public awareness materials and media publications	17,000	15,000	0	32,000	0	0	32,000	10,000	17,000	5,000	32,000	ME	
	5203	Education materials	12,500	2,500	27,500	42,500	0	0	42,500	12,500	15,000	15,000	42,500	ME	
5199	Sub-total	65,000	53,000	48,000	166,000	0	0	166,000	39,000	77,000	40,000	166,000			
Other Costs	5300	Other Operating Costs: Sundry													
	5301	Communication (Internet, phone)	0	0	0	0	0	7,500	7,500	2,500	2,500	2,500	7,500	ME	
	5302	Bank Charges	0	0	0	0	0	1,500	1,500	500	500	500	1,500	ME	
	7999	Sub-total	0	0	0	0	0	9,000	9,000	3,000	3,000	3,000	9,000		

Please explain any aspects of the budget as needed here

See project budget for ease of review

Project title: Land Restoration and Ecosystem Service Improvement through Use of Fruit and Nut Tree Biodiversity in Armenia
 Project number: 11140
 Project executing partner: Ministry of Environment of Armenia
 Project implementation period: 2024-2025-2026

Expenditure Category	Expenditure by project component/activity											Responsible Entity		
	1 Policy & Institutions	2 Agro Bio	3 Capacity Building	Subtotal	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total	2024	2025	2026	Total			
Salary and benefits / Staff costs: Project personnel	PERSONNEL COMPONENT													
	1100	Salary and benefits / Staff costs: Project personnel												
	1101	National Project Coordinator	0	0	0	0	72,450	72,450	24,150	24,150	24,150	72,450	ME	
	1102	Site Coordinator (in each project site - 3 people)	44,000	0	0	44,000	0	44,000	14,600	14,700	14,700	44,000	ME	
	1199	Sub-total	44,000	0	0	44,000	0	72,450	116,450	38,750	38,850	116,450		
	1300	Salary and benefits / Staff costs: Administrative Support												
	1301	Project Assistant	0	0	0	0	54,000	54,000	18,000	18,000	18,000	54,000	ME	
1302	Finance Assistant	0	0	0	0	25,000	25,000	9,000	8,000	8,000	25,000	ME		
1399	Sub-total	0	0	0	0	79,000	79,000	27,000	26,000	26,000	79,000			
International Consultants	5500	International Consultants Evaluation												
	5501	Midterm Evaluation	0	0	0	0	20,000	0	20,000	0	20,000	0	UNEP	
	5502	Terminal Evaluation	0	0	0	0	30,000	0	30,000	0	30,000	30,000	UNEP	
	5503	Audit Service Fee	0	0	0	0	5,000	5,000	0	2,500	2,500	5,000	ME	
5899	Sub-total	0	0	0	0	50,000	5,000	55,000	0	22,500	32,500	65,000		
Local Consultants	1200	Local Consultants												
	1201	[1201-00] Agrobiodiversity Expert	0	36,000	0	36,000	0	36,000	12,000	12,000	12,000	36,000	ME	
	1202	[1201-01] Information System and Database Expert	0	36,000	0	36,000	0	36,000	12,000	12,000	12,000	36,000	ME	
	1203	[1201-02] Marketing and Agro and Eco-tourism Expert (International)	0	0	30,000	30,000	0	30,000	5,000	15,000	10,000	30,000	ME	
	1204	[1201-03] Gender Focal Point	12,000	12,000	12,000	36,000	0	36,000	12,000	12,000	12,000	36,000	ME	
	1205	[1201-04] Local Gender Experts (in each project site -3)	10,000	10,000	10,000	30,000	0	30,000	7,000	11,000	12,000	30,000	ME	
	1206	[1201-05] Capacity Building Expert	0	0	30,000	30,000	0	30,000	10,000	10,000	10,000	30,000	ME	
	1207	[1201-06] Public Awareness Expert	15,000	15,000	0	30,000	0	30,000	10,000	10,000	10,000	30,000	ME	
	1208	[1201-07] Monitoring and Evaluation Expert	12,000	12,000	12,000	36,000	0	36,000	5,000	15,000	16,000	36,000	ME	
	1209	[1201-08] Policy Expert	36,000	0	0	36,000	0	36,000	5,000	15,000	16,000	36,000	ME	
	1299	Sub-total	85,000	121,000	94,000	300,000	0	300,000	78,000	112,000	110,000	300,000		
Travel	1600	Travel on official business												
	1601	Travel Local	10,000	20,000	20,000	50,000	5,000	5,000	60,000	20,000	20,000	20,000	60,000	ME
	1602	International Travel/Air Fair	5,000	5,000	5,000	15,000	0	0	15,000	5,000	5,000	15,000	ME	
	1699	Sub-total	15,000	25,000	25,000	65,000	5,000	5,000	75,000	25,000	25,000	25,000	75,000	
Sub-contract to executing partner/ entity	SUB-CONTRACT COMPONENT													
	2100	Sub-contract to executing partner/ entity												
	2101	Development of national and regional (provincial) management / development plans and strategies to include the use of fruit and nut tree biodiversity in land and forest restoration (20 percent of the BL will be devoted for gender and youth responsive aspects)	51,000	0	0	51,000	0	0	51,000	20,000	20,000	11,000	51,000	ME
	2102	Development of harvesting standards and other regulatory framework for sustainable management of wild fruit and nut tree species (20 percent of the BL will be devoted for gender and youth responsive aspects)	40,000	0	0	40,000	0	0	40,000	15,000	15,000	10,000	40,000	ME
	2103	Development of knowledge management system to promote innovation, integration, transformation and scaling up (20 percent of the BL will be devoted for gender and youth responsive aspects)	60,000	0	0	60,000	0	0	60,000	20,000	30,000	10,000	60,000	ME
	2104	Development of measures on institutional and financial support for selected regions (20 percent of the BL will be devoted for gender and youth responsive aspects)	35,000	0	0	35,000	0	0	35,000	7,000	15,000	13,000	35,000	ME
	2105	Establishment of Center for Biodiversity and Climate Adaptation Knowledge	26,500	0	0	26,500	0	0	26,500	10,000	10,000	6,500	26,500	ME
	2106	Implementation of sustainable land and forest restoration by local governments	0	75,000	0	75,000	0	0	75,000	20,000	35,000	20,000	75,000	ME
	2107	Identification and use of drought-resistant indigenous fruit and nut trees species and varieties for restoration of degraded lands and forests	0	132,440	0	132,440	0	0	132,440	51,000	54,000	27,440	132,440	ME
	2108	Application of water and soil-saving technologies	0	45,000	0	45,000	0	0	45,000	20,000	15,000	10,000	45,000	ME
	2109	Establishment of National database and information system on indigenous fruit and nut tree species	0	55,000	0	55,000	0	0	55,000	15,000	20,000	20,000	55,000	ME
	2110	Development of maps on areas vulnerable for climate change and land degradation, maps of mining sites for restoration with use of fruit and nut tree biodiversity	0	50,000	0	50,000	0	0	50,000	15,000	25,000	10,000	50,000	ME
	2111	Development of gender and youth responsive national capacity building strategy	0	0	25,000	25,000	0	0	25,000	15,000	10,000	0	25,000	ME
	2112	Development of youth and gender equitable training programs for forestry and city gardening workers	0	0	38,000	38,000	0	0	38,000	15,000	15,000	8,000	38,000	ME
	2113	Development of High Schools, technical colleges, and universities curriculum, courses and club activities	0	0	43,000	43,000	0	0	43,000	10,000	18,000	15,000	43,000	ME
	2114	Development of knowledge and skills in value adding, ecosystem services marketing	0	0	32,000	32,000	0	0	32,000	10,000	11,000	11,000	32,000	ME
2115	Activities on promoting technologies on value addition and creation of new products, and eco- and agro-tourism business development	0	0	30,000	30,000	0	0	30,000	10,000	10,000	10,000	30,000	ME	
2399	Sub-total	212,500	357,440	168,000	737,940	0	0	737,940	253,000	303,000	181,940	737,940		
Trainings, Workshops, Meetings	TRAINING COMPONENT													
	3200	Trainings, Workshops												
	3201	Exchange visits to demonstration plots to share the knowledge	0	35,000	15,000	50,000	0	0	50,000	10,000	20,000	20,000	50,000	ME
	3202	Trainings for experts on DATAR	20,000	0	0	20,000	0	0	20,000	5,000	10,000	5,000	20,000	ME
	3203	Trainings for farmers and local communities	0	0	25,000	25,000	0	0	25,000	10,000	10,000	5,000	25,000	ME
	3204	Trainings for foresters and city gardening workers	0	0	35,000	35,000	0	0	35,000	10,000	15,000	10,000	35,000	ME
	3205	Trainings for Clubs of Young Foresters/Horticulturists	0	0	15,000	15,000	0	0	15,000	5,000	5,000	5,000	15,000	ME
	3206	Trainings on value adding and agro-ecotourism development for farmers and local communities	0	0	35,000	35,000	0	0	35,000	10,000	15,000	10,000	35,000	ME
	3299	Sub-total	20,000	35,000	125,000	180,000	0	0	180,000	50,000	75,000	55,000	180,000	
	3300	Meetings/Conferences												
	3301	Inception meeting	7,000	0	0	7,000	0	0	7,000	7,000	0	0	7,000	ME
	3302	Steering Committee meetings	0	0	0	0	0	3,500	3,500	1,500	1,000	1,000	3,500	ME
	3303	Site coordination meetings	2,000	1,000	1,000	4,000	0	2,200	6,200	2,300	1,700	2,200	6,200	ME
3304	Technical meetings/workshops	18,000	4,000	4,000	26,000	0	0	26,000	5,000	10,000	11,000	26,000	ME	
3305	National partners meetings	0	10,000	0	10,000	0	0	10,000	3,000	3,000	4,000	10,000	ME	
3306	Conferences to share lessons learnt	0	10,000	0	10,000	0	0	10,000	0	0	10,000	10,000	ME	
3307	Farmers' Fairs	0	22,000	0	22,000	0	0	22,000	0	11,000	11,000	22,000	ME	
3308	Awareness Raising Events	15,000	15,000	10,000	40,000	0	0	40,000	10,000	20,000	10,000	40,000	ME	
3399	Sub-total	42,000	62,000	15,000	119,000	0	5,700	124,700	28,800	46,700	49,200	124,700		

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.