





Terminal Evaluation FINAL Report

of the UNDP-GEF Project: "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia"



GEF Agency: United Nations Development Programme (UNDP)

Implementing Partner: Ministry of the Environment (former Ministry of Nature Protection)

GEF-5 **UNDP Atlas Award ID:** Funding: 00081940

GEF Project ID: 5353 Region & Country: Armenia

UNDP PIMS: 4416

Project Timeline: Dec. 2015 - Dec. 2020 **Evaluation Timeline:** Sept. to Nov. 2020

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Submitted on November 17, 2020

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List of Abbreviations and Acronyms

APR Annual Progress Report

ARM Armenian Dram
AWP Annual Work Plan
BD Biodiversity

CBO Community Based Organization

CC Climate Change

CCM Climate Change Mitigation

CDR Combined Delivery Report (Atlas report)
CPAP Country Programme Action Plan
CPD Country Programme Document
DAC Development Assistance Committee

EE Energy Efficient (Efficiency)

FE Forest Enterprise

FMP Forest Management Plan
GCF Green Climate Fund
GEF Global Environment Facility
GPS Global Positioning System

Ha Hectare

HCVF High Conservation Value Forest

IUCN International Union for Conservation of Nature

LD Land Degradation

M Million(s)

M&E Monitoring and Evaluation
MNP Ministry of Nature Protection
MOE Ministry of Environment

MOU Memorandum Of Understanding

MTR Mid-Term Review
NE North Eastern (Armenia)

NGO Non-Governmental Organization
NIM National Implementation Modality

NP National Park

NRM Natural Resource Management NTFP Non-Timber Forest Product

OECD Organization for Economic Co-operation and Development

PB Project Board
PC Project Coordinator
PIF Project Identification Form

PIR Project Implementation Review (report)
PMAT Portfolio Monitoring and Assessment Tool

PMU Project Management Unit

REDD Reducing Emissions from Deforestation and Forest Degradation

SBAA Standard Basic Assistance Agreement
SESP Social and Environmental Screening Protocol

SFM Sustainable Forest Management

SGP Small Grant Programme

SLM Sustainable Land Management
SMART Specific, Measurable, Attainable, Relevant and Time-bound

SNCO State Non Commercial Organization

SRF Strategic Results Framework
tCO2 Tons of Carbon Dioxide
TE Terminal Evaluation
TOR Terms of Reference
TSA Targeted Scenario Analysis

UN United Nations

UNCT United Nations Country Team

UNDAF United Nations Development Assistance Framework

UNDP United Nations Development Programme

UNEG United Nations Evaluation Group

UNFCCC United Nations Framework Convention on Climate Change

USD United States Dollar

WWF World Wide Fund for Nature

Acknowledgements

This report was prepared by Mr. Jean-Joseph Bellamy (<u>JJ@Bellamy.net</u>). The Evaluator would like to express his gratitude and appreciation to all stakeholders he interviewed. Their contributions were most appreciated, and the facts and opinions they shared played a critical part in the conduct of this evaluation.

The Evaluator would also like to extend special thanks to the personnel of the United Nations Development Programme (UNDP) who supplied key information and key contacts to conduct this evaluation. A special thank you to Mr. Hovik Sayadyan, Project Manager; and Ms. Lusine Sargsyan for their support in setting up interviews and collect information. Finally, a special thank you to Mr. Vardan Tserunyan, Evaluation Support Assistant and National Expert who provided a valuable support to conduct interviews, visit project sites and collect documents. They all provided invaluable support that contributed to the successful fact-finding phase of this terminal evaluation.

DISCLAIMER

This report is the work of an independent Evaluator and does not necessarily represent the views, or policies, or intentions of the United Nations Development Programme (UNDP) and/or of the Government of Armenia.

1. Main Conclusions, Recommendations and Lessons¹

1.1. Background - Introduction

This report presents the findings of the Terminal Evaluation (TE) of the UNDP-implemented and GEF-financed Project: "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia". This TE was performed by an International Evaluator - Mr. Jean-Joseph Bellamy, supported by an Evaluation Support Assistant and National Expert - Mr. Vardan Tserunyan.

Table 1: Project Information Table

Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-						
Project Title:	eastern Armenia					
UNDP Project ID (PIMS #):	4416	PIF Approval Date:		November 4, 2013		
GEF Project ID:	5353	CEO Endorsement D	ate:	June 18, 2015		
Atlas Project ID:	00081940	Project Document (F Signature Date (date began):		December 24, 2015		
Country:	Armenia	Date Project Manage	er hired:	May 6, 2016		
Region:	Caucasus	Inception Workshop	date:	June 17, 2016		
Focal Area:	Multifocal Area	Midterm Review date	e:	June 2, 2018		
GEF-5 Strategic Program:	BD-2; LD-2; LD-3; CCM-5; SFM/REDD+ -1	Planned closing date:		December 24, 2019		
Trust Fund:	GEF-5	If revised, proposed closing date:		December 31, 2020		
Executing Agency:	Ministry of Environment (ex.					
Project Financing	at CEO endorsen	nent (USD)	at Completion (TE) (USD)			
(1) GEF Grant	2,977	,169		2,661,639		
(2) UNDP	900	,000		900,000		
(3) MOE	8,650	,000		8,642,593		
(4) Hayantar SNCO	3,777	,235		7,515,506		
(5) WWF (Armenia)	(Armenia) 376,500		441,368			
(6) Caucasus Nature Fund	Nature Fund 286			582,139		
(7) Small Grants Programme		0		72,517		
(8) Total co-financing [2 to 7]	13,989	,935		18,154,123		
Project Total Cost [1+7]:	16,967	,104	20,815,762			

The Caucasus Ecoregion is one ecoregion of the *Global 200 WWF Ecoregions*, and one of the most endangered terrestrial ecosystems. Mountains cover approximately 65% of this ecoregion and the diversity of climate zones results in numerous microclimates supporting a range of ecosystems. Forests are the most important ecosystem for biodiversity conservation in the Caucasus, covering nearly 20% of the region.

The forests of Armenia cover 334,100 ha, which includes 283,600 ha of natural forests and 50,500 ha of plantation forests. These forests are managed by the State Non-Commercial Organisation (SNCO) "Hayantar" and its eleven subordinated forest enterprises of the Ministry of Agriculture; though some forests are part of the specially protected area system of Armenia, including the "Dilijan" National Park. A large part of the country's forests (215,337 ha - 2/3) are located in the Tavush and Lori marzes in the North Eastern Armenia; and 95% are natural forests. Forests in both marzes are rich in wild fruit-bearing species, which are commonly used by surrounding population. Nine specially protected areas are located in the two marzes covering a total of 53,645 ha; two protected areas are managed by the Ministry of Environment (MOE) and seven sanctuaries are managed by "Hayantar".

TE of the UNDP-GEF Project: "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia"

¹ Conclusions and Recommendations are in Chapter 1 with a brief background section. It is structured as an Executive Summary but also a stand-alone section presenting the highlights of this final evaluation. It could be easily printed out separately for wider distribution. If translation is available, it is proposed to translate this chapter and include the translation version in this report.

The main cause of land and forest degradation in North Eastern Armenia is the deforestation and overexploitation of natural resources. In the beginning of the 90's, the end of subsidized energy, the energy crisis and the military blockage of the country, forced the rural and urban population to use wood for cooking and heating resulting in significant levels of deforestation, particularly in north-eastern Armenia. Although, the rate of deforestation has decreased over time, due to the efforts by the government, research suggests that around 630,000 m³ of timber is still illegally logged in Armenia annually.

The long term solution to address land and forest degradation includes the reform of forest policy, development of supply and demand solutions, and institutional strengthening. By extension it also includes the need to address social issues as well such as poverty, and lack of attractive and available alternatives. Overall, reducing pressures on forests, implies the need to shift from the current unsustainable practices to sustainable land and forest management approaches. However, several major barriers have impeded the implementation of the long-term solution; they include:

- Inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management.
- Minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground.
- Lack of incentives and benefits to local communities to participate in forest management and conservation.
- Lack of financial resources.

As a response to address these barriers, the project was designed to promote an integrated approach seeking to balance environmental management with development and community needs. It has attempted to improve the sustainability of forest management while maintaining the flow of vital ecosystem services and sustain the livelihoods of local forest-dependent communities. The objective of the project is "Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services". It is to be achieved through the delivery of two expected outcomes and 11 outputs:

- Outcome 1: Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management.
- Outcome 2: Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services.

This is a project supported by UNDP and GEF. It is funded by a grant from the GEF of USD 2,977,169 (including \$744,000 from REDD+), a contribution of USD 900,000 from UNDP (USD 180,000 in cash), USD 12,427,235 from the government, USD 376,500 from WWF Armenia, and USD 286,200 from Caucasus Nature Fund. The total financing of the project is USD 16,967,104. The project was approved by GEF on June 21, 2015; it started on December 24, 2015; the inception workshop was held in Yerevan on June 17, 2016; and the project duration was four (4) years, then extended by one year. It is implemented in accordance with the National Implementation Modality (NIM); the implementing partner is the Ministry of Environment (MOE)².

This TE report documents achievements of the project and includes four chapters. Chapter 1 presents the main conclusions, recommendations and lessons; chapter 2 presents an overview of the project; chapter 3 briefly describes the objective, scope, methodology, evaluation users and limitations of the evaluation; chapter 4 presents the findings of the TE; and relevant annexes are found at the back of the report.

1.2. Conclusions

Project Formulation

i) A highly relevant project supporting the government of Armenia to reform its forestry sector.

The timing of the project was good. It was designed to address issues of deforestation and overexploitation of natural resources in the Tavush and Lori marzes (North Eastern Armenia), which have been growing since the early 90's. Despite that more recently, the rate of deforestation has decreased, it is still estimated that a lot of

² The Ministry of Nature Protection (MNP) was renamed Ministry of Environment (MOE) in mid-2018.

timber is still illegally logged annually in Armenia and that households are the largest consumer of domestic forest products. The long-term solution is to reform the forestry sector with policy reforms, development of supply and demand solutions and institutional strengthening. However, reforming the sector from unsustainable practices to integrated sustainable land and forest management practices has faced four key barriers: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources. This project is part of initiatives funded by the government and other development partners to address these barriers and contribute to implement the long-term solution.

ii) A good project strategy with a coherent Logical Framework Matrix integrating past experiences and good management arrangements.

The project was well formulated. There is a good logical "chain of results" – activities, outputs, outcomes, and objective - to reach the expected results. It was a clear response to national priority needs, which were to support Armenia to reform its forest policy framework, to develop supply and demand solutions, to strengthen relevant institutions, and to address social issues, particularly poverty and lack of attractive and available alternatives. The project was conceptualized on the basis of addressing four barriers through a two-pronged approach: (i) to improve the enabling environment for planning, monitoring and adapting sustainable forest and land management; and (ii) to invest in demonstrating innovative sustainable forest and land management practices seeking to reduce pressure on forests and pastures while maintaining the flow of ecosystem services. The management arrangements were adequate and effective. They provided the project with "checks and balances" mechanisms to review, assess and correct the course of action when necessary. It included a Project Board and an Advisory Board, which provided a platform for key stakeholders to meet, debate, adjust and decide the way forward.

Project Implementation

iii) The project used adaptive management extensively to secure project deliverables while maintaining adherence to the overall project design.

The project has been well managed following UNDP and government of Armenia management procedures. The project document has been used as a "blueprint" to implement the project. An efficient implementation team has been in place, detailed work plans have been guiding the implementation, assignments were conducted with the required participation of relevant stakeholders, progress of the project was well monitored, and the PB fulfilled its guidance role. However, the project has also faced serious disruptive "shocks" which necessitated the regular use of adaptive management measures. In five years, the project had to navigate through several government changes, including working with four different PB Chairs and changes to the forestry governance system, through the "Velvet Revolution" in 2018 and more recently, through the on-going Nagorno-Karabakh conflict. Through all these changes/events, the project implementation team has demonstrated its strong ability to use adaptive management measures to adapt to new situations while maintaining adherence to the overall implementation plan and ensuring progress toward the expected results.

iv) Project partnerships with key stakeholders were conducive to a good implementation of activities; despite several government reorganizations/changes.

The project implementation team developed and enjoyed excellent collaborations with a multitude number of stakeholders at national level and local level in Lori and Tavush regions. All these partnerships have been very valuable for implementing project activities and contributed to a good national ownership of these activities as well as their related achievements. It will certainly contribute to the long-term sustainability of project achievements. Additionally, the Advisory Board, composed of a broad representation of stakeholders involved in forest management has been very useful to guide the technical aspects of the project and to help the project to navigate through the series of disruptive changes and events. The implementation team has also skillfully "pushed" a gender mainstreaming agenda through activities supported by the project and to ensure that women were well represented in the project decision making process with almost 50% of women on the PB and 40% of women on the Advisory Board. Women also played a key role in organizations which partnered with the project to implement community-based innovative solutions.

v) The M&E plan to measure the performance of the project was good, including a good set of 24 indicators and their related targets but weak in measuring the capacities developed.

The M&E plan is a satisfactory monitoring framework to measure the performance of the project with a good mix of quantitative and qualitative indicators. The 24 indicators are SMART indicators with clear targets; they have been used to report progress made in the APR/PIR reports. It is an effective and relatively simple monitoring framework. It is also cost-efficient; the collection of monitoring information is closely related to project activities and do not require extra surveys, studies, etc. In the meantime, these 24 indicators do not measure well capacities developed by the project. Few indicators track the number of people trained but they do not measure the progress made in developing capacities. Proxy indicators measuring the impact of these training events would be needed.

vi) The GEF grant (USD 2.977M) will be expended at the completion of the project with some variances against the budgets per outcome.

The GEF grant financing this project should be completely expended by December 2020; though as of end of August 2020, the remaining budget is USD 315,530³ or about 10% of the GEF grant to be expended in 4 months, which is a much higher monthly average when compared to the monthly average since the start of the project. When comparing budget vs. actual disbursements for each outcome so far, the project invested more than planned in demonstrating sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services (outcome 2); and less in securing an enabling environment for the sustainable management of forest in marzes in North Eastern Armenia (outcome 1).

Project Results

vii) The project has delivered most of its expected outcomes.

The project has delivered results against most of its end-of-project targets, with only few shortcomings. It was able to achieve what it was intended to achieve, and the project has enjoyed a good country ownership. The project delivered two sets of results. Under outcome 1 it supported activities to improve the forest management planning function in the Lori and Tavush regions. It supported the development of 6 FMPs for 6 Forest Enterprises, including forest inventories and maps for 3 Forest Enterprises. It drafted amendments to the Forest Code to include 3 new protocols (biodiversity, ecosystem services and forest carbon), which are currently being reviewed by Parliament. It developed protocols for these improved FMPs, which provide instructions on how to develop these FMPs and which were the object of an amendment to an existing Ministry of Agriculture Decree.

Under outcome 2, the project focused on investments in demonstrating sustainable forest and land management practices with the aim of reducing pressure on forests and pastures while maintaining the flow of ecosystem services. The project supported the development of guidelines to measure the forest carbon stock, which were officially accepted by MOE. As of mid-2020, the project has invested in the rehabilitation of almost 5,700 ha of degraded forests and about 1,000 ha of degraded pastures. The project supported the delineation of 77,532 ha of forest as HCVF, in which biodiversity and carbon sequestration will be emphasized. Finally, the project invested in community-based small-scale initiatives surrounding these forests with the objective of improving the livelihoods of these communities while at the same time decreasing the need of forest products, particularly firewood and by extension decreasing the rate of deforestation. It includes the introduction of energy-efficient stoves; the production of briquettes made of biomass; solar power; solar water heaters; etc. Throughout all these activities conducted under this outcome 2, the project provided a long list of tangible assets such as antihail nets; technological devices: 2 GoPro cameras, 1 drone camera, 24 GPS receivers, 20 portable radios and 12 handheld data collector (Trimble TDC100); 1 drone, 1 Lintab (tree ring measuring device), 1 briquetting system, 8 tractors, 2 balers, 5 mowers, 1 forklift, 1 plow 5 case, 1 plow 4 case, 5 plows 3 case, 2 cultivators, 1 chipper grinder, 1 crusher for paper and straw, and 8 computer units.

³ As of November 1, the remaining budget is \$201,287, out of which \$140,000 is already allocated to project activities such as restoration of degraded forests. It confirmed that the entire GEF grant should be expended by the end of the year.

The only shortfall in implementing this project was the delivery of 6 FMPs for 6 FEs instead of the planned delivery of 11 FMPs for 11 FEs. The development of FMPs has been a convoluted process since day one of this project. Following multitude negotiations with MOE, Hayantar SNCO and development partners such as GIZ, the scope of this activity changed and became larger, with the need for the project to support the development of these FMPs starting from scratch and not only improving existing ones as planned originally. Nevertheless, the project was able to move forward with 6 FMPs for 6 FEs, which are at various degrees of being approved. Additionally, the initial target of 11 was changed to 9 due to the fact that 2 mergers happened in 2019 and 2020 with, respectively the merging of 2 FEs each time. The remaining 3 FEs (9-6) include one FE that is developing its own FMP with the financial support of MOE. The other 2 FEs have started the process but activities were stopped after a few weeks.

viii) Three critical success factors contributed to the project effectiveness.

They include: (i) the project was well designed, responding to national needs and benefitting from a good engagement and participation of stakeholders. It was developed on the basis of previous related initiatives benefiting from past experiences and lessons learned and also of a good government support/interest; (ii) a good leadership from MOE as Chair of the PB to guide and supervise the implementation of the project; and (iii) a good flexibility (using adaptive management) in allocating project resources and implementing activities which were responses to stakeholders needs, and in adapting to government changes and external shocks such as the "Velvet Revolution" in 2018 and, more recently, the on-going Nagorno-Karabakh conflict.

ix) The project has contributed to reducing the barriers which hamper the implementation of the long-term solution to address the deforestation issue.

The long term solution to address the deforestation issue is to reform the forestry sector with policy reforms, development of supply and demand solutions and institutional strengthening. However, the progress in implementing this solution has faced four key barriers, which formed the rationale of this project. Project activities have certainly contributed to the partial removal of these barriers. In order to improve the planning, regulatory and institutional framework (1st barrier), the project supported the development of 6 FMPs; it also supported the drafting of guidelines and protocols, which are (or are being) adopted by the relevant ministries. The second barrier, which is the lack of experience in implementing SFM and SLM practices, was addressed by the project through the support of several demonstrations such as community-based small scale innovative solutions seeking to reduce pressure on forests and through the demonstration of rehabilitation of degraded forests and pastures. Finally, by supporting community-based small-scale solutions, the project supported the demonstration of small businesses which can improve the livelihoods of these communities while at the same time decreasing the need of forest products, particularly the need for firewood (3rd barrier). It includes the demonstration of briquettes production, introduction of energy efficient woodstoves and installation of solar power and heater units. Regarding the last barrier that is the lack of financial resources, it was not part of the objective of this project. Nevertheless, the project has still contributed to increasing the knowledge on the value of these forests, which overt time should be translated into a greater interest from the government and ultimately, over time, more financial resources should be allocated to this sector.

Sustainability

x) Some project achievements are already institutionalized; they should be sustainable in the long run, though there are some risks.

Project achievements are, for the most part, already institutionalized and became part of the "official" instruments to manage forests and pastures in Armenia. They should, therefore, be sustained over the long-term. MOE has now an improved enabling environment with instructions on how to produce integrated FMPs. Hayantar SNCO and its Forest Enterprises are now equipped with 6 improved FMPs in North Eastern Armenia and have the capacities to use the guidelines and protocols to sustain the new approach over the long-term. However, it is noted that the forestry sector is still underfunded, which presents a financial risk to sustainability and the change from unsustainable to sustainable practices implies the reform of the institutional framework and governance of the forestry sector, which, under this project demonstrated that it is a challenging task.

xi) The project played a good catalytic role by demonstrating SFM and SLM practices and by improving the enabling environment.

This project has had a good catalytic role. It developed "public goods" and demonstrated the usability and effectiveness of these goods such as tools, methods, guidelines, innovative solutions, and skills and knowledge. As "public goods" the project supported innovative solutions to reduce pressure on forest such as testing a briquette production system as an alternative to firewood, solar water heaters, energy efficient stove, passive solar greenhouse, solar energy. It also includes forest and pasture management practices such as more intensive fodder production systems, coppicing techniques as a traditional method of woodland management, assisted natural regeneration, and mineralization and sowing techniques. It also supported the development of guidelines to measure forest carbon stock, protocols to formulate FMPs and recommendations to amend specific legislation. Regarding the demonstrations of these public goods, the project in collaboration with the SGP implemented a small grant scheme to fund small-scale innovative solutions to catalyze the public goods listed above. Five projects were selected and funded to implement energy efficient initiatives such as introduction of energy-efficient stoves for conservation of forest resources in the Tavush region and solar power for energy autonomy and forest conservation in the same region. The project also supported the rehabilitation of almost 5,700 ha of degraded forests and 1,000 ha of degraded pastures. It also supported the development of 6 FMPs to demonstrate the new approach to manage forests sustainably.

From a catalytic point of view, the achievements are now at the stage of being replicated and scaled-up throughout the relevant organizations including governmental and non-governmental organizations. The challenge now is to develop mechanisms of broader adoption that would lead to transformational change with an expected increase of investments to support these achievements beyond the GEF funding. Most signals point to a replication and scaling up of project achievements throughout Armenia in the coming years.

1.3. Recommendations

Based on the findings of this terminal evaluation, the following recommendations are suggested.

Recommendation 1: It is recommended to ensure that all technical reports produced by the project be available to the public after the end of the project.

Issue to Address

The project has produced a body of knowledge including numerous studies, assessment, recommendations, guidelines, etc. As the project is closing at the end of the year it is recommended to ensure the public availability of this body of knowledge, including a full listing in the final project report. When considering this recommendation, it is also recognized that the project team is in the process of printing and publishing a set of 20 key documents/outputs to be disseminated in the coming weeks. It is encouraged to also make these products available online.

Recommendation 2: It is recommended to produce roadmap detailing the way forward.

Issue to Address

The project contributed to improving the enabling environment for SFM and SLM and invested in testing and demonstrating innovative solutions for managing sustainably forests and pastures in North Eastern Armenia. As per the GEF definition of catalytic role, most results of this project are now ready for replication and scaling up. In order to facilitate and ensure the sustainability of these results, it is recommended to collate together a summary of the results achieved and identify the way forward to replicate and scale-up these results throughout the country. This "Roadmap for the Way Forward" should detail what needs to be done, when, how and who, to facilitate the transfer of project achievements to other stakeholders. It would also contribute to ensure the long-term sustainability of project's achievements and provide useful information for the future directions/needs of the forestry sector in Armenia.

Recommendation 3: It is recommended to organize a final workshop focusing on achievements of the project and the way forward.

Issue to Address

The project is ending at the end of December 2020. It has accumulated valuable experiences in formulating FMPs but also in investing in demonstrations of various innovative solutions to rehabilitate degraded forests and pastures and in supporting the implementation of small-scale initiatives to reduce pressure on the demand of forest products. It is recommended to organize a workshop showcasing project achievements but also presenting the way forward, such as a roadmap to "pass the baton". In the meantime, it is recognized that currently, the pandemic situation in Armenia is such that a workshop cannot really take place before the end of the project. However, as much as possible it is recommended that UNDP keeps the plan to organize such workshop, once the pandemic will subside. Participants should include all project stakeholders and beneficiaries as well as other development partners. It is noted that this plan has also been discussed between the project team and UNDP Senior Management. They arrived at the same conclusion to postpone the date; given also that the option to organize such workshop online is not a valid option due to too much information to showcase and transfer.

Recommendation 4: It is recommended for the Ministry of Environment to explore the possibility to conduct a TSA Assessment.

Issue to Address

Targeted Scenario Analysis (TSA) estimates the value of ecosystem services within decision making, to help make the business case for sustainable policy and investment choices. Through TSA, practitioners working with governments and private enterprises can generate and present data related to the management of ecosystems in a way that is more relevant to the choices facing a decision maker. The product of a TSA is a balanced presentation of evidence, for a decision maker, that weighs up the pros and cons of continuing with business as usual (BAU) or following a sustainable development path in which ecosystems are more effectively managed termed sustainable ecosystem management (SEM). Considering the need for reforming the forestry section in Armenia and the limited government investments in this area, it is recommended to look into the feasibility to conduct a TSA⁴ through projects or directly funded by the government. A TSA would result in demonstrating the value of forests in Armenia and provide a good "business case" for increasing the allocation of funds to this sector. The project may initiate discussions with the Ministry of Environment to explore the interest and feasibility for a TSA assessment.

1.4. Lessons Learnt

Several lessons learned are presented below. There are based on the review of project documents, interviews with key informants and analysis of the information collected for this evaluation:

- Political risk needs to be part of the risks of implementing such a project as it can impact negatively the effectiveness of a project.
- A good design leads to a good implementation, which in turn leads to good project results. There is more chance for a project well designed to be a success. Every steps of the way count in the success of a project; it is a lot easier to succeed when all these steps are relevant and clear to be implemented.
- A project that is a response to clear national needs and priorities is often highly relevant for beneficiaries and its chance of being implemented effectively is maximized.
- Adaptive management is a key management instrument for this type of project, providing the necessary flexibility to review and reinvent the approach to implement the project as needed to secure project deliverables while maintaining adherence to the overall project design.
- This project is a good example of a demonstration project that could lead to an investment project as per the current GEF types of project (*foundational*, *demonstration* and *investment*). The project demonstrated adaptive measures to climate change for mountain forest ecosystems (*a demonstration project*); it is now ready to be replicated (*an investment project*) throughout Armenia.
- As part of managing knowledge, a demonstration project needs to end up with a final phase to document results and to identify the way forward to replicate these results in similar context in the country and in the region.

⁴ http://www.undp.org/content/dam/gp-commodities/docs/TSA/undp-gcp-TSA%20case%20studies%20summary.pdf

• A project procuring needed tangible deliverables brings tangible results to beneficiaries with positive direct and immediate impacts on them. It contributes to a strong participation of beneficiaries in project activities and overall to a better effectiveness of project activities.

1.5. Terminal Evaluation Ratings and Achievement Summary Table

Below is the rating table as requested in the TORs. It includes the required performance criteria rated as per the rating scales presented in Annex 10 of this report. Supportive information is also provided throughout this report in the respective sections.

Table 2: Terminal Evaluation Ratings and Achievement Summary Table

Evaluation Ratings:						
1. Monitoring and Evaluation	Rating	2. IA& EA Execution	Rating			
M&E design at entry	S	Quality of UNDP Implementation	S			
M&E Plan Implementation	S	Quality of Execution - Executing Agency	S			
Overall quality of M&E	S	Overall quality of Implementation / Execution	S			
3. Assessment of Outcomes	Rating	4. Sustainability	Rating			
Relevance	HS	Financial resources	ML			
Effectiveness	MS	Socio-political	L			
Efficiency	S	Institutional framework and governance	ML			
Overall Project Outcome Rating	MS	Environmental	L			
		Overall likelihood of sustainability	ML			

<u>Note</u>: The effectiveness of the project was rated as MS, mostly due to the fact that the plan was to deliver 11 FMPs and the actual number of FMPs delivered is 6. However, as it is discussed in section 4.3.1, the delivery of FMPs has been a convoluted process. The project was, in fact, to deliver 8 FMPs. GIZ was to deliver one of these 11 FMPs, and four Forest Enterprises (FE) merged into 2 FEs (11 - 1 - 2). Despite that the project did not deliver 8 FMPs, it is to be noted that when considering the context within which this project was delivered (4 changes of PB Chairs, the "*Velvet Revolution*" in 2018 and more recently, a still on-going Nagorno-Karabakh conflict), one could say that the overall effectiveness of the project has certainly been satisfactory.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT⁵

- 1. The Caucasus Ecoregion covers a total area of 580,000 km² and consists of six countries, including Armenia. It is one ecoregion of the *Global 200 WWF Ecoregions*, and one of the most endangered terrestrial ecosystems. Mountains cover approximately 65% of this ecoregion and the diversity of climate zones results in numerous microclimates supporting a range of ecosystems.
- 2. Forests are the most important ecosystem for biodiversity conservation in the Caucasus, covering nearly 20% of the region. In the Red Book of Plants of Armenia (2010) 452 species of vascular plants (12 % of the flora of Armenia) and 40 species of fungi (1.05% of the biota of Armenia) are registered. Of them 141 species of plants and 6 species of fungi were assessed as Critically Endangered by IUCN criteria. In the Red Book of Animals of Armenia (2010) 308 species, including 155 vertebrates and 153 invertebrates are registered. It includes 50 species of invertebrates and 62 species of vertebrates that were assessed as Critically Endangered.
- 3. The forests of Armenia cover 334,100 ha, which includes 283,600 ha of natural forests and 50,500 ha of plantation forests. Oriental beech (*Fagus orientalis*), the Georgian oak (*Quercus iberica*), the Oriental oak (*Quercus macranthera*), the Caucasian hornbeam (*Carpinus caucasica*) and the Pine tree (*Pinus kochiana*) form 97.2% of the forested territory in Armenia. These forests are managed by the State Non-Commercial Organisation (SNCO) "Hayantar" and its eleven sub-ordinated forest enterprises of the Ministry of Agriculture; though some forests are part of the specially protected area system of Armenia, including the "Dilijan" National Park.
- 4. A large part of the country's forests (215,337 ha 2/3) are located in the Tavush and Lori marzes in the North East Armenia; and 95% are natural forests. Forests in both marzes are rich in wild fruit-bearing species, including apple (*Malus sp.*), pear (*Pyrus sp.*), many species of hawthorn (*Crataegus sp.*), Greek walnut (*Juglans regia*), plum (*Prunus divaricata*), shadberry (*Mespilus germanica*), cornelian cherry (*Cornus mas*), which are commonly used by surrounding population. Nine specially protected areas are located in the two marzes covering a total of 53,645 ha; two protected areas are managed by the Ministry of Environment and seven sanctuaries are managed by "Hayantar".
- 5. The main cause of land and forest degradation within the targeted districts is the deforestation and overexploitation of natural resources. In the beginning of the 90's, with the end of subsidized energy following independence and the energy crisis due to the closure of nuclear power plants and the military blockage of the country, most part of the rural and urban population were forced to use wood for cooking and heating resulting in significant levels of deforestation, particularly in north-eastern Armenia. Although, the rate of deforestation has decreased over time, due to the efforts by the Government to address the issue, research suggests that around 630,000 m³ of timber is still illegally logged in Armenia annually.
- 6. The long term solution to address land and forest degradation includes the implementation of forest policy reforms, development of supply and demand solutions, and institutional strengthening. By extension it also includes the need to address social issues as well such as poverty, and lack of attractive and available alternatives. Overall, reducing pressures on forests, implies the need to shift from the current unsustainable practices to sustainable land and forest management approaches. However, several major barriers have impeded the implementation of the long-term solution; they include:
 - Inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management
 - Minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground
 - Lack of incentives and benefits to local communities to participate in forest management and conservation
 - Lack of financial resources.
- 7. As a response to address these barriers, the project was designed to promote an integrated approach seeking to balance environmental management with development and community needs. It has attempted to

⁵ Information in this section has been summarized from the project document.

reduce forest-land uses conflicts and improve the sustainability of forest management so as to maintain the flow of vital ecosystem services and to sustain the livelihoods of local forest-dependent communities (and downstream users). The objective of the project is "Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services". It is to be achieved through the delivery of two expected outcomes and 11 outputs (see more detailed about the project strategy in Annex 1 and maps of project sites in Annex 2):

- 1. Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management.
 - a. Forest management plan guidelines/protocols updated for mainstreaming ecosystem, climate risks and biodiversity considerations into forest management planning in Northeast Armenia
 - b. Geo-spatial information systems support forest inventory and mapping for forest management planning, development, implementation and monitoring
 - c. Revised forest management plans integrate considerations of biodiversity, ecosystem services, climate mitigation, and community resource use
 - d. System for effective monitoring and enforcement of forest management plans, including clear delineation of roles and responsibilities of key partners and management of participatory processes in forest development
 - e. Recommendations for national policy and regulations for facilitating adoption of sustainable forest management practices
 - f. Enhanced capacity for sustainable land and forest management within key agencies and communities
- 2. Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services.
 - a. Designation of High Conservation Value Forests covering 85,000 ha of current production and protection forests for species conservation and climate mitigation
 - b. Restoration of forests and pasture lands, and rehabilitation of multiple use forestlands through community forest resource management
 - c. Alternative livelihood programs for local communities as incentive to conserve forests and biological resources
 - d. Integrated strategy for management of firewood collection and distribution from forests
 - e. Carbon stock assessments and coefficients for key forest types in NE Armenia
- 8. This is a project supported by UNDP and GEF. It is funded by a grant from the GEF of USD 2,977,169 (including \$744,000 from REDD+), a contribution of USD 900,000 from UNDP (USD 200,000 in cash), USD 12,427,235 from the government, USD 376,500 from WWF Armenia, and USD 286,200 from Caucasus Nature Fund. The total financing of the project is USD 16,967,104. The project was approved by GEF on June 21, 2015; it started on December 24, 2015; the inception workshop was held in Yerevan on June 17, 2016; and the project duration was four (4) years. It is implemented in accordance with the National Implementation Modality (NIM) and the implementing partner is the Ministry of Environment.

3. EVALUATION FRAMEWORK

- 9. This Terminal Evaluation (TE) a requirement of UNDP and GEF procedures has been initiated by UNDP Armenia, the Commissioning Unit and the GEF Implementing Agency for this project. This review provides an in-depth assessment of project achievements and progress towards its objective and outcomes and recommendations for other similar UNDP-supported and GEF-financed projects in the region and worldwide.
- 10. This assignment was conducted during the coronavirus COVID-19 pandemic and under the emergency situation regime declared in Armenia since March 2020. Within this context, UNDP and the Government of Armenia decided to proceed with the TE, following local guidelines with regards to precautions against the spread of COVID19; including using online and remote communication means as much as possible. The International Evaluator supported by a National Expert, conducted the assignment in a way to minimize epidemiologic risks. A key priority was safety; no stakeholders, consultants or UNDP staff was put in harm's way. The International Evaluator conducted the assignment remotely from his home in Ottawa, Canada using communication tools such as email, Skype, Zoom, WhatsApp and other convenient electronic tools. The National Expert was responsible to conduct interviews face-to-face or by using communication tools such as

phone, Skype, Zoom or other means, and also following the current government guidelines to minimize epidemiologic risks. Each interview was prepared by the Evaluator with the support of the Evaluation Support Assistant and National Expert; using the Interview Protocol (see Annex 8) to collect evaluative evidence required by the assignment. For interviews conducted with Armenian-based interviewees, the Evaluator was supported by a National Expert, who provided language support. For interviews outside of Armenia, appropriate solutions were found to conduct these interviews. In addition, the National Expert visited project sites as per his TORs and provided all collected data (including photo/video) to the International Evaluator. (see additional remarks on conducting remote evaluations under COVID-19 in Annex 3).

3.1. Objectives

11. The objective of this Terminal Evaluation (TE) is to promote accountability and transparency, to assess and disclose the extent of project accomplishments against the expected objective and outcomes and how they contribute to the achievements of GEF strategic objectives aimed at global environmental benefits, to assess the efficiency of the project implementation modality including its management arrangements, to analyze the sustainability of activities supported by the project, and to draw lessons that can both improve the sustainability of benefits from this project and aid in the overall enhancement of future UNDP programming.

3.2. Scope

- 12. As indicated in the TORs (see Annex 4), the scope of this TE was to conduct an assessment of achievements of project results and the extent to which the project has successfully carried out adaptive management, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of future UNDP programming. The Evaluator framed the evaluation effort using the evaluation criteria of relevance, coherence, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. Under each of these criteria, evaluation questions were identified and compiled in an evaluation matrix (see Annex 5).
- 13. The scope of this evaluation is divided into three parts in accordance with the TORs and the *Guidance* for Conducting Terminal Reviews of UNDP-Supported, GEF-Financed Projects. A summary of the scope of this TE is presented below:

I. Project Design and Formulation:

- Review the problem addressed by the project and the underlying assumptions;
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results;
- Review the project's objectives and outcomes/components and how feasible they can be reached within the project's time frame;
- Undertake a critical analysis of the project's logframe indicators and targets;
- Review how the project addresses country priorities;
- Review country ownership;
- Review management arrangements and decision-making processes;
- Review the extent to which relevant gender issues were raised in the project design;
- Assess how gender aspects are integrated into the project design;
- Review UNDP comparative advantage;
- Review linkages between the project and other interventions within the sector.

II. Project Implementation

- Review how adaptive management was implemented during the implementation of the project;
- Review overall effectiveness of project management as outlined in the project document;
- Review the quality of execution of the Executing Agency/Implementing Partner(s);
- Review any delays in project start-up and implementation;
- Review how Results-Based Management is being implemented;
- Examine the use of the project's results framework/ logframe as a management tool.
- Consider the financial management of the project, including cost-effectiveness;

- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions;
- Review the decision making processes to align financing priorities and annual work plans?
- Review the monitoring tools currently being used and the project progress reporting function as well as the feedback loop for adaptive management;
- Review project partnerships arrangements;
- Review stakeholder's participation and country-driven project implementation processes;
- Review project communications;

III. Project Results

- Review the progress made against the logframe indicators and the end-of-project targets;
- Assess the stakeholders' ownership of project achievements;
- Compare and analyse the GEF Tracking Tool at Baseline with the one completed at the time of TE;
- Identify remaining barriers to achieving the project objective;
- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date;
- Assess risks to sustainability in term of financial risks, socio-economic risks, institutional framework and governance risks, and environmental risks.
- Review and possibly identify ways in which the project can further expand its achievements;

3.3. Methodology

14. The methodology that was used to conduct this TE complies with international criteria and professional norms and standards; including the norms and standards adopted by the UN Evaluation Group (UNEG) and the *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects*.

3.3.1. Overall Approach

- 15. The evaluation was conducted in accordance with the guidance, rules and procedures established by UNDP and GEF and as reflected in the UNDP "Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects", and the UNEG Standards and Norms for Evaluation in the UN System. The evaluation was undertaken in-line with GEF principles which are: independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility and utility. The process promoted accountability for the achievement of project objective and outcomes and promoted learning, feedback and knowledge sharing on results and lessons learned among the GEF and its Partners.
- 16. The evaluation adopted a *Utilization Focused Evaluation (UFE)* approach, which was predicated on maximizing the practical value of the evaluation to project stakeholders. The TE was planned and conducted in ways that enhanced the likely utilization of both the findings and of the process itself to inform decisions and improve performance of the project. Using this approach, the Evaluator did not make decisions independently of the intended users, but he rather facilitated decision-making amongst the people who will use the findings of the terminal evaluation.
- 17. The Evaluator developed evaluation tools in accordance with UNDP and GEF policies and guidelines to ensure an effective project evaluation. The evaluation was conducted, and findings were structured around six major evaluation criteria; which are also the six recently revised internationally accepted evaluation criteria set out by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD)⁶. There are:
 - Relevance is the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.

⁶ OECD/DAC Network on Development Evaluation, Better Criteria for Better Evaluation: Revised Evaluation Criteria Definitions and Principles for Use

- Coherence is the compatibility of the intervention with other interventions in a country, sector or institution.
- *Effectiveness* is the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
- *Efficiency* is the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
- *Impacts* is the extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.
- Sustainability is the extent to which the net benefits of the intervention continue or are likely to continue.
- 18. In addition to the UNDP and GEF guidance for evaluating projects, the Evaluator applied to this mandate his knowledge of evaluation methodologies and approaches and his expertise in environmental management, including the application of multilateral environmental agreements in national environmental frameworks. He also applied several methodological principles such as (i) *Validity of information*: multiple measures and sources were sought out to ensure that the results are accurate and valid; (ii) *Integrity*: Any issue with respect to conflict of interest, lack of professional conduct or misrepresentation were immediately referred to the client; and (iii) *Respect and anonymity*: All participants had the right to provide information in confidence.
- 19. The evaluation was conducted following a set of steps presented in the table below:

Table 3: Steps Used to Conduct the Evaluation

: 5 : 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5:	Tuble 6. Otops Osca to Conduct the Evaluation						
Review Documents and Prepare Inception Start-up teleconference/finalize assignment work plan Collect and review project documents Draft and submit Inception Report	III. Analyze Information In-depth analysis and interpretation of data collected Follow-up interviews (where necessary) Draft and submit draft evaluation report						
Prepare interview schedule II. Collect Information	IV. Finalize Evaluation Report						
 Individual Interviews with key Stakeholders Further collect project related documents Debriefings / <u>Presentation of key findings</u> 	 Circulate draft report to UNDP-GEF, SLT, and relevant stakeholders Integrate comments and submit <u>final Evaluation</u> <u>Report</u> 						

20. Finally, the Evaluator signed and applied the "Code of Conduct" for Evaluation Consultants (see Annex 6). The Evaluator conducts evaluation activities, which are independent, impartial and rigorous. This TE clearly contributed to learning and accountability and the Evaluator has personal and professional integrity and was guided by propriety in the conduct of his business.

3.3.2. Evaluation Instruments

21. The evaluation provides evidence-based information that is *credible*, *reliable* and *useful*. Information was mined from project documents, as secondary information, and as primary information obtained through data-gathering activities conducted for this evaluation, most prominently key informant interviews. Using several evaluation tools and gathering information from different types of stakeholders at different levels of management, the information collected was triangulated⁷ through the concept of "*multiple lines of evidence*" to validate findings. To conduct this evaluation the following evaluation instruments were used:

Evaluation Matrix: An evaluation matrix was developed based on the evaluation scope presented in the TORs, the project log-frame and the review of key project documents (*see Annex 5*). This matrix is structured along the six evaluation criteria and includes all evaluation questions; including the scope presented in the guidance. The matrix provided overall directions for the evaluation and was used as a basis for interviewing people and reviewing project documents.

^{7 &}lt;u>Triangulation</u>: The use of three or more theories, sources or types of information to verify and substantiate an assessment. By combining multiple data sources, methods, analyses or theories, evaluators seek to overcome the bias that inevitably comes from single informants, single methods, single observations or single theories. (DFID, *Guidance on Evaluation and Review for DFID Staff*, London. 2005

Documentation Review: The Evaluator conducted a documentation review from Canada (home office). In addition to be a main source of information, documents were also used to prepare interviews. A list of documents was identified during the start-up phase and further searches were done through the web and contacts. The list of documents to be reviewed were completed once the data collection phase was concluded (see Annex 7).

Interview Protocol: Based on the evaluation matrix, an interview protocol was developed (*see Annex 8*) to solicit information from stakeholders. As part of the participatory approach, the Evaluator ensured that all parties viewed this tool as balanced, unbiased, and structured.

List of Stakeholders to be Interviewed: A list of Stakeholders to be interviewed was constituted during the preparatory phase of this TE (see Annex 9). This list was reviewed to ensure that it represents all project Stakeholders. As the assignment progressed forward, additional stakeholders were identified to be interviewed. On this basis, dates and time slots for interviews were planned in advance with the objective of ensuring a broad scan of Stakeholders' views during the data collection phase.

Key Informant Interviews: Stakeholders were interviewed, ensuring that a proper balance of men and women were selected (*see Annex 9*). The semi-structured interviews were conducted using the interview protocol adapted for each interview. All interviews were conducted remotely using phone, Skype, Zoom or other communication platforms with some follow up using emails when needed. Confidentiality was guaranteed to the interviewees and the findings were incorporated in the final evaluation report.

Achievement Rating: The Evaluator rated project achievements using the "TE Ratings" guidance provided in the TORs. It included a six point rating scale to measure progress towards results and project implementation and adaptive management and a four point rating scale for sustainability (see Annex 10).

22. This terminal evaluation report documents the achievements of the project; it includes 4 chapters. Chapter 1 presents the main conclusions, recommendations, lessons learned and ratings; chapter 2 presents an overview of the project; chapter 3 briefly describes the objective, scope, methodology, and limitations of the evaluation; and chapter 4 presents the findings of the evaluation. Relevant annexes are found at the back end of the report.

3.4. Limitations and Constraints

- 23. The approach for this terminal evaluation is based on a planned level of effort of 34 days. It comprises an effort to collect evaluative evidence through documents and interviews of stakeholders. Within the context of these resources, the Evaluator was able to conduct a detailed assessment of actual results against expected results and successfully ascertains whether the project has met its main objective as laid down in the project document and whether the project initiatives are, or are likely to be, sustainable after completion of the project. The Evaluator also made recommendations for any necessary corrections and adjustments to the overall project work plan and timetable for reinforcing the long-term sustainability of project achievements.
- 24. Due to COVID-19, this TE has been conducted remotely. Interviews were conducted online through videos when possible or audio when the internet bandwidth was limited. Despite that it is not as efficient as face-to-face interviews, the Evaluator was able to collect evaluative evidence and triangulate the collected information to ascertain how well the project will meet its expected targets.

4. EVALUATION FINDINGS

25. This section presents the findings of this TE adhering to the basic structure proposed in the TORs and as reflected in the UNDP project evaluation guidance.

4.1. Project Design/Formulation

26. This section discusses the assessment of the formulation of the project, its overall design and strategy in the context of Central Asia.

4.1.1. Analysis of Strategic Results Framework

- 27. The Strategic Results Framework identified during the design phase of this project presents a good and clear set of expected results. No changes were made to the Strategic Results Framework during the inception phase. The review of the objective and outcomes indicates a good logical "chain of results" Activities

 Outputs

 Outcomes
 Objective. Project resources have been used to implement planned activities to reach a set of expected outputs (11), which contributed to achieving a set of expected outcomes (3), which together contributed to achieving the overall objective of the project. This Strategic Results Framework also includes for the objective and each outcome a set of indicators with baseline and target values to be achieved by the end of the project. These indicators and targets have been used to monitor the performance of the project.
- 28. The project was developed in the context of land and forest degradation in the Tavush and Lori marzes, which encompasses 2/3 of the Armenian forests. Following independence, with was followed by an energy crisis due to the end of subsidized energy, rural but also urban communities were "forced" to overexploit natural resources. In particular, the use of wood for cooking and heating resulting in significant deforestation in North-Eastern Armenia. Though the energy situation has improved since the 90's, resulting in the decrease of deforestation, the practices of overexploitation of natural resources in North-Eastern Armenia have not sufficiently changed and it is estimated that around 630,000 m3 of timber is still illegally logged in Armenia annually. As discussed in section 2, the long-term solution is to reform the forest policy framework, develop supply and demand solutions, strengthen relevant institutions, and it also needs to address social issues, particularly poverty and lack of attractive and available alternatives. However, four barriers have impeded the implementation of this long-term solution; it includes: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources. As a response, the project was designed to address these barriers.
- 29. The logic model of the project presented in the *Strategic Results Framework* is summarized in table 4 below. It includes one objective, two outcomes and eleven outputs plus one component focusing on monitoring the project. For each expected outcome and the objective, targets to be achieved at the end of the project were identified.

Table 4: Project Logic Model

Expected Results	Targets at End of Project
Project Objective: Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services.	 11 forest management plans integrating considerations of biodiversity, ecosystem services, climate mitigation and community resource use
	● 5 Community development plans updated
	● 681,990 metric tCO2 avoided and/or sequestrated
	 250,000 ha of forest managed for multiple sustainable forest management and ecosystem benefits
Outcome 1 - Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management	One set of forest management plan protocols/guidelines for mainstreaming ecosystem, climate risk mitigation and biodiversity considerations approved by Ministry of
Output 1.1: Forest management plan guidelines/protocols updated for mainstreaming ecosystem, climate risks and biodiversity	Agriculture

Expected Results Targets at End of Project considerations into forest management planning in • 11 sets of forest inventory and maps in support of North-east Armenia sustainable forest management for forest enterprise • Output 1.2: Geo-spatial information systems branches support forest inventory and mapping for forest • 11 forest enterprise branches effectively applying management planning, development, consideration of the needs for biodiversity, climate implementation and monitoring mitigation, forest ecosystem services and community • Output 1.3: Revised forest management plans sustainable use integrate considerations of biodiversity, ecosystem One set of forest monitoring protocols approved and services, climate mitigation, and community adopted by Ministry of Agriculture resource use • 60 marz and enterprise branch forest staff trained in the • Output 1.4: System for effective monitoring and use of ecosystem based planning tools enforcement of forest management plans, • 100 pasture stakeholders (at least 30 women) undergone including clear delineation of roles and technical and skills training and development in sustainable responsibilities of key partners and management of pasture management participatory processes in forest development • 500 forest dependents (at least 150 women) trained in • Output 1.5: Recommendations for national policy technical skills for sustainable forest resource use and regulations for facilitating adoption of sustainable forest management practices • One set of recommendations on accounting for ecosystem services valuation and community resource use • Output 1.6: Enhanced capacity for sustainable land and forest management within key agencies and communities Outcome 2 - Investment in demonstrating improved • At least 85,000 ha of high biodiversity conservation value sustainable forest and land management practices to forests designated identified and effectively managed for reduce pressure on high conservation forests and biodiversity and climate mitigation maintain flow of ecosystem services. Population of five indicator bird species stable or increase • Output 2.1: Designation of High Conservation over baseline values Value Forests covering 85,000 ha of current Population changes of five indicator butterfly species stable production and protection forests for species and/or do not decrease conservation and climate mitigation • 4,932 ha of degraded forests regenerated through assisted • Output 2.2: Restoration of forests and pasture natural regeneration lands, and rehabilitation of multiple use forestlands through community forest resource management • 1.000 ha of degraded pasture and hav fields rehabilitated under sustainable management practices to reduce • Output 2.3: Alternative livelihood programs for pressure on forest lands local communities as incentive to conserve forests and biological resources • 3,000 ha of forest land under multiple use regimes (sustainable NTFP production and agro-forestry) with • Output 2.4: Integrated strategy for management of participation of forest dependent communities firewood collection and distribution from forests • 15% decrease in number of livestock using natural forests • Output 2.5: Carbon stock assessments and for unsustainable grazing practices in targeted forest coefficients for key forest types in NE Armenia • 15% reduction in forest firewood collection areas in targeted forest branches Reduced areas of felling in target state forests One set of recommendations for management of dependencies in firewood use from forests developed by Ministry of Agriculture • 20% households (at least 1/3 women) reporting increased incomes from forest and non-forest resources in target communities, including percentage of beneficiaries among • One set of carbon stock assessment completed for key forest types in NE Armenia • 559,110 metric tCO2 avoided from conservation set-asides over a10-year period • 122,880 metric tCO2 improvement in carbon sequestration capacity of restored forests over a 10-year period Component 3 - Monitoring, learning, adaptive feedback, outreach, and evaluation

Source: Project Document.

- 30. The review of the *Strategic Results Framework* and the overall strategy detailed in the project document when compared with the initial strategy presented in the Project Identification Form (PIF) reveals no major key differences in the overall strategy of the project. The PIF sets 2 key outcomes which were kept as is in the final strategy (detailed in the project document with the addition of a third outcome on M&E). In the meantime, several changes can be observed between the PIF and the project document at the expected output level, though these changes are mostly a refinement of each expected output as opposed to any new directions for the project. It was noted that the PIF was reviewed by the Scientific and Technical Advisory Panel (STAP), which was concluded with the statement "*STAP acknowledges that on scientific or technical grounds the concept has merit.*" It provided a set of guidance to consider through the formulation of the project and the drafting of the project document. Overall, the first iteration of the project was submitted to GEF on March 26, 2013; the project concept was approved on November 1, 2013; it was approved by GEF for implementation on June 15, 2015; and the project document was signed on December 24, 2015, which is the date the project began, a total of 2.75 years (33 months).
- 31. The overall project its rationale, its strategy, its risks, its monitoring and reporting framework, the engagement of stakeholders and its proposed management structure as detailed in the project document was reviewed during the inception phase and particularly at the inception workshop held on June 17, 2016 in Yerevan. No changes were made to the strategy and stakeholders reconfirmed the relevance of this project to address existing barriers and contribute to the long-term solution. A set of recommendations was documented in the inception report, focusing mostly on key activities to be undertaken during the first year of implementation. However, one key conclusion made in the inception report was that "there will be a need to extend the project implementation period for at least one year, as it was mentioned by several stakeholders, in order to meet the project objective and outcomes."
- 32. The detailed review of the project formulation conducted for this evaluation revealed a project strategy with a good logic model. It presented a clear set of planned activities, which were expected to lead to the achievement of a set of expected results (*see Annex 1*). It is part of a strategy to support Armenia to reform the forest policy framework, develop supply and demand solutions, strengthen relevant institutions, and address social issues, particularly poverty and lack of attractive and available alternatives.

4.1.2. Assumptions and Risks

33. Risks and mitigations measures were identified during the formulation phase of the project and presented in the project document (*Annex 1 of the project document*). The list of risks was entered into the UNDP-Atlas system and monitored throughout the implementation of the project. The initial list of risks identified during the formulation of the project is presented in the table below.

Table 5: List of Risks and Mitigation Measures Identified at the Formulation Phase

	Project Risks	Rating	Mitigations (summaries)
1.	Proposed enabling legal and institutional framework is not modified/adopted or adoption is not timely	Moderate	 To strengthen the commitment of the government to reform the forestry sector, the project will make the economic case for SFM/SLM and biodiversity conservation and showcasing its value in NE Armenia. In order to further mitigate this risk, UNDP will maintain a watching brief over commitment and work with national and regional authorities to expedite legal and policy reforms.
2.	Conflicts and misunderstandings among public institutions, private sector partners, NGOs and resource users undermine partnership approaches and implementation of cooperative governance arrangements	Moderate	This risk will be mitigated through a participatory approach to SFM and SLM, a strong focus on local capacity building and awareness raising. The project will help developing incentives for land users exercising sustainable and climate resilient forest and land management. Where possible, formal agreements/MOUs will be used to define roles and responsibilities. Training will be provided to stakeholders on governance and conflict resolution. Activities will be designed and implemented in a win-win manner, beneficial to all, as far as possible. The sustainable development of the landscape will be emphasized with arguments that are supported with long-term economic forecasts.

	Project Risks	Rating	Mitigations (summaries)
3.	Landowners/users float planning regulations leading to multiplication of illegal logging and overgrazing	High	Establishment of landscape level forest management for a and landscape level management planning through mapping and inventory, supported by participatory processes, as well as robust implementation of monitoring mechanisms for biodiversity and ecosystem resilience will work towards minimizing the risk. A dialogue with the forestry industry and farmers will be undertaken as part of the process of regional integrated sustainable forest and land management planning – to address concerns, so as to improve compliance
4.	Low buy-in from communities to the Livelihood Support Scheme	Moderate	This risk will be mitigated with professional reach out and marketing of the incentive's products, as well as with careful selection of the host institution, and negotiations on scheme management and communication with residents.
5.	Increased negative attitude of the local community towards forest management due to enforcement of restrictions of access to and subsistence collection of firewood	High	This risk will be mitigated by employing a participatory planning approach in developing/revising Integrated Forest Management Plans. [with this approach], it is believed a sense of ownership will also be installed and at the overall community level a system of self-enforcement will also be established. The project will further employ a 'carrot' approach - in order to relieve pressures from local communities on forests resources. Hayantar and the CBOs will enter into legal agreements, providing strong financial incentives to the community through agreed wood harvesting.
6.	Elite capture power at local levels so that the marginalized groups will have lesser authority to wield planning and generating benefits	Moderate	Develop transparent and inclusive arrangements for power sharing with local bodies responsible for sustainable forest and land management in village. This would facilitate the participation of traditionally marginalized groups (landless, women, youth). CBOs will be strengthened, and forest governance mechanisms will be improved, creating incentives for heads of CBOs to be more responsive to the concerns of their members and local government authorities.
7.	Climate change risk: pasture and forest degradation caused by CC passes the point when the consequences cannot be dealt with through adaptation measures.	Moderate	Over the longer-term, climate change is expected to take its toll on the forests. The project is addressing this risk by considering climate change aspects in the integrated land and forest use plans.

Source: Project Document.

34. In addition to this list of seven risks, the formulation team also identified more specific risks under the objective and the two main outcomes and documented in the "Strategic Results Framework". For each of these risks, assumptions were made. This additional list of risks includes:

Objective:

- Failure to generate adequate revenues from SFM might change government priorities
- Failure to effectively engage local stakeholders (herders, landowners, forest dependents and other stakeholders leads to conflict
- Reduced revenues from timber exploitation and demands from communities for timber and fuelwood might shift government priorities away from sustainable use and conservation.
- Management of forests for multiple benefits might impinge on user rights and misunderstandings that needs to be managed

Risks under Outcome 1:

- Inability to assess economic benefits of ecosystem services and derive direct measurable benefits to local economy may result in reluctance to move away from forestry related economic activities
- Rapid turnover of staff can undermine capacity improvements for inventory and mapping skills
- Longer gestation period to see visible benefits may hamper efforts at selling SFM principles to policy makers
- Staff turnover may constraint improvement in capacity development and retention
- Failure of Hayantar to effectively engage local pasture stakeholders in forest management decision-making
- Failure of Hayantar to recognize potential opportunities for engagement of households in training

 GoA and Hayantar would be less conducive to make changes from existing narrowly focused forest production priorities

Risks under Outcome 2:

- Government priorities may change from forest protection to industrial use.
- Climate change impacts may increase to the extent that even if the project implements activities to improve land condition in pasture and forest lands it may not be enough to make a difference
- Low buy-in from communities might undermine the impact of this activity
- Herders may be reluctant to associate themselves and participate in grazing lands management and controls.
- Increased negative attitude of local people due to restrictions of access may restrict opportunities for collaboration
- Engaging local stakeholders more robustly contains some risk in Armenia, where centralized approaches are still the norm.
- Elite capture at local level would prevent marginalized groups and forest dependents from generating benefits of project
- Lack of capacity and skills for assessments of carbon
- 35. Regarding this rather long list of risks identified in the *Strategic Results Framework (SRF)*, there are mostly specific operational risks, which were identified against a set of specific activities to achieve the expected outputs. Related to these risks a set of assumptions were identified. These specific operational risks and assumptions are valid when reviewing the project strategy. However, beside the description of these risks and assumptions presented in the SRF, the Evaluator did not find any follow up to these risks during the implementation of the project. The monitoring of risks focused mostly on the initial list of seven risks presented on the table above.

Social and Environmental Safeguards

- 36. The Evaluator also reviewed the UNDP Social and Environmental Screening Procedure (SESP) applied during the project formulation. It is interesting to note that the screening to identify social and environmental risks is close to the list of risks presented in the table above but not an exact copy. The SESP listed 9 risks; 6 of them were identical to the risks #2 to #7 above. The #1 risk "Proposed enabling legal and institutional framework is not modified/adopted or adoption is not timely" was not mentioned in the SESP. However, 3 additional risks were identified in the SESP and which were not taken into account in the main risk table presented in the project document. They are #6: Project activities proposed within or adjacent to critical habitats, including legally protected areas (e.g. nature reserve, national park), may pose risk to biodiversity conservation; #8: There is a risk that duty-bearers do not have the capacity to meet their obligations in the Project; and #9: The Project may involve utilization of genetic resources (e.g. collection and/or harvesting, commercial development, etc.). The overall project risk categorization in the SESP was assessed as Moderate Risk.
- 37. The review of the seven (7) risks presented in the table above and their respective mitigation measures reveal that there are covering key aspects of the project where issues can arise, and the level of risk significance is appropriate. These risks were reviewed during the inception phase and no change were reported in the inception report. The Evaluator found among this list some key risks such as the risk that the government is not willing to approve any reform of the enabling environment related to forest management; the risk that no clear consensus can be found among the different actors including the natural resource users to work together toward solutions; and the risk that local communities resist to any changes in the management of forests.
- 38. However, approaching the end of the project, we also need to recognize that two risks were not identified at the outset of the project and which have affected the project and required management actions to mitigate their effect. One such risk, was the outbreak of the COVID-19 pandemic and its negative impact on the delivery of project activities. The project has been progressing well since its outset until early 2020 when the pandemic outbreak started in Armenia. However, since the end of the first quarter of 2020 some project activities have been restricted affecting the implementation of the last workplan. Nevertheless, using adaptive management measures, the project management team has, when possible, migrated some activities online as a mitigation measure. The plan to end the project by December 2020 has not changed and the procedure to close the project have started.

- 39. The second risk which was not identified at the outset of the project was the political risk. Since the start in early 2016, the project has faced a series of political events including: the "Velvet Revolution" in 2018, 4 changes of Ministers and Deputy Ministers co-chairing the Project Board (PB) over the 5 years, and, more recently, the on-going Nagorno-Karabakh conflict. As reported in the Project Implementation Reports (PIRs) of 2019 and 2020, the internal political crisis, which led to significant changes in government operations necessitated the use of adaptive management measures to adapt to these changes. The key measures implemented was to keep the implementation of activities flexible and adapt the on-going workplans according to new realities.
- 40. At the time of this terminal evaluation, the Evaluator concurs with the overall risk assessment which was conducted during the formulation of the project and documented in the project document. It was also noted that despite having multiple lists of risks (list in project document, risks in SRF, risks in SESP), the risk log entered in the Atlas system was ultimately the one used/monitored by the implementation team. This list includes the initial list of 7 risks identified in the project document but also the pandemic risk, armed conflict risk and internal politics risk. Those were entered in the system as they arose, were monitored on a regular basis and reported in the progress reports (PIRs) when rated as critical.

4.1.3. Linkages between the Project and Other Interventions

- 41. This project was designed to address issues of deforestation and overexploitation of natural resources in the Tavush and Lori marzes. These issues have been growing since the early 90's. At this time, access to subsidized energy was stopped, the closure of nuclear power plants created an energy crisis and Armenia faced a military blockage. All of this forced the population to use wood for cooking and heating, resulting in significant levels of deforestation in North-Eastern Armenia. Then, a construction boom also contributed to deforestation. Despite that the rate of deforestation has decreased over time, it was noted in the project document that some research is still estimating that around 630,000 m³ of timber is still illegally logged annually in Armenia and that households are the largest consumer of domestic forest products.
- 42. The key solution is to reform the forestry sector with policy reforms, development of supply and demand solutions and institutional strengthening. However, underlying all these measures, there are critical social issues, which would need to be addressed before any of these measures could have any impact on deforestation. Behind the use of household fuelwood are critical factors to be considered: (i) low welfare levels, ii) lack of attractive alternatives; iii) widespread availability; and iv) access. Considering the latter, despite an annual household allocation of fuelwood for communities near the forests, the access to wood is often difficult for most families. It resulted in the creation of business opportunities to cut the wood and transport it to households for a price.
- 43. In the meantime, reforming the sector to reduce pressures on forests and to secure conservation and enhance carbon stocks mean the needs to shift from the current unsustainable practices to sustainable land and forest management to integrated sustainable land and forest management approaches. However, as discussed in section 2, the effort of the government to shift from unsustainable practices to sustainable practices has faced four key barriers: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources.
- 44. This project is part of initiatives funded by the government and development partners to address these barriers. The project document stated that the government of Armenia was committed to invest in excess of USD 20M in Natural Resource Management (NRM) in North Eastern Armenia over the project period. Additionally, the Ministry of Environment (MOE) was committed to invest in excess of USD 6.7M in national environmental standards, specifications and guidelines. Other government entities were also to invest some resources in this sector in the North Eastern region such as the Forest State Monitoring Centre, the State Environmental Inspectorate, Hayantar SNCO, the Forest Enterprises, as well as several NGOs such as the Caucasus Nature Fund and WWF. The project partnered with all these stakeholders.

- 45. On the development partners side, one key partner at the time of the formulation of the project was GIZ. It had a project underway titled "Integrated Biodiversity Management, South Caucasus (IBiS) programme." GIZ supported the implementation of the IBiS programme in Armenia, Azerbaijan and Georgia from December 2015 to November 2019 with a total budget of 22.89 M euros (USD 26.9M). This programme focused on two areas related to this project: (i) sustainable forest management on national & forest enterprise level; and (ii) sustainable pasture management on national and local level. In the forest area the IBiS programme focused on the development of a National Forest Management Information System (NFMIS). In the pasture area, it supported the development of a pasture toolkit, which includes a pasture monitoring manual, pasture management guidelines and pasture rehabilitation guidelines.
- 46. At the formulation stage, the strategy of this project was to build on ongoing GIZ supported activities, which were already focusing on improving the management of forests and pastures, including the development of FMPs for all 11 FEs in the two regions. The project was also to take stock of information made available by the NFMIS developed with the support of the GIZ-IBiS programme. The initial strategy developed during the formulation of this project was to strengthen/upgrade the 11 Forest Management Plans (FMPs) with the introduction of the biodiversity, ecosystem services and forest carbon protocols; whereby the first FMP for the Sevqar FE would have been done with the support of GIZ building on their experience in the sector and the other 10 FMPs to be supported by this UNDP-GEF funded project. However, for unknown reason to the Evaluator, GIZ decided to stop its forest management planning activities and focused mostly on the development of the NFMIS and related capacity development activities. As a result, this project ended up with the task of supporting the development of 11 FMPs, including the introduction of the biodiversity, ecosystem services and forest carbon protocols.

4.1.4. Lessons from other Relevant Projects/Initiatives

- 47. The design of the project benefited from past experiences in the area of forest and pasture management. It was built on past experiences including projects supported by key development partners involved in the same sector: European Union, the World Bank and GIZ. It also includes past GEF-funded projects implemented by UNDP.
- 48. One initiative was the European Neighbourhood and Partnership Instrument East Countries Forest Law Enforcement and Governance II Program (ENPI FLEG 2) funded by the European Union and the Austrian Development Cooperation. This programme was financed with an EU grant of 9M euros (USD 11.2M), run from 2013 to 2017, and operated in Armenia, Georgia, Azerbaijan, Belarus, Moldova, Russia, and Ukraine. It had a three-pronged strategy: (i) strengthen forest governance through improving implementation of relevant international processes; (ii) enhance forest policy, legislation and institutional arrangements; and (iii) develop, test and evaluate sustainable forest management models at the local level on a pilot basis for future replication. In Armenia, the programme supported legal and institutional review and reforms, built human resource capacity to address FLEG issues, strengthened public awareness and public monitoring of forests, strengthened sustainable forest management through activities with model forest units such as forest protected areas and alternative livelihood activities on sustainable use of forest resources with the involvement of adjacent communities in the Tavush region.
- 49. Other relevant initiatives which informed the formulation of this project were the World Bank Community Agricultural Resource Management and Competitiveness Project for Pasture/Livestock Management Plans; the GIZ ongoing programme (see section 4.1.3 above); and the WWF Armenia Forest Landscape Restoration in Northern Armenia, which was involved in restoration of the natural habitat of critically endangered plant and animal species through reforestation as well as income generation for the local population; as well as the EU ENRTP Caucasus Increasing the resilience of forest ecosystems against climate change in the South Caucasus Countries through forest transformation also implemented by WWF Armenia.
- 50. Finally, the project was developed benefited from the extended experience of UNDP in implementing related GEF-funded projects in Armenia. It included the UNDP-GEF project "Adaptation to Climate Change Impacts in Mountain Forests Ecosystems in Armenia", UNDP-GEF Project "Enabling activities for the preparation of Armenia's Third National Communication to the UNFCCC", The UNDP/GEF Project "Catalysing Financial Sustainability of Armenia's Protected Area System", and also the UNDP-GEF Small

Grants Program (SGP) in Armenia, which have accumulated a recognized expertise in Armenia to develop alternative livelihoods for rural communities.

4.1.5. Planned Stakeholder Participation

- 51. An initial stakeholder analysis during the PIF stage was followed up with consultations during the PPG stage of the project. Consultations took place with, both, institutional stakeholders in the context of their statutory involvement in the project, and more broadly with non-governmental stakeholders including forest dependent communities in the two marzes in NE Armenia. Two major workshops were held during the preparation of the project. An inception workshop in October 2014, and a Draft Project Document Stakeholder Consultation Workshop in March 2015. The consultation process was concluded with the identification of key stakeholders, their existing respective roles and responsibilities, and their potential roles in the implementation of this project. Then, on the basis of this consultations, a Stakeholder Involvement Plan was developed. All this information was documented in the project document under the section 3 Stakeholder Analysis, complemented with Annex 3 Stakeholder Involvement Plan.
- 52. In this stakeholder involvement plan clear potential roles in implementing the project were identified as well as a process to engage stakeholders in the implementation of project activities. One objective of this stakeholder participation plan was to ensure that those involved have the full knowledge of the progress and obstacles in implementing the project and to take advantage of the experience and skills of the participants to enhance project activities. Several mechanisms were identified to engage stakeholders, including: regular meetings and conference calls to communicate and disseminate project progress and/or identify difficulties in achieving the development outcomes; face to face meetings with the aim of discussing forest planning and development progress; exchange of reports to adequately inform all stakeholders about project implementation; and set coordination mechanisms with the to-be-contracted private companies. The plan also included the constitution of a Project Advisory Committee to ensure representation of all stakeholders in the project.

4.1.6. Gender Responsiveness of Project Design

- 53. Regarding gender mainstreaming, as reported in the MTR, the project did not have a comprehensive, standardized gender analysis completed during the project development phase aligned with the *UNDP GEF Equality Strategy for 2014-2017*. However, it was recognized that gender aspects of the project were considered and discussed both in the CEO Endorsement Request and the project document. In the latter, it was stated that the project was designed to recognize the gender dimension of its work and that it will mainstream a gender perspective into forest management planning. It would recognize gender-specific roles in forest and pasture management and, overall, in natural resources management. Finally, it was stated that gender issues would be addressed by promoting full and equitable participation of women in the conservation and landscape management approaches supported by the project.
- 54. The review of the planned stakeholder participation in the project, including gender mainstreaming, indicates that an extensive stakeholder analysis was conducted during the formulation of this project, which led to the development of a well-articulated stakeholder involvement plan. All key stakeholders have been identified, clear roles and responsibilities were defined, and mechanisms were identified to engage these stakeholders. The Evaluator noted the plan to constitute a Project Advisory Committee to ensure a broad representation of all key interests throughout the implementation of the project.

4.1.7. Planned Replication Approach

55. Replicability was defined in the project document as the basis for determining the success of the project. It stated that the overall goal of widely integrating SFM and SLM into policies, and programs throughout north-eastern Armenia implies that the models developed in the targeted communes are replicable outside of those communes. It was anticipated that the first component focusing on mainstreaming SFM and SLM at the policy level would create an enabling framework for replicating SFM and SLM throughout the country. However, it was also recognized that it will require facilitating an understanding of national level decision makers that forest and land degradation is a constraint to economic development and poverty alleviation. However, it was also recognized that creating an enabling framework for replicating SFM and SLM may

provide some support to integrated economic development planning.

- 56. Under the second component, the project has sought to develop synergies among rural development actors and programs with an objective of raising additional investments that will fund sustainable resources use practice models and other alternative livelihood generation activities. Based on tested models, it was anticipated that they would become catalysts for regional and local NGOs, CBOs and government rural development agencies to raise investments for SFM, SLM and broader community actions.
- 57. Finally, the carbon monitoring component of the project, which was to test guidelines and practical tools for carbon monitoring and measurement in land use and forestry sector, may hopefully be adopted as part of the national carbon monitoring framework and used at national level for the preparation of greenhouse gases inventory and national communication to UNFCCC.
- 58. The review of this planned replication approach conducted for this evaluation indicates a convincing replication approach. The basic concept of this approach was based on the assumption that the project would be successful; which in turn would catalyze greater interest in strengthening the management of forests and pastures; and by extension replicate the tested measures throughout the country. As discussed in the previous section, a good stakeholder involvement plan would also contribute to the replicability of project achievements.

4.1.8. UNDP Comparative Advantage

- 59. UNDP has been established in Armenia in March 1993 and supports the government to reach national development priorities and the Sustainable Development Goals by 2030. Its interventions in Armenia are governed by the *Standard Basic Assistance Agreement (SBAA)* which was signed on March 8, 1995. This agreement set the conditions for the assistance and cooperation with the government of Armenia. As part of the UN Country Team (UNCT) in Armenia, UNCT interventions are planned in a five-year cycle and documented in the *UN Development Assistance Framework (UNDAF)*. This project was developed during the end life of the second UNDAF which was for the period 2010-2015. This UNDAF was aligned with the main national development priorities outlined in the second Poverty Reduction Strategy Paper (PRSP). The UNDAF 2010-2015 priorities were in four key areas: (i) Poverty reduction; (ii) Democratic governance; (iii) Basic social services; (iii) Environmental management and Disaster risk reduction. This UNDAF also prioritized vulnerable groups as target groups for its cooperation, including the poor, women and children, the disabled, elderly and refugees who are being hardest hit by the gaps in economic and human development.
- 60. The UNDAF 2016-2020 is the current development assistance framework, which was agreed by the UN and the government of Armenia on July 31, 2015. This strategic programme framework has been guiding the cooperation between the government of Armenia and the UNCT since 2016. Seven key expected outcomes were identified, which were aligned with the priorities established in the *Armenia Prospective Development Strategy 2014-2025* and the Sustainable Development Goals (SDGs). Under environmental sustainability and resilience building, the expected outcome (#7) is "by 2020 Sustainable development principles and good practices for environmental sustainability resilience building, climate change adaptation and mitigation, and green economy are introduced and applied."
- 61. Within the context of the UNDAF 2016-2020, UNDP developed its *Country Programme Action Plan (CPAP)* for the same period 2016-2020. It was developed upon the experience gained and the progress made during the implementation of the previous CPAP for the period 2010-2015. The *Assessment of Development Results of Armenia* conducted in 2014 highlighted that UNDP was the most effective in: (i) supporting formulation or reform of national policies and strategies; (ii) developing and strengthening national institutional capacities, (iii) implementing large and complex projects; (iv) administering resources, and (v) piloting innovative solutions. The theory of change of the CPAP 2016-2020 was that human development is possible when people participate in decision-making and are empowered to contribute and share the benefits of economic growth in a sustainable environment.
- 62. Aligned with the UNDAF 2016-2020, the CPAP 2016-2020 strategy is made up of 14 expected outputs. Under the UNDAF expected outcome focusing on environmental sustainability and resilience building (#7), five expected outputs (out of 14) were identified: (i) Regulatory framework of social, environmental and economic sectors is updated to better address environmental sustainability and resilience principles; (ii)

Innovative climate change and disaster-risk reduction/resilience measures and practices applied and replicated across the country; (iii) Government uses innovative mechanisms and tools for evaluation and decision-making over the conservation and sustainable use of natural resources; (iv) Low carbon and 'green economy' issues become priority for the government, supported by relevant regulatory framework and activities; and (v) New production and consumption patterns are introduced and new 'green' jobs are created. Of note, the Evaluator noted that "forest" was not mentioned at all in this programme.

- 63. A mid-term review of the CPAP 2016-2020 has been conducted in 2018 and this project was part of the of this review. It was recognized that UNDP Armenia is considered as one of the go-to partners for the government of Armenia for the formulation, testing and implementation of transformative development models. It is demonstrated by the capacity of UNDP Armenia to mobilize financial resources. During the period 2016-2018, UNDP mobilized over USD 42.8M; funds coming from the EU, the government of Russia, the UK Good Governance Fund, the GEF, the Green Climate Fund (GCF) and the government of Armenia.
- 64. Additionally, it assessed that the capacity of UNDP Armenia to use adaptive management was, for instance, demonstrated during the "Velvet Revolution", which affected the timelines and delivery of the majority of UNDP implemented projects. The country office realigned its programmatic priorities with both national counterparts and donors, reassessed and updated the risks accordingly, and adjusted project timelines.
- 65. In the Country Programme Document (CPD) for Armenia (2016-2020, which was presented at the Executive Board of UNDP on June 12, 2015, it was stated that UNDP will leverage its comparative advantage as an actor working on all aspects of sustainable human development, and as a visionary, innovative organization with expertise and convening capacity. Additionally, the comparative strengths of UNDP in Armenia were part of the "Assessment of Development Results" conducted in 2014. It found that in addition to the worldwide recognized comparative strengths in technical and managerial capacities to effectively implement projects, provide policy advice, and offer its global network of experts on human development issues to transfer knowledge and technology for development, additional strengths were more specific to the country office in Armenia. It included the strong relationships with government entities, the long term engagement with key civil society organizations, a good outreach to local governments and communities through its web of projects, its power to convene other strategic stakeholders and partner with, its administrative capacity to allows for piloting and testing new models of service delivery or other innovative solutions to address existing challenges, and good understanding of the socio-economic and cultural context due to its long presence in the country.
- 66. Finally, UNDP brought an extensive experience in the sector acquired through a portfolio of related projects mostly funded by the GEF but also the Adaptation Fund and other Development Partners.

4.1.9. Management Arrangements

- 67. The management arrangements planned at the onset of the project included:
 - GEF Implementing Agency: UNDP served as the GEF implementing agency for the project. It was a member of the Project Board and was the Senior Supplier, representing the interests of the GEF. This role was represented by the UNDP Deputy Resident Representative. As such, its primary function within the Board was to provide guidance regarding the technical feasibility of the project. It was also to make sure that progress towards expected results remains consistent from a supplier perspective, that the supplier resources were made available and ensure a quality assurance role in the implementation of the project.
 - Implementing Partner (IP): The Ministry of Environment (MOE), acted as the Implementing Partner (*Project Executive*) of the project. Based on the standard NIM procedures, MOE has been responsible for the overall project.
 - Senior Beneficiary: The primary function of the Senior Beneficiary has been to represent the interests of those who will ultimately benefit from the project. Its function within the Project Board (PB) was to ensure the realization of project results from the perspective of different stakeholders and beneficiaries. At the time of the formulation of the project, the Ministry of Agriculture was the primary beneficiary based on the mandate in addressing agriculture and forest

- policy. The Ministry designated "Hayantar" SNCO as the entity to act as the "owner" of the forest enterprises.
- Project Board (PB): A PB was constituted to serve as the executive consensus-based decision-making body for the project. It included representatives from key partners to the project. It met 6 times during the lifetime of the project. The PB provided strategic directions and management guidance for the implementation of the project. The PB ensured that the required resources were committed and arbitrated on any conflicts within the project or negotiated a solution to any problems with external bodies. The PB approved the Annual Work Plans (AWPs), reviewed the Annual Progress Reports/Project Implementation Reports (PIRs), and reviewed/approved corrective measures when needed. It ensured that the project remained on course to deliver the desired outcomes of the required quality. The Evaluator noted that the chair of the PB changed 4 times since the outset of the project.
- Project Assurance: The Project Assurance role has been to carry out objective and independent
 project oversight and monitoring functions and reports to the PB. This role has been fulfilled by
 the Environmental Governance Portfolio Analyst of UNDP Country Office.
- Project Management Unit (PMU): A PMU was established under the UNDP Environmental Governance management team comprising of a Project Coordinator (PC), a Technical task leader (TL) and a Project Assistant.
- Project Coordinator (PC): The PC was nominated by the UNDP-CO and had the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Project Board. The PC's prime responsibility was to ensure that the project produced the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.
- Advisory Board: A multi-stakeholder advisory committee was planned to be established as an advisory body to provide technical and operational guidance for project implementation, to ensure consistency and synergy with other ongoing development processes in the country as well as sustained political commitment and broad-based public support.
- *Technical Experts*: As required, the project implementation team hired technical experts to provide technical support for the different components of the project.
- 68. The financial arrangements and procedures for the project were governed by UNDP rules and regulations applicable on project implemented through the National Implementation Modality (NIM)⁸. All procurement and financial transactions were governed by applicable UNDP regulations, including the recruitment of staff and consultants/experts using standard UNDP recruitment procedures.
- 69. The Evaluator found that the management arrangements were adequate and effective for the implementation of the project. They provided the project with clear roles and responsibilities for all parties including clear reporting lines of authority. The PB met regularly to monitor the implementation of the project and approve the AWPs and progress reports. The good functioning of the Project Board provided an effective way to communicate, keep stakeholders engaged, a forum to discuss and resolve critical management issues and nurtured a good national ownership of project achievements. It was also a good mechanism to mitigate the impact of several changes of Chair, which occurred 4 times over the lifetime of the project. Overall, management arrangements provided the project with "checks and balances" mechanisms to review, assess and correct the course of action when necessary.

4.2. Project Implementation

70. This section discusses the assessment of how the project has been implemented. It assessed how efficient the management of the project was and how conducive it was to contribute to a successful project.

⁸ In line with standing GEF and UNDP policies, the project was nationally executed by the Government (referred to as 'national implementation modality (NIM)' in UNDP terminology). The Government has key control functions related to all aspects of project leadership, management and implementation (e.g. provides the National Project Director, heads and manages the Project Board, considers and approves key milestones within its jurisdiction – such as annual work plans, budgets, management responses to mid-term and final evaluations, participates in monitoring, etc., as further described in the Management Arrangements).

4.2.1. Adaptive Management

- 71. The project has been well managed. The project implementation team followed UNDP and government of Armenia procedures for the implementation of the project and used adaptive management extensively to secure project deliverables while maintaining adherence to the overall project design. The review indicates that project achievements are aligned with the project document that was endorsed by stakeholders. The *Strategic Results Framework* included in the project document has been used as a "blueprint" to implement the project (see Section 4.1.1). An efficient implementation team has been in place, detailed work plans have been guiding the implementation, assignments were conducted with the required participation of relevant stakeholders, progress of the project was well monitored, mostly through quarterly progress reports, which were reviewed by the PB.
- 72. The project was implemented with a good logical process. Each initiative supported by the project was conducted following well-defined terms of reference and/or feasibility studies. Comprehensive assessments and analyzes were conducted at the beginning of the project to assess existing government instruments and their respective capacities. Then, based on these analyses, capacity gaps were identified and plans of actions to address these gaps were developed and implemented.
- 73. Adaptive management has been used regularly to adapt to a changing environment. The project has been able to navigate through several government changes, including working with four different PB Chairs, through the "Velvet Revolution" in 2018 and more recently, the on-going Nagorno-Karabakh conflict. Through all these changes/events, the project implementation team has demonstrated its ability to use adaptive management measures to adapt to new situations while maintaining adherence to the overall implementation plan and ensuring progress toward the expected results.
- One example where adaptive management was used include the no-cost time extension of the project. Initially, this project was developed an approved for a total duration of 4 years. However, during the inception phase, the feasibility to implement the set of planned activities and to achieve the expected results was raised by stakeholders. It was reported in the inception report that "there will be a need to extend the project implementation period for at least one year,, in order to meet the project objective and outcomes." At the time, no changes were made, and the implementation team carried on with the implementation of activities. However, the need for an extension was also discussed at the first PB meeting on August 18, 2016. One PB member expressed his concern that activities envisaged by the project are very complex and complicated to be completed in 4 years and that a no-cost extension for 1-2 years will be needed. Then, the MTR conducted late 2018, concluded and recommended a no-cost time extension of 6-12 months due to a lengthy start-up time, and a dynamic socio-political and institutional context. This recommendation was reviewed by the PB at its December 20, 2018 and asked UNDP to undertake the process for requesting a no-cost time extension for one year; extending the project from December 31, 2019 to December 31, 2020. All along, the implementation team offered flexibility to stakeholders to adapt to the situation. Following the need to extend the project due to a heavy and complex set of activities to be implemented, additional external factors were added such as the "Velvet Revolution" in 2018 and the government changes. Nevertheless, the recommendation was finally approved in early 2019 and the implementation team adapted the project work plan to be aligned with this new timeline.
- 75. Overall, the use of adaptive management is best demonstrated with the review of the Project Implementation Reports (PIRs). These reports include Section *F. Adjustments* which is annually a discussion to report the adjustments made during the past year to the implementation of the project to adapt to changing circumstances. The first PIR 2017 reported that due to a delay to start the project, the first work plan had to be adjusted to compensate for this late start. The second PIR 2018 reported that the reform of the forest sector, which started in autumn 2017 as well as the "Velvet Revolution" in early 2018 with the formation of a new government and the preparation for new parliamentary elections affected once again the implementation of project activities and required the implementation of adaptive measures to adapt the project to the new realities. In the third PIR 2019, it was reported that the reform of the forest sector was still ongoing and that the State Forest Committee was created as planned, which included Hayantar SNCO. However, this new institutional set up did not establish the State Forest Service as anticipated. Compounded with the previous events (revolution followed up by parliamentary elections) the project had to adjust again its schedule of activities to

deliver the expected results as planned. The fourth PIR 2020 reported that the forest sector was still being reformed with the dissolution of the recently created *State Forest Committee* and the reorganization of the institutional set up with some structural changes of Hayantar SNCO and its Forest Enterprises (FEs), which included the merging of 4 of these enterprises into 2 Forest Enterprises. As a result, the initial 11 FEs targeted by the project were reduced to 9, which necessitated the reorganization of the project work plan to support the development of 9 Forest Management Plans (FMPs) instead of 11 as initially planned. Finally, early in 2020, the outbreak of the COVID-19 pandemic had once again affected the implementation of project activities and required the implementation team to adapt again to this new situation.

76. In conclusion, it goes without saying that this project implementation team used adaptive management extensively as a management approach to adapt to new situations; particularly to properly allocate the financial resources available, find effective ways to procure goods and services to the project on time and on budget and to deliver the expected results as planned initially.

4.2.2. Partnership Arrangements / Gender Mainstreaming

- 77. As discussed in Section 4.1.5 and 4.1.8, stakeholder engagement and management arrangements of the project were adequate for the implementation of the project; they provided the project with clear roles and responsibilities for each party. A well-articulated stakeholder involvement plan was developed during the formulation of the project and included mechanisms to engage these stakeholders. Furthermore, as discussed in section 4.1.8, the PB provided the expected leadership to the project, including its role as a decision-making body for the project. Finally, the Advisory Board provided a platform for key stakeholders to meet, debate, adjust and decide the way forward; particularly in the context of the rather numerous disruptive changes/events which occurred during the implementation of this project. This advisory board has been composed of about 30 members representing a broad spectrum of stakeholders, including government representatives, development partners, NGOs and academia. It met four times, usually just prior to each PB meetings. It was a good opportunity for the implementation team to present the achievements and on-going activities and get feedback from a large professional audience.
- 78. The project has been implemented through partnerships with numerous organizations in Armenia; often partnering with the "right" organizations that were entities, which would bring the necessary skills, knowledge and ultimately value in the implementation of specific activities. A good example was the collaboration with the NGO "Armenia Tree Project." Together the project and this NGO collaborated on community agro-forestry systems and education/extension services. This NGO, created in 1994, has planted over 5M trees using improved planting techniques. The project also collaborated with another NGO "Armenia Forests" which has extensive experience in developing legislation and normative documents for the forestry sector and environmental protection. The project used their experience when it supported the revision of the national forest legislation. A third example is the collaboration with the NGO "Ecolur" which is a public environmental information center which provides up-to-date information and analyses of environmental issues in Armenia. It is an effective platform that the project used to broadcast the project objectives, its progress and as a mean to communicate with stakeholders with a feedback mechanism for dialoguing.
- 79. The list of organizations which collaborated/cooperated with the project includes government entities such as Hayantar SNCO, State Forest Monitoring Centre SNCO but also MOE, Ministry of Agriculture, Ministry of Emergencies Situations, Ministry of Education, etc. It also includes Academia such as Yerevan State University to conduct forest carbon soil analyses, Armenian National Agrarian University to update the forestry educational programmes, etc.; research institutions such as the Institute of Zoology and the Institute of Botany to collaborate on the development of the new concept of High Conservation Value Forest (HCVF). Finally, the project has also partnered with the private sector for specific tasks. It includes Geomap LLC specialized in cadastral mapping. The project collaborated with Geomap on boundaries correction and demarcation activities for Ijevan and Noyemberyan FEs, related protected areas (PAs) and neighboring communities. There is also the collaboration with Green Land LLC to prepare the forest rehabilitation technical project targeting 90 ha of coppice degraded forest under the management of Lalvar FE. The resulting 300m3 of firewood generated as a by-product of coppice activities were given to local needy families. Finally, the project worked with several locally-based organizations in Lori and Tavush regions, including the NGOs Lori Student Union, and Green Land, as well as local public organizations such as Verelq, Bridge of Hope, Full Life, and Lori Beekeepers.

- 80. One particular partner also worth mentioning is the Small Grant Programme (SGP) implemented by UNDP and funded by GEF. The project partnered with the SGP to use their grant mechanism as a delivery mechanism to support the alternative livelihood opportunities in the Lori and Tavush regions targeting communities adjacent to forests. A letter of agreement was signed between the project and the SGP to determine the terms and conditions of this collaboration. Under this agreement the SGP launched their grant process with a total budget of USD 200k from the project. It resulted in the decision to fund five grants:
 - Introduction of energy-efficient stoves for conservation of forest resources in Tavush region
 - Solar power for energy autonomy and forest conservation in Tavush region
 - Sustainable income generation in Debed community through effective backyard farming
 - Sports and adventure tourism development in Stepanavan
 - Complex application of low carbon and energy-efficient technologies in Dzoragyur community of Lori region
- 81. Overall, the project implementation team developed and enjoyed excellent collaborations with a multitude number of stakeholders at national and local in Lori and Tavush regions. All these partnerships have been very valuable for implementing project activities and contributed to a good national ownership of these activities as well as achievements. It will certainly contribute to the long-term sustainability of project achievements.

Gender Mainstreaming

- 82. As discussed in section 4.1.5, gender equality aspects of the project were considered and discussed both in the CEO Endorsement Request and the project document; however, the MTR also noted that the gender analysis provided in the project document was not aligned with the UNDP GEF Equality Strategy for 2014-2017. Nevertheless, a gender audit was conducted in 2018 with the support of an international gender expert. In addition to analyze gender aspects within the context of implementing this project, the assignment objective was also to provide expert advice in implementing specific gender mainstreaming actions.
- 83. The assignment was aligned with the UNDP Armenia CPD/CPAP 2016-2020 and the related UNDP Gender Equality Strategy for Armenia. The gender audit analysed how gender was mainstreamed through the implementation of the project and identified the entry points for improving the mainstreaming of gender in project activities. It reviewed the legal framework and the national instruments related to gender equality and women's rights, the participation of women in politics and public decision-making, the gender-based socioeconomic status, and a special focus on gender and agriculture/forestry sector.
- 84. The gender audit concluded with three main areas that needed a greater focus and actions: (i) capacity and competence of project and UNDP staff is limited; (ii) lack of capacities to develop and track indicators and/or M&E system generated indicator-tracking schemes; and (iii) availability of gender responsive budgets to be able to implement additional gender-based activities.
- 85. The Evaluator also noted that gender mainstreaming was reported in each PIR. The first PIR reported that the implementation team made sure to have a proper representation of women in project activities. The PB first meeting was with 36 members, including 16 women. The membership of the Advisory Board included 40% women. The project also noted that most public organizations which partnered with the project were headed by women. In the second PIR, it discusses how the role of women in pasture and forest management was more and more recognized. In the third PIR, it mentioned that a training on pasture management was given to 100 pasture stakeholders including 50 women. Also training on sustainable forest resources given to 260 forest stakeholders included 100 women.
- 86. The review of how gender mainstreaming was integrated in the implementation of the project reveals that the implementation team skillfully "pushed" a gender mainstreaming agenda through activities supported by the project but also ensuring that women were well represented in the project decision making process with almost 50% of women on the PB and 40% of women on the Advisory Board. Women have also played a key role in organizations which partnered with the project, including being recipients of some SGP grants such as the installation of solar panels and heaters in 4 kindergardens and schools; and starting small forest related businesses. Overall, gender-disaggregated data shows that the project was implemented with a good balance of men and women and an approach to advance gender equality.

4.2.3. Project Finance

- 87. The project is implemented in line with the Standard Basic Assistance Agreement (SBAA) between the Government of Armenia and the United Nations Development Program (UNDP), signed by the parties on March 8, 1995. As discussed in Section 4.1.8, the implementation modality of the project to allocate, administer and report on project resources is the *UNDP Support Services to National Implementation Modality (NIM)*. The provision of support services was the object of a Letter of Agreement between the government of Armenia represented by the Minister of Foreign Affairs and UNDP, represented by the UNDP Resident Representative in Armenia. Based on this agreement, UNDP may provide at the request of the designated institution support services for activities that are part of the Country Programme Action Plan (CPAP). It may include identification and/or recruitment of personnel, procurement of goods and services, contracting responsible parties, and identification and facilitation of training activities.
- 88. Financial records were consolidated into the UNDP-ATLAS system as the accounting and financial system for all UNDP projects. Then, based on the financial information input, the Atlas system can produce financial reports Combined Delivery Reports (CDRs) showing financial information broken down by line items such as local consultant fees, travel tickets, printing and publications, utilities, etc. and presented by project outcome (called Activity in the Atlas system).
- 89. At the outset of the project, the total financial resources to finance the project were USD 16,967,104, of which USD 2,977,169 (18%) was the GEF grant; USD 900,000 was the UNDP co-financing pledge (USD 180,000 cash and USD 720,000 in-kind); USD 8,650,000 from the Ministry of Environment (USD 2,595,000 cash and USD 6,055,000 in-kind); USD 3,777,235 from Hayantar SNCO (USD 2,500,000 cash and USD 1,277,235 in-kind); and USD 662,700 from NGOs (WWF Armenia and Caucasus Nature Fund).

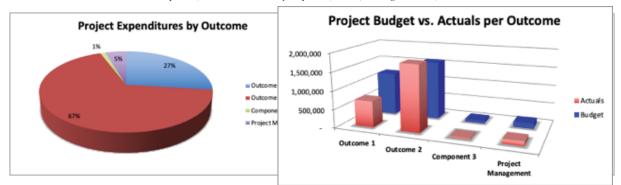
GEF-Grant

90. The review of financial records as recorded in the UNDP Atlas system indicates that by the end of August 2020, USD 2,661,639 have been expended, which is almost 90% of the entire GEF grant (USD 2.98M). As of September 1, 2020, with a remaining budget of USD 315,530, it is expected that 100% of the GEF grant will be expended by the end of project in December 2020. The breakdown of project expenditures by outcome and by year is presented in the table below.

Table 6: Disbursement Status of GEF Grant (in USD)

Table 6. Disbursement Status of GET Statit (III 66b)								
Component	Budget (USD)	2016	2017	2018	2019	2020 ⁹	Total (USD)	Outcome Exp./ Total Exp.
Outcome 1	1,175,400	56,154	197,903	139,098	187,658	137,507	718,320	27%
Outcome 2	1,585,499	53,304	263,620	668,449	592,609	213,834	1,791,816	67%
Component 3	74,500	1,779	932	20,245	3,057	2,089	28,102	1%
Project Management	141,770	6,630	24,583	38,503	31,411	22,273	123,401	4.6%
TOTAL	2,977,169	117,867	487,037	866,295	814,736	375,704	2,661,639	100%

⁹ Financial figures for 2020 are from Jan. to August 2020



Sources: UNDP Atlas Financial Reports (Combined Delivery Reports (CDRs) to August 2020).

- 91. The financial figures presented above indicate that so far 27% of the total GEF grant has been expended on outcome 1 that is "Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management". Another 67% of the total GEF grant was expended on outcome 2 that is "Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services"; and 1% was expended on outcome 3 that is "Monitoring, learning, adaptive feedback, outreach, and evaluation". The remaining expenditures (4.6%) were expended on project management.
- 92. In term of disbursement profile over time, the project has spent just over 4% in 2016, 18% in 2017, 33% in 2018, 31% in 2019 and so far 14% in 2020. Since its inception, the project has disbursed a monthly average of about USD 47,500.
- 93. As shown on the diagram, when comparing the actual expenditures per outcome to the original budget per outcome developed during the formulation of the project, deviations can be observed. So far, project expenditures recorded under outcome 1 are USD 457,080 below the initial budget (-39%); expenditures recorded under outcome 2 are USD 206,317 over the initial budget (+13%); expenditures recorded under outcome 3 are USD 46,398 under the initial budget (-62%); and project management expenditures are USD 18,369 under budget (-13%).
- 94. Based on these figures, so far more project expenditures were allocated to outcome 2 and less on outcome 1 & 3. It means that financially, the project invested more than planned in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services; and less in securing an enabling environment for the sustainable management of forest in marzes in North Eastern Armenia. However, we also need to consider that the remaining budget to be expended between August and December 2020 is USD 315,530, which is about 10% of the total GEF grant and which can affect the above ratio, depending under which outcome this amount will be expended.
- 95. The review of AWP budgets against the yearly actual expenditures (GEF grant) indicates variances from year to year. As indicated in the table below, the project expended its budget planned for the first year; it underspent the following two years (2017 and 2018) with respectively 56% and 77%; then expended its budget in 2019. As of August 2020, the project expended 54% of its 2020 AWP budget.

Table 7:	Annual	Work I	Plane	Vergue	Actual	Evnend	diturpe	(GEE	arant)

Years	AWP Budgets	Actual Expenditures	% Spent
2016	117,867	117,867	100%
2017	869,278	487,037	56%
2018	1,123,634	866,295	77%
2019	808,934	814,736	101%
2020	691,234	375,704	54%

Sources: Project AWPs, UNDP-Atlas CDR Reports and SLT financial report for Jan. to August 2020

96. Finally, an independent audit of project expenditures financed by the GEF grant and UNDP was conducted for the period 2017. It concluded that "the attached statement of expenses (CDR) presents fairly, in all material respects, the expense of USD 527,230.16 incurred by the project for the year ended 31 December 2017 in accordance with the accounting policies presented in the Note 2 and were: (i) in conformity with the approved project budgets; (ii) for the approved purposes of the project; (iii) in compliance with the relevant UNDP regulations and rules, policies and procedures (referenced in the Note 2); and (iv) supported by properly approved vouchers and other supporting documents."

Co-financing / Parallel Financing

97. The co-financing and parallel financing commitments at the outset of the project totaled the amount of USD 13,989,935 and represents 82% of the total financing required for implementing the project. Furthermore, 58% of this co-financing commitments is in-kind and 42% is in cash. The co-financing from MOE represents 62% of the total co-financing (both in-kind and cash) and co-financing from Hayantar SNCO represents 27% of the total co-financing (in-kind and cash). Together they represent 89% of the total co-financing pledge at the outset of the project. The amounts indicated in the table below were all the object of co-financing letters confirming these commitments at the outset of the project.

Table 8: Co-financing Status

Partner	Туре	Commitments (USD)	Actuals (USD)
UNDP	Cash	180,000	180,000
UNDP	In-kind	720,000	720,000
MOE	Cash	2,595,000	8,642,593
MOE	In-kind	6,055,000	
Hayantar SNCO	Cash	2,500,000	7,515,506
Hayantar SNCO	In-kind	1,277,235	
WWF Armenia	Cash	376,500	441,368
Caucasus Nature Fund	Cash	286,200	582,139
Small Grant Programme	Cash & In-Kind	0	72,517
	Total (USD)	13,989,935	18,154,123

Source: Project Document and information collected from the project implementation and SGP teams.

98. As of the time of this terminal evaluation, available actual co-financing figures provided by the project implementation team indicates an actual co-financing amount of USD 18,154,123 or 130% of the commitment made by project Partners at the outset of the project. The Evaluator noted the additional co-financing contribution of the SGP. As discussed in section 4.2.2, the SGP became a Partner to the project and used its experience to implement the project's grant mechanism supporting alternative livelihood opportunities related to forest management in the Lori and Tavush regions. The project funded the five given grants for a total of USD 200k and the SGP co-financed the implementation of the initiative with an estimated cash value of USD 47,885 and in-kind of USD 24,632. Based on the review conducted for this terminal evaluation, the Evaluator confirm that all Partners have kept a strong interest in the project and contributed to the implementation of project activities.

4.2.4. Monitoring & Evaluation (M&E) Approach

99. A Monitoring and Evaluation (M&E) Plan was developed during the formulation of the project in accordance with UNDP and GEF procedures. A total indicative cost of USD 74,500 was budgeted for this plan, representing about 2.5% of the total GEF grant. This plan listed monitoring and evaluation activities to measure the performance of the project, including a mid-term review and a terminal evaluation (this report). The plan was based on the *Strategic Results Framework* that included a set of performance monitoring

indicators and related targets along with their corresponding sources of verification. No changes were made to this M&E Plan during the inception phase.

- 100. A summary of the operating modalities of the M&E plan is as follows:
 - A set of 24 <u>Performance Indicators</u> with their respective baselines and targets by the end of the project were identified and documented in the <u>Strategic Results Framework</u>. They have been used to monitor/measure the performance of the project at the objective and outcomes level and this information has been reported in annual progress reports.
 - An <u>Inception Workshop</u> was planned to assist all partners to fully understand and take ownership of the project and review the entire project strategy including its monitoring and evaluation, as well as finalize the first Annual Work Plan (AWP). This workshop was held on June 17, 2016 in Yerevan. No changes were made to the project implementation strategy at this workshop, though, as discussed in section 4.2.1, the implementation timeline of the project against the set of expected results and planned activities was discussed and participants recognized that 4 years was too short for the project to reach its targets and that 1-2 more years would be needed. An <u>Inception Workshop Report</u> was prepared to summarize the inception phase of the project, including the discussions held at the inception workshop.
 - <u>Quarterly Progress Reports</u>: These quarterly reports served as brief overviews of progress made during past quarters and are recorded in the UNDP Enhanced Results Based Management Platform.
 - <u>Annual Project Reviews / Project Implementation Reviews (APR/PIRs)</u>: These annual progress reports are both UNDP and GEF reporting requirements, following specific guidelines. They are annual progress report measuring the progress made by the project during the past year and overall since its inception. They include a review of the development objective, measuring the progress made using the performance indicators to achieve the overall expected objective and outcomes; and a review of the implementation measuring the progress made during the past year. PIRs follow the GEF annual cycle of July 1st to June 30th for each year. Four PIRs were produced by the project: 2017, 2018, 2019 and 2020.
 - <u>Combining Delivery Reports (CDRs)</u>: These financial reports, produced by the UNDP Atlas system, are summaries of project expenditures issued quarterly and by outcome (called Activity in Atlas) but also as needed. They also contain a risk log to track project risks and their mitigative measures.
 - <u>Periodic Monitoring through site visits</u>: UNDP Country Office (CO) staff conducted visits to project sites in Lori and Tavush regions. Following each visit, Back To Office Reports (BTORs) were prepared.
 - <u>Mid-term Review and Terminal Evaluation</u>: The project was to be subjected to a mid-term review and a terminal evaluation. The mid-term review was to review the progress made by the project against the expected results and identify recommendations for adaptive management as needed. The mid-term review was conducted in May-August 2018. Regarding the terminal evaluation (this report), it is focusing on the delivery of the project's results as initially planned, on impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals and provides recommendations for follow-up activities.
 - <u>Learning and Knowledge Sharing</u>: Results from the project were to be disseminated within and beyond the project intervention zone through existing information sharing networks and forums; including a two-way flow of information between this project and other similar projects.
 - <u>Branding and Visibility</u>: Full compliance was required with UNDP's Branding Guidelines and the GEF's Visibility Guidelines, including the use of the UNDP and GEF logos. For other agencies and project partners that provide support through co-financing, their branding policies and requirements should be similarly applied.
 - <u>Financial Audit</u>: Audits were to be conducted by the legally recognized auditor of UNDP Armenia office, in accordance with UNDP Financial Regulations and Rules and applicable Audit policies. The Evaluator noted that one audit of the project expenditures was done for the period 2017, which validated the expenditures as presented.

101. The set of indicators to measure the progress of the project at the objective and outcomes level was reviewed by the Evaluator. The project was approved with a set of 24 indicators, which were presented in the *Strategic Results Framework* with their respective baselines and targets to be achieved by the end of the project. No changes were made to these indicators during the inception phase. The list of indicators and their respective targets are presented in the table below:

Table 9: List of Performance Indicators

	e 9: List of Performance Indicators	
Project Outcomes	Indicators	Targets
Project Objective: Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services.	Number of forest management plans integrating considerations of biodiversity, ecosystem services, climate mitigation and community resource use (integrating sustainable forest management principles)	11 5 Community development plans updated
	 Total avoided and/or sequestrated carbon benefits over ten-year period due to improved sustainable management of forests. 	• 681,990 metric tCO2
	Extent in hectares of forest area managed for multiple sustainable forest management and ecosystem benefits	• 250,000
Outcome 1 - Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management • Output 1.1: Forest management	 Number of forest management plan protocols/guidelines for mainstreaming ecosystem, climate risk mitigation and biodiversity considerations into forest management in NE Armenia 	One set approved by Ministry of Agriculture
plan guidelines/protocols updated for mainstreaming ecosystem, climate risks and biodiversity considerations into forest management planning in	 Number of sets of forest inventory and maps in support of sustainable forest management for forest enterprise branches 	• 11
North-east Armenia Output 1.2: Geo-spatial information systems support forest inventory and mapping for forest management planning, development,	6. Number of forest enterprise branches effectively applying consideration of the needs for biodiversity, climate mitigation, forest ecosystem services and community sustainable use	• 11
 Months of the control o	 Number of forest monitoring protocols to assess effectiveness of adoption for SFM in forestlands 	One set of protocols approved and adopted by Ministry of Agriculture
ecosystem services, climate mitigation, and community resource use	Number of marz and enterprise branch forest staff trained in the use of ecosystem based planning tools	• 60
Output 1.4: System for effective monitoring and enforcement of forest management plans, including clear delineation of roles and	Number of pasture stakeholders undergone technical and skills training and development in sustainable pasture management	100 (of which at least 30 are women)
responsibilities of key partners and management of participatory processes in forest development	Number of forest dependents trained in technical skills for sustainable forest resource use	• 500 (of which at least 150 are women)
 Output 1.5: Recommendations for national policy and regulations for facilitating adoption of sustainable forest management practices 	Number of recommendations on accounting for ecosystem services valuation and community resource use	One set of recommendations
Output 1.6: Enhanced capacity for sustainable land and forest management within key agencies and communities		
Outcome 2 - Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation	 Hectares of high biodiversity conservation value forests designated identified and effectively managed for biodiversity and climate mitigation 	• At least 85,000
forests and maintain flow of ecosystem services.	Change in population trends for five indicator bird species	Population of indicator bird

Project Outcomes	Indicators	Targets
Output 2.1: Designation of High Conservation Value Forests covering 85,000 ha of current		species stable or increase over baseline values
production and protection forests for species conservation and climate mitigation • Output 2.2: Restoration of forests and pasture lands, and rehabilitation	Change in population trends for five indicator butterfly species	Population changes of indicator butterfly species stable and/or do not decrease
of multiple use forestlands through community forest resource management	Number of hectares of degraded forests regenerated through assisted natural regeneration	• 4,932
 Output 2.3: Alternative livelihood programs for local communities as incentive to conserve forests and biological resources Output 2.4: Integrated strategy for 	Number of hectares degraded pasture and hay fields rehabilitated under sustainable management practices to reduce pressure on forest lands	• 1,000
management of firewood collection and distribution from forests • Output 2.5: Carbon stock assessments and coefficients for key	Number of hectares of forest land under multiple use regimes (sustainable NTFP production and agro-forestry) with participation of forest dependent communities	• 3,000
forest types in NE Armenia	18. Percentage decrease in number of livestock using natural forests for unsustainable grazing practices in targeted forest branches	• 15%
	Percentage reduction in forest firewood collection areas in targeted forest branches Reduced areas of felling in target state forests	• 15%
	20. Number of recommendations for management of dependencies in firewood use from forests	One set of recommendation developed by Ministry of Agriculture
	21. Percentage of households reporting increased incomes from forest and non-forest resources in target communities, including percentage of beneficiaries among women	20%, of which at least 30% of beneficiaries are women
	22. Number of carbon stock assessment completed for key forest types in NE Armenia	One set of baseline assessment completed and monitoring
	23. Emissions of metric tCO2 avoided from conservation set-asides over a10-year period	• 559,110 metric tCO2
	24. Improvement in carbon sequestration capacity in metric tCO2 of restored forests over a 10-year period	• 122,880 metric tCO2

Source: Project Document and PIRs

102. These 24 indicators were identified to measure the performance of the project and its progress toward the project's outcomes and objective. They have been used to report progress made in the APR/PIR reports. The review of these indicators and their respective targets reveals that they are SMART¹⁰ indicators with clear targets. It is a good set of indicators that was used to measure how well the project was progressing. With clear targets, it makes them unambiguous indicators that are specific, measurable, available and relevant for the project in a timely manner.

103. The M&E plan is a satisfactory monitoring framework to measure the performance of the project with a good mix of quantitative and qualitative indicators. Quantitative indicators give a clear measure of things and are numerically comparable. They also provide an easy comparison of a project progress over time and

¹⁰ SMART: Specific, Measurable, Attainable, Relevant and Time-bound.

are easy to monitor and do not require too many resources to collect data. Qualitative indicators measure the degree of capacity developed such as skills developed for relevant stakeholders, procedures and mechanisms developed within relevant institutions and measure the relevance of the enabling environment in place (laws, policies and programmes). They depict the status of a situation in more qualitative terms.

- 104. Overall, this framework is an effective and relatively simple monitoring tool. It is also cost-efficient; for most indicators/targets the collection of monitoring information is closely related to project activities and do not require extra surveys, studies, etc. For instance, the project worked in developing recommendations for managing the dependencies in firewood use from forest. Once these recommendations are identified, it is just a matter to summarize their status of these recommendations, which would provide the monitoring information needed to report progress against indicator #20. The same logic is true for most indicators such as the number of forest management plan protocols/guidelines. The status of project supported activities in this area would provide the progress made against indicator #4.
- 105. However, the review of these 24 indicators reveals a certain weakness in measuring how well capacities are developed under outcome 1. The indicators #8, 9, and 10 are tracking the number of people trained. They are valid output indicators to track the delivery of training programmes. However, as it is well known, they are not good indicators to measure the development of capacities. In this case the use of proxy indicators measuring the impact of these training events would be "SMARTer" such as measuring how well these new skills and knowledge are applied by the people trained.
- 106. Finally, the ratings given in each PIR (4) were reviewed by the Evaluator and compared to those given in this terminal evaluation. The ratings given over the 4 years of implementation are overall *Marginally Satisfactory* for both progress in achieving the development objectives and the implementing progress. The Evaluator noted that these ratings included those from the Implementing Partner and also from the GEF Focal Point and that overall, these ratings were consistent among raters. The first year rated was 2017 and was rated as *Satisfactory*; however, the subsequent years were all rated as *Moderately Satisfactory*. The review conducted for this terminal evaluation concurs with these ratings. The rating of "Overall Project Outcome Rating" is rated as *Moderately Satisfactory*.

4.2.5. Contribution of UNDP and Implementing Partner

- 107. The contributions of UNDP as the GEF Implementing Agency and of MOE as the Implementing Partner in implementing the project was satisfactory; particularly when considering the critical changes and events that occurred during the implementation of this project. They supported the implementation of the project in their respective area of responsibility. They provided good support to the implementation team to ensure an efficient use of GEF resources and an effective implementation of the project. Both institutions also participated actively in the design and implementation of the project.
- 108. At the outset of the project, UNDP and the government of Armenia signed (May 20, 2015) a letter of agreement identifying the terms and conditions under which UNDP may provide direct services to the project upon requests from the government, while the capacity of the government-designated entity is strengthened to enable it to carry our such activities directly. The services that may be provided by UNDP to the project upon the request from the government include: (i) identification and/or recruitment of project and programme personnel; (ii) identification and facilitation of training activities; and (iii) procurement of goods and services.
- 109. Within the context of this agreement, UNDP has provided an effective support to the implementation of the project. It provided the required guidance to apply UNDP project management procedures such as procurement, hiring and contracting as well as financial management and guidance for reporting project progress. As discussed in section 4.1.8, the Environmental Governance Portfolio Analyst from the UNDP Country Office provided quality assurance over the implementation of the project, ensuring that the required qualities for project activities were fulfilled. Overall, UNDP backstopped the project with its own resources; supported the project management team throughout the implementation, including the participation in the decision-making process for implementing the project through the PB.
- 110. MOE, as the national Implementing Partner, played also an important role in the implementation of this project as the main government anchor point of the project. Additionally, as the Chair of the PB it provided

good leadership in guiding the implementation of the project. Overall, MOE played an important facilitator role for the project. It also provided the government/institutional context for the legitimization of project-supported activities; including the adoption of protocols, guidelines and other norms developed with the support of the project as well as the adoption of the new HVCF concept to be implemented in Armenia and the new approach to develop Forest Management Plans, including their content. The Evaluator also noted that the co-financing reported by MOE at the end of the project is equal to the amount pledged at the outset of the project.

111. Despite all the government changes that occurred during the implementation of the project, including 4 different Chairs of the PB, the Evaluator noted the good relationship between UNDP and the Implementing Partners of the project, including MOE, Ministry of Agriculture, Hayantar SNCO, and the State Forest Monitoring Centre SNCO. There is no doubt that these relationships were conducive to an effective collaboration in implementing the project. From a sustainability perspective, it should also contribute to a good uptake and scaling up of project achievements.

4.2.6. Summary of the Mid-Term Review (MTR)

- 112. One external Evaluator conducted a Mid-Term Review (MTR) over the period May-August 2018. The Evaluator reviewed the project at mid-point following the UNDP and GEF evaluation guidelines. It concluded at the time that the progress of the project was moderately satisfactory. It stated that the project strategy was technically sound, but the implementation was facing some practical challenges. Furthermore, due to its focus on only 2 regions in Armenia to address rural fuelwood dependency, it raised the question of effectiveness of the sustainable forest management plans supported by the project. Regarding the project results, the MTR rating was moderately unsatisfactory, stating that 13 targets are likely to be met but it was uncertain that the remaining 11 targets would be met by the end of the project.
- 113. Otherwise, the MTR considered the project relevant, stating that the project clearly supports national priorities related to SFM, forest, land degradation and climate change. It rated the efficiency as moderately unsatisfactory, based on a low disbursement, which was concluded that the project was behind schedule. Finally, the long-term sustainability was rated as moderately likely.
- 114. The MTR was concluded with a set of 19 recommendations. A management response was developed to review each recommendation and provide a management response on how each recommendation will be addressed, including proposed key action(s), timeframe, responsible unit(s) and tracking the status. It was completed in December 2018 and, since that date, proposed actions have been under implementation.

4.3. Project Results and Impacts

115. This section discusses the assessment of project results, what are the remaining barriers limiting the effectiveness of the project, how efficient was the project to deliver its expected results, and how sustainable and replicable these achievements will be over the long-term.

4.3.1. Overall Achievements / Effectiveness

116. As presented in Sections 4.1, the project has been implemented through two (2) outcomes. The implementation progress is measured though a set of 24 indicators, each one with its respective target to be achieved by the end of the project. Below is a table listing key results achieved by the project against each expected outcome, using the corresponding targets to measure the progress made. Additionally, a color "traffic light system" code was used to represent the level of progress achieved by the project.

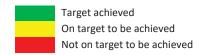


Table 10: List of Achievements vs. Expected Outcomes and Targets

	10: List of Achieveme	ents vs. Expected Outcomes and Targets	5TE
Expected Results	Project Targets	Results	Assess.
Outcome 1 - Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management • Output 1.1: Forest management plan guidelines/protocols updated for mainstreaming ecosystem, climate risks and biodiversity considerations into forest management	One set of forest management plan protocols/guidelines for mainstreaming ecosystem, climate risk mitigation and biodiversity considerations approved by Ministry of Agriculture	 Delivered three (3) FMPs (Ijevan, Noyemeryan and Vanadzor) to MOE for environmental impact assessment. These new generation FMPs are completed with the integration of protocols for biodiversity (HCVF concept), ecosystem services (including NTFPs, avoidance of carbon emissions and its sequestration, water regulation and other services) and indicator bird and butterfly species to monitor the ecosystem state. FMPs (3) for Tashir, Stepanavan and Jiliza FEs (Lori marz) will be completed by end of project Drafted FMPs protocols on biodiversity, ecosystem services and forest carbon, which have been included in the revised package of amendments to the Decree of the Ministry of Agriculture #130-N dated 10 August 2005 on FMP. 	
planning in North-east Armenia • Output 1.2: Geo- spatial information systems support forest inventory and		The concept of biodiversity conservation, ecosystem services and forest carbon were integrated into draft amendments to the Forest Code (2005), National Forest Policy (2004) and National Forest Program (2005). It is now under review.	
mapping for forest management planning, development, implementation and monitoring	11 sets of forest inventory and maps in support of sustainable forest management for	 Delivered three (3) sets of forest inventory and maps for SFM for 3 FEs (Ijevan, Noyemberyan and Vanadzor) to MOE. It includes all primary data (satellite images, state cadastral maps, etc.) Drafted three (3) other sets of forest inventory and 	
Output 1.3: Revised forest management	forest enterprise branches	maps for SFM for 3 FMPs (Tashir, Stepanavan and Jiliza in Lori marz).	
plans integrate considerations of biodiversity, ecosystem services, climate mitigation, and community resource use Output 1.4: System for effective monitoring and enforcement of forest	11 forest enterprise branches effectively applying consideration of the needs for biodiversity, climate mitigation, forest ecosystem services and community sustainable use	6 FEs started to use these inventories and maps for a more effective biodiversity conservation, climate mitigation, forest ecosystem services values and community sustainable use.	
management plans, including clear delineation of roles and responsibilities of key partners and	One set of forest monitoring protocols approved and adopted by Ministry of	 Amendments to strengthen forest monitoring protocols were introduced in the revised Forest Code of Armenia (adopted 24 October 2019), which is now with the Government of Armenia and pending approval by the National Parliament. 	
management of participatory processes in forest development • Output 1.5: Recommendations for	Agriculture	 In collaboration with the forest monitoring center, identified and mapped 3,000 ha of degraded forest ecosystems as potential reforestation and afforestation sites in state forest estate. This activity is also part of Armenia's obligation under the Paris climate agreement. 	
national policy and regulations for facilitating adoption of sustainable forest management practices • Output 1.6:	60 marz and enterprise branch forest staff trained in the use of ecosystem based planning tools	60 people in total in Tavush and Lori marzes, from 6 FEs (Ijevan and Noyemberyan in Tavush and Vanadzor, Stepanavan, Tashir and Jiliza in Lori) were trained in the use of ecosystem based planning tools.	
Enhanced capacity for sustainable land and forest management within	• 100 pasture stakeholders (at least 30 women) undergone	120 pasture stakeholders (55 women) in Tavush and Lori marzes have got technical skills and practical knowledge in sustainable pasture management.	

Expected Results	Project Targets	Results	5TE Assess.
key agencies and communities	technical and skills training and development in sustainable pasture management	 Pasture stakeholders from 4 communities in Lori region (Margahovit, Gugarq, Mets Parni and Vahagni) and 4 communities in Tavush region (Lusadzor, Yenoqavan, Koghb and Berd consolidated community) were trained in different aspects of sustainable pasture management and related issue. 	
	500 forest dependents (at least 150 women) trained in technical skills for sustainable forest resource use	• 500 forest dependents (150 women) were trained on sustainable forest resource use. Trainings sessions were organized in 7 forest enterprises of Tavush (Ijevan, Noyeberyan, Artsvaberd) and Lori (Vanadzor, Tashir, Stepanavan and Jiliza) marzes. It included administration staff of forest enterprises, forest rangers, as well as local forest dependent community members. Topics discussed included forest ecosystem services (sustainable use of forest primary and secondary products), non-timber forest products, eco-tourism, birdwatching, water related topics, etc.	
	One set of recommendations on accounting for ecosystem services valuation and	• A protocol titled "Forest carbon stock measurements guidelines for measuring carbon stocks in the north eastern forests of Armenia" has been accepted by MOE as official reference for any forest carbon inventory projects.	
	community resource use	 Recommendations derived from the guidelines were used in the "4th National Communication on Climate Changes" for Armenia under UNFCCC. Draft SFM plans for 3 FEs (Ijevan, Noyemberyan and Vanadzor) that include biodiversity, ecosystem services and forest carbon protocols have been delivered to MOE for approval. Biodiversity, forest carbon and ecosystem services are being assessed in FMPs for Tashir, Stepabnavan and Jiliza FEs of Lori marz. 	
Outcome 2 - Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services. • Output 2.1:	At least 85,000 ha of high biodiversity conservation value forests designated identified and effectively managed for biodiversity and climate mitigation	 77,532ha of HCVF have been delineated in Lori and Tavush regions: Ijevan state sanctuary: 13,912ha; Ijevan FE: 2,660ha; Noyemberyan FE: 8,506ha; Vanadzor FE: 9,796ha (former Gugarq and Yeghegnut FEs), Margahovit state sanctuary: 3,126ha; Dilijan NP with Yew Grove sanctuary: 33,765ha, Stepanavan FE: 2,844ha and Gyulagarak "Sochut" state sanctuary: 2,923ha. The remaining 7,468ha HCVF will be identified in the congrigor for the program of the p	
Designation of High Conservation Value Forests covering 85,000 ha of current production and protection forests for species conservation and climate mitigation	Population of five indicator bird species stable or increase over baseline values	 on-going forest management planning for Tashir and Jiliza FEs. Population of 5 indicator bird species remained stable over the project's life span, based on continuous field observations and calculations using the ten-year linear trend equation (y=ax+b) for the Coal Tit, Eurasian Nuthatch, Semi-collared flycatcher, Green Warbler and Song Thrush. 	
 Output 2.2: Restoration of forests and pasture lands, and rehabilitation of multiple use forestlands through 		 In summer 2020 it is planned to install 5 signboards throughout the area with description of indicator bird species. These sites eventually could grow as potential birdwatching sites and promote eco-tourism development 	
community forest resource management • Output 2.3:	Population changes of five indicator butterfly species stable and/or do not decrease	 Population of 4 indicator butterfly species during the project's lifetime remained stable, based on continuous field observations and monitoring by using the amended average number of individuals per 1km transect for the 4 butterfly species (Argynnis paphia, 	

Expected Results	Project Targets	Results	5TE Assess.
Alternative livelihood programs for local		Brintesia circe, Coenonympha arcania and Leptidea sinapis).	
communities as incentive to conserve forests and biological resources • Output 2.4: Integrated strategy for management of firewood collection and distribution from forests • Output 2.5: Carbon stock assessments and coefficients for key forest types in NE Armenia	4,932 ha of degraded forests regenerated through assisted natural regeneration	 5,682 ha of degraded forests were restored through assisted natural regeneration: 4,812 ha under 7 FEs of "Hayantar" SNCO and 120 ha in the area of Dilijan national park. Restoration of 508 ha area was performed by public NGO, 120 ha by Dilijan NP staff and 4,304 ha by "Hayantar" SNCO through trained local communities' members. 743 ha were restored through the coppicing improvement; 1,819 ha through mineralization in 1X1m platforms; and 2,370 ha through mineralization and sowing of oak and beech seeds in 1X1m platforms. 2,088 ha of degraded forest ecosystems were restored in Lori marz (Vanadzor (Gugarq +Yeghegnut FEs), Jiliza and Lalvar FEs) and 2,844 ha in Tavush marz (Ijevan, Noyemberyan, Sevqar, Artsvaber FEs and Dilijan national park). 	
	1,000 ha of degraded pasture and hay fields rehabilitated under sustainable management practices to reduce pressure on forest lands	 1,000 ha of degraded pasture and hay fields have been rehabilitated and are under sustainable management practices to reduce pressure on forest lands (458 ha in Lori and 542 ha in Tavush marzes) 8 communities participated in rehabilitation activities and trainings: 4 communities from Lori (Gugarq, Margahovit, Vahagni and Mets Parni) and 4 communities from Tavush (Yenoqavan, Lusadzor, Koghb and Berd consolidated community). 767 ha were restored by the project's direct technical and financial assistance and 233 ha were rehabilitated by communities 490 ha were cultivated for livestock fodder production with perennial crops (alfa-alfa, clover and mixed herbs); 170 ha were mechanically treated and sowed by perennial grass and herbs mixtures; on 290 ha only mechanical treatment was applied to improve soil aeration conditions and 50 ha were treated for mechanical removal of poisonous weed, named Veratrum Lobellianum. 	
	3,000 ha of forest land under multiple use regimes (sustainable NTFP production and agro-forestry) with participation of forest dependent communities	 3,000 ha of forest land were identified, mapped and recorded in FMPs of 6 forest enterprises of Tavush marz (Ijevan and Noyemberyan) and Lori marz (Vanadzor, Tashir, Stepanavan and Jiliza) for multiple use regimes (sustainable NTFP production and agroforestry) with participation of forest dependent communities. New generation FMPs contain large-scale maps along with detailed tables of forest fruits, berries, mushrooms, edible and medicinal herbs, etc. 	
	15% decrease in number of livestock using natural forests for unsustainable grazing practices in targeted forest branches	 According to some monitoring data, a 15-20 % decrease in the number of livestock using natural forests for unsustainable grazing practices in 6 forest enterprises of Lori and Tavush regions has been observed. 	
	15% reduction in forest firewood	• Registered a 25-30% reduction in forest firewood collection areas in 6 forest enterprises of Tavush	

Expected Results	Project Targets	Results	5TE Assess.
	collection areas in targeted forest branches Reduced areas of felling in target state forests	 (Ijevan, Noyemberyan) and Lori marzes (Vanadzor, Tashir, Stepanavan and Jiliza). Sixty (60) households in Vahagni community of Lori marz which were provided with energy efficient ovens reported a 25-30% firewood savings; which should save about 1,840m3 of firewood over the life of these stoves, the equivalent to 12.52 ha of saved forests. These results are compatible with previous results from 238 households in the Tavush region The implementation of these initiatives: solar panels and solar water heaters; passive solar greenhouse; EE ovens and briquetting facility should result in about 30,000m3 of reduced firewood collection or save 203.6 ha of forest and avoid 22,657 tons of CO2 	
	One set of recommendations for management of dependencies in firewood use from forests developed by Ministry of Agriculture	Ongoing development of a "Strategy for management of firewood collection and distribution of firewood from the forests" and also collaboration with MOE on the development of a "Biofuel market in the Republic of Armenia". These two studies will provide recommendations on how to manage dependencies on firewood use from forests, and how to develop biofuel market and a gradual transformation of rural firewood consumption.	
		 Collaboration with GIZ-Armenia to increase energy efficiencies for heating and cooking in rural areas. Tested energy efficient solutions such as solar energy and solar water heaters, passive solar green house, EE ovens as well as energy alternatives to firewood such as a briquette. 	
	20% households (at least 1/3 women) reporting increased incomes from forest and non-forest resources in target	15-20 % of households report increased incomes from forest and non-forest resources in targeted communities (30% are women) Covering 386 ha of vineyards and orchards with hailnets resulted in 541 tons of extra yield; an average 20% increase in income.	
	communities, including percentage of beneficiaries among women	 Produced raspberry seedlings in COAF Smart center nursery (2.38 ha) and shared them with 80 farmers in surrounding villages, expecting an estimated 15-20% of income increase for each household over the next 2-3 years. 	
		Very successful cases of local income increase with a forest recreation and amusement tope park in Stepanavan, and with micro-grant programs in Haghartsin-Teghut villages of Dilijan with an estimated increase of at least 25-30% for each local household.	
		 Interventions such as hail-nets, solar panels and water heaters, rope park, back-yard raspberry cultivation, passive solar greenhouse and Mets Parni briquetting facility should generate about 659.2M AMD (\$US 1.36M) of income over their warranty life and savings estimated at 71.7M AMD (\$US 150,000). 	
		 The number of direct beneficiaries totals 2,500 and indirect beneficiaries – 1,247 persons. 771 local staff, farmers, livestock breeders, etc. participated in trainings and/or consultation meetings 53 permanent and seasonal jobs were created as a result of above-mentioned project interventions 	
	One set of carbon stock assessment completed for key	1 set of carbon stock baseline assessment completed for key forest types in north-eastern Armenia. "Forest carbon stock measurements guidelines for	

Expected Results	Project Targets	Results	5TE Assess.
	forest types in NE Armenia	measuring carbon stocks in the north eastern forests of Armenia" developed, tested in Noyemberyan FE and applied to project target forest area of 250,000 ha managed by all FEs (9) in Lori and Tavush regions as well as in Dilijan NP. These guidelines were officially accepted by MOE as reference document for forest carbon inventory and monitoring activities.	
		 The forest carbon inventory and monitoring outcomes were used in the recently published "4th National communication on climate change" under UNFCCC for Armenia. 	
	559,110 metric tCO2 avoided from conservation set- asides over a10- year period	 510,161 metric tCO2 of avoided carbon emissions over a ten-year period were estimated for four (4) forest enterprises (Ijevan, Noyemberyan, Vanadzor and Stepanavan) according to the updated FMPs and the acting MP of Dilijan National Park. 	
		 Estimation of avoided carbon emissions for Tashir and Jiliza forest enterprises will be completed by the end of the project. 	
	122,880 metric tCO2 improvement in carbon sequestration capacity of restored forests over a 10- year period	• 122,880 metric tCO2 sequestration capacity of restored forests over a 10-year period resulting from completed restoration of 5,682 ha of degraded forest ecosystems in 6 FEs of Lori and Tavush marzes through coppicing improvement, mineralization in 1X1m platforms and mineralization + sowed beech and oak seeds in 1X1m platforms.	

Source: Adapted from project progress reports and information collected through interviews

- 117. The review of project achievements indicates that the project has delivered most of its end-of-project targets, with only minor shortcomings. The project was able to achieve what it was intended to achieve. As discussed in Section 4.2.1 the project used adaptive management extensively to provide flexibility in the project's approach working with partners and related government institutions and adapting to changing conditions. Flexibility and adaptation were particularly critical for this project. As discussed in section 4.2.1, the project had to adapt to several government reorganizations with four different Chairs of the PB, the "Velvet Revolution" in 2018 with internal politics issues, and the on-going Nagorno-Karabakh conflict which started in September 2020. As discussed in other parts of this report, the project is a clear response to national needs and, with a good engagement/participation of stakeholders in project activities, the project enjoyed a good national ownership.
- 118. With two expected outcomes, the project delivered two sets of results. Under outcome 1 the project focused on improving the enabling environment for SFM and SLM in North Eastern Armenia. The project supported activities to improve the forest management planning function in the Lori and Tavush regions; so far, it has supported the development of 6 FMPs for 6 Forest Enterprises. It supported forest inventories and maps done for 3 Forest Enterprises. It proposed amendments to the Forest Code, which are currently being reviewed by Parliament. It developed protocols for FMPs, which include biodiversity, ecosystem services and forest carbon and which were the object of an amendment to an existing Ministry of Agriculture Decree.
- 119. Under outcome 2, the project focused on investments in demonstrating sustainable forest and land management practices with the aim of reducing pressure on forests and pastures while maintaining the flow of ecosystem services. The project supported the development of guidelines to measure the forest carbon stock, which were officially accepted by MOE. It invested in the rehabilitation of almost 5,700 ha of degraded forests and about 1,000 ha of degraded pastures. The project supported the delineation of 77,532 ha of forest as HCVF, in which biodiversity and carbon sequestration will be emphasized. Finally, the project invested in community-based small-scale initiatives surrounding these forests with the objective of improving the livelihoods of these communities while at the same time decreasing the need of forest products, particularly firewood and by extension to decrease the rate of deforestation. It includes the introduction of energy-efficient stoves; the production of briquettes made of biomass, solar power, and solar water heaters, etc.

120. As part of implementing activities under outcome 2, the Evaluator also noted that the project has procured tangible assets. It includes anti-hail nets; technological devices: 2 GoPro cameras, 1 camera, 24 GPS receivers, 20 portable radios and 1 handheld data collector (Trimble TDC100); 1 drone, 1 Lintab (tree ring measuring device), 1 briquetting system, 3 tractors, 1 baler, 1 mower, 1 forklift, 1 plow 5 case, 1 cultivator, 1 chipper grinder, 1 crusher for paper and straw, and 8 computer units. These assets were used in the various demonstration activities supported by the project.

Delivery of Forest Management Plan (FMPs)

- 121. One key expected result not met by the project is the delivery of "11 sets of forest inventory and maps in support of sustainable forest management for FE branches" (target of indicator #5). The actual delivery is 6 FMPs. The fact that the project did not deliver the 11 FMPs as planned is the key fact justifying the TE assessment rating for indicators #1 (in Table 11) and #5 (in Table 10) as "Not on target to be achieved" and colored in red. It is also the main argument considered when rating the effectiveness of the project. In Table 2 in Section 1, effectiveness of the project is rated as Moderately Satisfactory (MS).
- 122. However, the review of the delivery of FMPs by the Evaluator revealed that when considering the process of supporting the development of these FMPs and the disruptive changes and events that happened during the implementation period (4 changes of PB Chairs, the "Velvet Revolution" in 2018 and more recently, the on-going Nagorno-Karabakh conflict), the overall effectiveness of the project has certainly been satisfactory.
- 123. The support to FMPs has been a "tortuous" process since day one of this project. Originally, the plan/understanding was that GIZ and its forest initiative in North Eastern Armenia was to fund and support the process to develop an FMP in one FE (Sevqar); then, based on this experience, to develop a FMP model, which was to be used/replicated by this UNDP-GEF project. This project would also have added three protocols to the model encompassing (1) biodiversity, (2) ecosystem services and (3) carbon to make the final model a SFM model. For various reason, GIZ stopped its forestry initiative and this plan did not materialize; hence this project was left with limited guidance as to how to proceed and also with a larger task to basically start supporting the development of FMPs from scratch, i.e. instead of only supporting the 3 protocols to be added-on existing set of FMPs and make them more sustainable.
- 124. At this point, the project was finally asked by MOE to proceed with the drafting of these 3 protocols and the development of FMPs, including the instructions from the 3 protocols, starting with 2 FEs (Ijevan & Noyemberyan in Tavush marz). Then, the project supported the development of 4 other FMPs to finally support a total of 6 FMPs which are now all drafted and are at different stage of approval. This total of 6 FMPs is against a planned total of 11 FMPs. However, the Gugarq and Yeghegnut FEs merged into the Vanadzor FE in November 2019 and later in 2020 the Lalvar and Dzegh FEs merged into the Toumanyan FE; bringing the planned total number of FMPs to deliver from 11 to 9. The Sevqar FE was supposed to be supported by GIZ. Its FMP is now underway with government funding and limited input from this project. Regarding the last two FMPs for the Toumanyan and Artsvaberd FEs, the project started the development of these plans in 2018 but it was stopped after a few months of development. At this time, discussions with MOE were held to reallocate the financial resources for these two FMPs to cadastral mapping. However, after piloting a small cadastral mapping project on 500 ha, it was concluded that it required too many resources to complete cadastral mapping of all forests for these 2 FEs. At this point in mid-2019, due to timing issue, the decision was made to reallocate a second time the remaining financial resources to restore 750 ha of degraded forests in Lori and Tavush regions.
- 125. The assessment conducted for this TE identified three critical success factors that partly explain this effectiveness: (i) the project was well designed, responding to national needs and benefitting from a good engagement and participation of stakeholders. It was developed on the basis of previous related initiatives benefiting from past experiences and lessons learned and also of a good government support/interest; (ii) a good leadership from MOE as Chair of the PB to guide and supervise the implementation of the project; and (iii) a good flexibility (using adaptive management) in allocating project resources and implementing activities to be able to respond to stakeholders needs, changes and external shocks such as the "Velvet Revolution" in 2018 and more recently, the on-going Nagorno-Karabakh conflict.

126. As a result of activities implemented with the support of the project, Armenia is now better equipped to sustainably manage its forests and pastures in North Eastern Armenia. With the introduction of the HCVF concept, it has now a better instrument to value its forests. Demonstrations were a chance to test different practices and approaches to better manage and rehabilitate forests and pastures while also improving the livelihood of communities surrounding these natural resources and by extension reducing the demand of firewood and decreasing the pressure on forests. Finally, through capacity development activities, skills and knowledge were transferred to staff involved in the management of forests and pastures including natural resource users.

4.3.2. Attainment of Project Objective / Impact

127. The review of project achievements presented in the previous section 4.3.1 reveals that the effectiveness of the project has been Moderately Satisfactory. The project has produced a good set of deliverables but, as described in other section above, the project also faced critical changes and events that affected its delivery and consequentially its effectiveness in reaching its expected results. Nevertheless, good progress was made, and several instruments are now in place/institutionalized to carry on with an enabling environment to practice SFM and SLM. It is anticipated that some activities, particularly planning activities, should continue after the end of the project with an uptake potential in other parts of Armenia. The table below presents key results of this project against the objective and its targets.

	Table 11: List of Achiev	vements vs. Objective and Targets
Expected Result	Project Target	Results
Project Objective: Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services.	11 forest management plans integrating considerations of biodiversity, ecosystem services, climate mitigation and community resource use 5 Community development plans updated	 Six (6) FMPs are being completed with integrated biodiversity, ecosystem services, climate mitigation and community resource use for Ijevan, Noyemberyan (Tavush marz) and Vanadzor, Tashir, Jiliza and Stepanavan (Lori marz) FEs Final amendment of 3 FMPs (Ijevan, Noyemberyan and Vanadzor) were completed including the development of a new FMP after the merger of Gugarq and Yeghegnut FEs now named Vanadzor FE. Currently going through environmental impact assessment, before final approval from MOE. Drafting FMPs for additional 3 FEs in Lori marz (Tashir, Stepanavan and Jiliza) is on-going and should be completed by the end of the project. Drafting of Sevqar FE (Tavush marz) FMP is on-going with support of the Government of Armenia but with limited input from the project beside methodologies. 9 community development plans in Lori and Tavush marzes updated to effectively manage their degraded forest and forest-adjacent pasture-lands and revived horticulture-based fodder production: Voskepar village of Noyemberyan consolidated community, Lusadzor, Yenoqavan and Berd consolidated community (Tavush) and Ardvi village of Odzun consolidated community (Tavush) and Ardvi village of Odzun consolidated community, Mets Parni, Gugarq, Margahovit and Vahagni (Lori). Voskepar village of Noyemberyan consolidated community benefits from the production unit for drying, storage, processing and packaging forest fruits, berries, mushrooms and herbs. Almost all inhabitants of Ardvi village of Odzun consolidated community (Lori marz) benefit from the passive solar greenhouse. Purchase and installed a briquetting facility (capacity of 400kg/h) with relevant agricultural machinery in cooperation with the "Mets Parni community" climate public revolving fund. More than 700 tons of briquettes were produced so far, the equivalent to 2,100 m³ of firewood or 15 ha of saved forests. 160 ha of previously non-cultivated lands are now

Expected Result	Project Target	Results
	681,990 metric tCO2 avoided and/or sequestrated	 Estimated 681,990 metric tCO2 avoided and sequestrated carbon benefits over ten-year period due to improved SFM according to final draft FMPs for 6 forest enterprise in Lori and Tavush marzes and MP for the Dilijan National park. 77,532 ha of HCVF (drafting of Tashir and Jiliza FEs FMPs are in progress) have been identified in 5 FEs, including revised boundaries of specially protected areas and newly identified HCVF areas. The sustainable management practices are now being implemented. Restored 5,682 ha (2,088 ha in Lori and 2,844 ha in Tavush marzes) of degraded forest ecosystems in 8 FEs, based on updated forest management principles and in both project target FEs as well as non-project FEs (Lalvar, Sevqar and Artsvaberd). 743 ha were restored through coppicing 1,819 ha through mineralization on 1X1m platforms 2,370 ha through mineralization and sowing of local valuable forest species seeds - beech and oak.
	250,000 ha of forest managed for multiple sustainable forest management and ecosystem benefits	 153,150 ha of forest (64.3% of all forest cover of project target area, including protected nature areas) is managed for multiple forest management and ecosystem benefits. A new generation of FMPs covering 85,781 ha in Ijevan, Noyemberyan and Vanadzor FEs have been drafted, amended, agreed and now is passing through environmental impact assessment stage before the final approval by MOE. 33,765 ha of forest including the Dilijan national park with Yew grove sanctuary have updated land-use and forest types classifications analyses with recommendations for sustainable management of natural resources. Submitted the amended and agreed drafts for 3 FEs: Noyemberyan, Ijevan and Vanadzor covering a total area of 85,781 ha (36% of total forest area of Lori and Tavush marzes, including areas of specially protected areas).

Source: Adapted from project progress reports and information collected through interviews

128. When comparing key results with the objective and its related targets, the project certainly contributed "to secure sustainable land and forest management in the Northeastern Armenia with continued flow of ecosystem services". Based on the results achieved, the project will have a long-term positive impact on strengthening SFM and SLM. It strengthened the enabling environment to sustainably plan, monitor and manage forests and pastures, it invested in testing and demonstrating sustainable practices to rehabilitate degraded forests and pastures, and it invested in community-based small-scale innovative solutions to improve the livelihoods of surrounding communities while at the same time decreasing the need of forest products, particularly firewood and by extension to decrease the rate of deforestation. MOE, Hayantar SNCO and its Forest Enterprises are now better equipped with instruments, methods, protocols and guidelines as well as lessons learned from testing and demonstrating innovative solutions, while local communities still enjoy ecosystem services provided by their surrounding environment.

129. Regarding the TE assessment in the table 11 above, the rating "Not to be achieved" is mostly due to the fact that the project supported the development of 6 FMPs instead of a target of 11 as planned in the project document. As discussed in the previous section, the development of these FMPs has been a "tortuous" process (see section 4.3.1 above under Delivery of FMPs). Nevertheless, the project was successful in supporting the delivery of 6 FMPs and in parallel to improve the governmental instructions to develop these FMPs with the introduction of 3 additional protocols covering the need to plan for biodiversity conservation, sustainable use of ecosystem services and carbon avoidance and sequestration.

GEF-5 Tracking Tools

130. The Evaluator also reviewed the GEF tracking tools for this project, which include the Land Degradation Portfolio Monitoring and Assessment Tool (LD-PMAT), the Climate Change Mitigation Tracking Tool, the

Sustainable Forest Management (SFM) REDD Tracking Tool, and the Biodiversity Tracking Tool. Tracking tools are instruments developed by the GEF Secretariat to measure progress in achieving the impacts and outcomes established at the portfolio (global) level under GEF-5 cycle. The information contained in these tracking tools is collated together at the global level to provide a global summary on the progress made in each GEF focal area.

- 131. The PMAT is a tool to capture important data on land degradation in areas targeted by GEF-funded projects. It was used by the formulation team to collect key datasets on land degradation in areas planned to be covered by this project. The tool was completed during the formulation of the project, at the mid-term point and at the time of this terminal evaluation. The Evaluator noted that the tool has provided some dataset to the M&E framework to measure the performance of the project. It includes the indicator #15 "Number of hectares of degraded forests regenerated through assisted natural regeneration" with the target of 4,932ha which was met by the project. Overall, the key differences in this tool between the data at the outset of the project and now include: number of ha under integrated landscape management; the target was 253,500ha and the project reported at the time of this TE that only 153,150 were under integrated landscape management; number of ha with improved forest management, same here with the same coverage of 153,150ha. Both mostly due to the fact that all anticipated FMPs are not completed yet, only 6 FMPs are completed (out of 9 planned). Another difference is the extend of land degradation with the project boundary. 1,000ha of rangeland was identified at the outset of the project as degraded; this number is now 5,000ha. The same is true for pastoral land with an actual number of 1,000ha of degraded pastoral land versus 350ha at the outset.
- 132. Regarding the Climate Change Mitigation (CCM) Tracking Tool, the project team completed the section "Objective 5: LULUCF" at the mid-term point and at the time of the TE. It reported factual numbers including the total area of avoided deforestation and forest degradation, area of reforestation and the lifetime11 direct GHG emission avoided as well as the lifetime direct carbon sequestration.
- 133. The Sustainable Forest Management (SFM) REDD Tracking Tool was also completed at the 3 time intervals. The main datasets entered in this tracking tool are datasets on project outcomes, both planned targets and current situation. One of the key datasets in this tool is the change of "National Carbon Stock Monitoring Systems in place (area covered)." From a rate of 2 (in design stage) at the outset of the project, it is now rated as 5 (implementation of science based inventory/monitoring system. The area covered went from 0ha to 250,000ha.
- 134. Finally, the Biodiversity Tracking Tool was also completed at the 3 time intervals. Data was entered under landscape coverage (ha) where project interventions will directly or indirectly contribute to biodiversity conservation or sustainable use. It was also updated under the section *Management Practices Applied*. This information is also reported in the PIRs.

Remaining barriers to achieve the project objective

- 135. The rationale of this project was based on addressing four key barriers, which have impeded the emergence of the long term solution that is to reform the forestry sector with policy reforms, development of supply and demand solutions and institutional strengthening. These four key barriers identified at the outset of this project were: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources.
- 136. Despite that it is difficult to measure the contribution of the project in removing these barriers, the assessment conducted for this terminal evaluation confirms that project activities contributed to the partial removal of these barriers. As discussed above and in the previous section 4.3.1, the project supported the strengthening of the forest management planning. It was able to complete 6 FMPs which are now in various degrees of being approved. It also supported the drafting of guidelines and protocols, which are (or are being) adopted by the relevant ministries. These activities and their related achievements are a contribution to the first barriers. Regarding the barrier related to the limited experience in developing and implementing SFM practices, the project has certainly contributed to the removal of this barrier. Under outcome 2, the project has

¹¹ Lifetime is understood in the CCM as lifetime of the project which was 5 years.

supported numerous demonstrations such as community-based small scale innovative solutions seeking to reduce pressure on forests. The project also demonstrated the rehabilitation of degraded forests and pastures using innovative techniques such as coppicing, assisted natural regeneration and mineralization. Finally, regarding the third barrier, by supporting these community-based small-scale solutions, the project supported the demonstration of small businesses which can improve the livelihoods of these communities while at the same time decreasing the need of forest products, particularly the need for firewood. It is the case with the demonstration of briquettes production made of biomass, introduction of energy efficient woodstoves and installation of solar power and heater units.

137. Overall, the project has contributed to diminish the impediment of these barriers to the implementation of the long term solution and more is expected with the follow up to these demonstration through replication and/or scale up. However, the review conducted for this evaluation also reveals that the fourth barrier - lack of financial resources - may be more challenging to be addressed. It is recognized that the forestry sector is a sector with limited government investments and also with a limited knowledge about the value of these forests. The project should contribute to increasing the knowledge on the value of these forests, which should be translated in a greater interest from the government; however, it is not anticipated that the financial resources allocated to this sector will change drastically in the coming years.

4.3.3. Relevance

- 138. As discussed in section 4.1.3 and 4.1.4, the project has been highly relevant for Armenia. Its timing was good. The project was designed to address issues of deforestation and overexploitation of natural resources in the Tavush and Lori marzes, which have been growing since the early 90's. Despite that more recently, the rate of deforestation has decreased, it is still estimated that around 630,000 m³ of timber is still illegally logged annually in Armenia and that households are the largest consumer of domestic forest products.
- 139. The long-term solution is to reform the forestry sector with policy reforms, development of supply and demand solutions and institutional strengthening. However, underlying all these measures, there are critical social issues, which would need to be addressed before any of these measures could have any impact on deforestation. Behind the use of household fuelwood are critical factors to be considered: (i) low welfare levels, ii) lack of attractive alternatives; iii) widespread availability; and iv) access.
- 140. In the meantime, reforming the sector to reduce pressures on forests and to secure conservation and enhance carbon stocks mean the needs to shift from the current unsustainable practices to integrated sustainable land and forest management practices. However, the effort to shift from unsustainable practices to sustainable practices has faced four key barriers: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources.
- 141. This project is part of initiatives funded by the government and other development partners to address these barriers. At the outset of the project, the government committed to invest in excess of USD 20M in Natural Resource Management (NRM) in North Eastern Armenia over the project period. All related government entities such as MOE, Hayantar SNCO and their Forest Enterprises, Forest State Monitoring Center have been committed to address the need to reform the sector. Additionally, the design of the project was "grounded" in the extended experience of UNDP in implementing similar projects and also in other experiences such as the GIZ funded initiatives and WWF in the forestry sector in Armenia.
- 142. The project is also well aligned with UNDP priorities in Armenia. As discussed in Section 4.1.7, the CPAP strategy, which is also well aligned with the UNDAF for the period 2016-2020, set 14 expected outputs, including 5 of them under the UNDAF expected outcome focusing on environmental sustainability and resilience building. Despite that it was noted that "forest" was not mentioned in the CPAP strategy, the project is well aligned with most of these five expected outputs such as update of regulatory framework, use of innovative mechanisms and tools for conserving and use natural resources sustainably and introduction of new production and consumption patterns.

- 143. Regarding the relevance of the project against GEF priorities, it was noted that it was designed within the context of the GEF-5 strategic priorities, resulting in a project objective that is directly in line with the GEF-5 strategic objectives for land degradation, biodiversity, climate change and sustainable forest management. In particular, the project is well aligned with the biodiversity objective BD-2: Mainstream biodiversity conservation and sustainable use into production landscapes seascapes and sectors. It is well aligned with the land degradation objectives LD-2: Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependent people; and LD-3: Reduce pressures on natural resources by managing competing land uses in broader landscapes. Finally, it is also aligned with the climate change objective CCM-5: Promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry and SFM/REDD+1: Forest Ecosystem Services: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services.
- 144. In conclusion, the project is highly relevant for Armenia. It has also benefited from a good engagement of stakeholders, which was translated into good partnerships with numerous organizations in Armenia bringing skills, knowledge and ultimately value in the implementation of specific activities funded by the project. It enjoyed excellent collaborations with these partners, particularly in Lori and Tavush regions, and it contributed to a good national ownership of the project, which, in turn, will certainly contribute to the long-term sustainability of project achievements.

4.3.4. Efficiency

- 145. As discussed in some sections above, the project has been efficiently implemented it is rated *Satisfactory*. The review of the management and partnership arrangements revealed that the project enjoyed a good collaboration with all key stakeholders with a good participative approach through the PB and the Advisory Board, as well as constant informal communications among partners. The project implementation team allocated project resources prudently.
- 146. Furthermore, as discussed in section 4.2.1, the review revealed that the project management team used adaptive management to secure project deliverables while maintaining adherence to the overall project design. Adaptive management have been used regularly to adapt to a constantly changing environment; particularly to adapt to several key changes/events including working with four different PB Chairs, implementing activities through the "Velvet Revolution" in 2018 and its political implications and more recently, the ongoing Nagorno-Karabakh conflict. Through this type of adaptation, the project implementation team certainly demonstrated its ability to adapt to changing environment.
- 147. The efficiency of the project was also the result of a well-managed day-to-day activities. Using a participative approach and a good transparent communication approach, project activities were implemented with a good engagement of stakeholders and clear management procedures. The good relationship between UNDP, the implementation team and stakeholders also contributed to an efficient implementation. It resulted in good synergies among the project implementation team and staff from key organizations such as MOE, State Forest Committee, Hayantar SNCO, Forest Enterprises, and Forest State Monitoring Centre.
- 148. Finally, external expertise and contractors were hired as needed to ensure the implementation of activities. An emphasis was on hiring national experts and contractors and, when needed, additional expertise had been sourced internationally. This approach allowed Armenia as a country to develop a greater technical expertise in-country. It was the case for undertaking a carbon assessment, including the development of "Forest Carbon Stock Measurements Guidelines for Measuring Carbon Stocks in the North Eastern Forests of Armenia." This initiative was contracted to an international expert who, through the assignment, was able to develop some local capacity in this area. It was also a similar case for conducting a forest inventory in the project area. An expert was recruited through the "Russian Expert on Demand" modality. In this particular case, it was also noted that the cost of the expert was funded by the modality at no cost to the project.
- 149. Despite the fact that it is always difficult to analyze the cost-benefit of such projects, the review of all management elements of the project confirm that the implementation of the project was an efficient operation that created a good value for money. The prudent approach to engage project funds was translated into good value for money and the use of adaptive management allowed for the identification and implementation of activities that were very responsive to immediate needs of stakeholders, and the need to achieve the expected

results.

4.3.5. Country Ownership

- 150. The country ownership has been good. The project has addressed key national needs to improve the management of forest in the North Eastern region of Armenia. It was designed on the basis of a good contextual review and it was a response to several barriers, which have hampered an effective reform of the forestry sector. It has been implemented through a good participative approach engaging stakeholders all the way from the design of project activities to their implementation. As discussed in section 4.2.2, the implementation team was able to engage all key stakeholders. The project partnered with numerous organizations including government entities but also academia, NGOs, public organizations and private sector. Each initiative was implemented with the "right" partner(s) bringing the needed skills and knowledge to the process.
- 151. As discussed in other sections of this report, the PB with its members provided a good leadership to guide the implementation of the project. The Advisory Board, composed of a broad representation of stakeholders involved in forest management, including government representatives, development partners, NGOs and academia, provided a good platform for key stakeholders to meet, debate, adjust and decide the way forward on technical aspects of the implementation. It is worth mentioning that this good participation of stakeholders has been critical but also a positive sign of good ownership when the project was faced with disruptive changes/events which occurred during the implementation of this project. Despite the fact that the Chair of the PB changed 4 times over the lifetime of the project, the occurrence of the "Velvet Revolution" in 2018 and its political implications and more recently, the on-going Nagorno-Karabakh conflict, the implementation team with its partners were able to carry on with the implementation of project activities. In itself, it is a testament of a good country ownership.
- 152. It is expected that this good country ownership will contribute to the long-term sustainability of project achievements. Some achievements are already mainstreamed into the management systems and instruments used by government entities such as Hayantar SNCO and its Forest Enterprises; they should be sustained over the long-term. Based on the review conducted for this terminal evaluation, "building blocks" developed with the support of the project to strengthen the FMPs should be sustained over the long term. It is a key element to improve the management of forests in Armenia; it should be sustained, and chances are that it should be scale up in other parts of the country. No reform of the forestry sector can be done without proper management planning. The project has contributed to strengthening the forest management plans in the North Eastern region of Armenia; it is a critical step in the right direction.

4.3.6. Mainstreaming

- 153. The review of project achievements indicates that some of them are already institutionalized and mainstreamed within appropriate entities. It is the case for the set of forest inventories and maps done for 3 Forest Enterprises, which are now being reviewed by the Ministry of Environment as custodian of these outputs. The same is true for the amendments to the Forest Code. These amendments are now going through the Parliamentary process to be reviewed and ultimately to be approved. The support to elaborate protocols for FMPs, which include biodiversity, ecosystem services and forest carbon were the object of an amendment to an existing Ministry of Agriculture Decree. Under outcome 2, the project supported the development of guidelines to measure the forest carbon stock, which were officially accepted by MOE. All these initiatives are now part of the governmental instruments available to entities managing forests. There are mainstreamed in the "machinery" in place to manage forests in Armenia, which will contribute to their long-term sustainability.
- 154. Regarding the activities implemented in the field i.e. in Lori and Tavush regions in North Eastern Armenia the rehabilitation of degraded pastures and forests are there to stay. 1,000 ha of degraded pastures were rehabilitated and now managed with sustainable practices. The same is true for almost 5,000 ha of degraded forests. Additionally, the project supported the delineation of HCVF covering a total area of 77,532 ha. These high conservation value forests are now recognized and should be the object of being managed effectively focusing on biodiversity conservation and carbon sequestration. All the activities were conducted with local actors. In most cases the Forest Enterprises are the custodian of these forests; hence are becoming the custodian of project achievements. At this point, good steps forward to improve the management of forests

have been accomplished; the challenges are to sustain these changes over the long-term.

155. Overall, the project - as a direct response to national priorities with limited time and resources - was to improve the enabling environment to better manage forests and pastures in North Eastern Armenia and to invest in innovative demonstrations on how to improve the sustainable management of these forests and pastures. Together, all interventions supported by the project have contributed and were mainstreamed in improving the management of these ecosystems. They also set the foundations for a more sustainable approach to manage forest and pastures in North Eastern Armenia and ultimately to address the issue of deforestation in this region.

4.3.7. Sustainability

- 156. The sustainability strategy described in the project document for project achievements was based on recognizing a set of building blocks, which would act as incentives to sustain the project achievements. It included (i) the existence of a policy and institutional framework for mainstreaming biodiversity and integrating natural resource management into land use planning; (ii) a strong commitment from government to address the forest and land degradation issues in North-eastern Armenia, as this is where two-thirds of the forests of the country are found and the source of many rivers; and (iii) the project has financial sustainability written into it, through the review and realignment of public expenditure and the brokering of additional public and private funding towards natural resource management. It also stated that the lack of recognition of the values of natural resources and the ecosystem values it provides and the application of this recognition in the land use allocation was what the project was designed to address.
- 157. In the meantime, as discussed in the previous sections 4.3.5 and 4.3.6, project achievements are mostly "owned" by the relevant entities involved in managing forests and key achievements were already institutionalized and became part of the "official" instruments to manage forests and pastures in Armenia. By extension, project results should be sustained over the long-term. Hayantar SNCO and its Forest Enterprises, and the Forest State Monitoring Centre are now equipped with improved FMPs but also with guidelines and protocols to sustain the new approach over the long-term. The review indicates that key achievements of the project should be sustained over the long-term.
- 158. Below is a discussion on potential environmental, institutional, financial, and social risks to sustainability and the related assumptions made.

Socio-economic risk to Sustainability

159. The review identified no expected issues that would result in negative social impacts; there is no socio-economic risk to sustainability. In the worst-case scenario, if the project has a very limited impact, it should not have any negative impact other than the "business as usual" scenario would continue and the barriers preventing the improvement of coordination and cooperation in the region would remain. Nevertheless, the project has made some progress. It delivered a series of guidelines; it developed FMPs for forest enterprises in the Lori and Tavush regions plans; through innovative practices it rehabilitated some degraded pastures and forests; and invested in small-scale initiatives with communities surrounding these forests seeking to decrease the deforestation rate. The more successful all these activities will be the more positive socio-economic impact the project will have in the Lori and Tavush regions.

Environmental risk to Sustainability

160. The review did not find any environmental risks to the sustainability of project outcomes. The project has supported the strengthening of the enabling environment in North Eastern Armenia to better manage forests and pastures, including the planning process through FMPs. Ultimately, the achievements of the project that is "sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services" should have a medium and long-term positive environmental impact over natural resources in the target areas. The strengthening of FMPs, the development of capacities of the "forest managers", the development of protocols and guidelines, the demonstrations to rehabilitate degraded forests and pastures, the protection of HCVFs as well as the small-scale innovative solutions to reduce pressure on forest while contribution to improving the livelihoods of local communities, should render the management of these ecosystems more sustainable over the long-term.

Institutional framework and governance risk to Sustainability

161. On the contrary to the other risks above, there is a moderate institutional framework and governance risk to sustainability. As discussed earlier in Chapter 4.1, the project is a direct response to address four key barriers: (i) inadequate planning, regulatory and institutional framework for Integrated Forest and Land Resource Management; (ii) minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground; (iii) lack of incentives and benefits to local communities to participate in forest management and conservation; and (iv) lack of financial resources. The main focus of the project has been on strengthening the enabling environment conducive to SFM and SLM. It is also focusing on demonstrating practices to reduce pressure on forests and pastures while maintaining the flow of ecosystem services. The project has achieved most of its targets, which include strengthened FMPs, capacities developed, protocols and guidelines, demonstrated rehabilitated pastures and forests and innovative community-based solutions to reduce pressure on forests. Most of these achievements have been institutionalized, it is anticipated that the government will continue in the same direction in the foreseeable future building on the results achieved with the support of the project. However, part of the effort to shift from unsustainable practices to sustainable practices necessitates reforming the institutional framework and governance of the forestry sector. The project has contributed to reforming the sector but, in the meantime, reforming this sector in Armenia is a complex affair with risks. This risk area to sustainability is rated as Moderately Likely.

Financial risk to Sustainability

162. When reviewing the sustainability of project achievements – particularly the demonstrations - financial risk is the main area where the sustainability of some project achievements can be questioned. The project invested in some demonstrations – including demonstrations to rehabilitate degraded pastures and forests using innovative practices and financial support to innovative community-based solutions to reduce pressure on forests, however a key question is: What about after the project end and the project resources will be no longer available? Despite the fact that the project document states that the project is not expected to impose long-term burdens on the national or marz budgets and that the aim of the project is to improve the effectiveness of existing budgetary allocations for the forestry sector at the forest enterprise level and not to expand public deficits, the review for this TE indicates that the governmental financial resources allocated to the forestry sector are limited and that to fully sustain and scale up the project achievements, additional financial resources are needed. The project has contributed to demonstrate the value of forests as a public good. It is hoped that the demonstrations will result in an increase of public investments into a sustainable forestry sector. This risk area to sustainability is rated as *Moderately Likely*.

4.3.8. Catalytic Role

163. The GEF defines the catalytic role of projects as one of the ten operational principles for the development and implementation of the GEF work program. The GEF funds projects in such a way that they attract additional resources, pursue strategies that have a greater result than the project itself, and/or accelerate a process of development or change. It recognizes that its support is catalytic in nature: "it does not achieve impact on its own but rather in collaboration with its partners, especially through follow-up actions by governments and other agents at different scales". The GEF's catalytic role¹² is characterized as a three-phased approach consisting of foundational activities, then demonstrations, and finally investments. Within this context, the review of the catalytic role of this project is to consider the extent to which the project has demonstrated: a) the production of a "public good", b) demonstration(s), c) replication, and d) scaling up of the project achievements.

164. Considering the GEF definition of the catalytic role and its four-point scale, this project has demonstrated a certain catalytic role focusing on two phases: foundational activities and demonstrations. Through its activities the project has demonstrated a) the *production of public goods* and b) the *demonstrations of these public goods*.

165. The review indicates that the project has produced a good list of "public goods" such as innovative

¹² GEF, March 22, 2013, Fifth Overall Performance Study of the GEF – First Report: Cumulative Evidence on the Challenging Pathways to Impact

solutions to reduce pressure on forest such as testing a briquette production system as an alternative to firewood, solar water heaters, energy efficient stove, passive solar greenhouse, solar energy. It also includes forest and pasture management practices such as more intensive fodder production systems, coppicing techniques as a traditional method of woodland management, assisted natural regeneration, and mineralization and sowing techniques. Finally, achievements under outcome 1 could be seen as public goods such as guidelines to measure forest carbon stock, protocols to formulate FMPs and recommendations to amend specific legislation.

- 166. Regarding the *demonstrations of these public goods*, the project in collaboration with the SGP implemented a small grant scheme to fund small-scale innovative solutions to catalyze the public goods listed above. Five projects were selected and funded: (i) Introduction of energy-efficient stoves for conservation of forest resources in Tavush region; (ii) Solar power for energy autonomy and forest conservation in Tavush region: (iii) Sustainable income generation in Debed community through effective backyard farming; (iv) Sports and adventure tourism development in Stepanavan; and (v) Complex application of low carbon and energy-efficient technologies in Dzoragyur community of Lori region. The project also supported the rehabilitation of degraded forests and pastures including 1,000 ha of degraded pastures and almost 5,700 ha of degraded forests. Finally, the project supported the development of 6 FMPs to demonstrate the new approach to manage forests sustainably.
- 167. However, when considering the GEF definition of investment activities, the investment of the project in the development of mechanisms of broader adoption that would lead to transformational change has been limited, such as replication, scaling-up, and market change as well as increasing investment of stakeholders to fully sustain GEF-supported initiatives beyond GEF funding.
- 168. As of the time of this evaluation, the project is closing. From a catalyst role point of view, the project has developed "public goods", demonstrated the usability and effectiveness of the tools, methods, guidelines, innovative solutions, and skills and knowledge. It is now at the stage of being replicated and scaled-up throughout the relevant organizations including governmental and non-governmental organizations for some of these tools and methods. As it was discussed in other sections of this report, project achievements benefit from a good national ownership, most of these achievements are already institutionalized and all signals point to the long-term sustainability of these achievements. It is anticipated that in the years to come, these achievements will be replicated and scaled-up throughout Armenia.

Annex 1: Project Expected Results and Planned Activities

The table below was compiled from the list of expected results and planned activities as anticipated in the project document. It was used during the assignment by the Evaluator as a succinct summary of what is expected from this project. Progress made against these expected results and expected targets was assessed during this evaluation and reported in the TE report.

<u>Project Objective</u>: Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services.

Intended Outcomes	Expected Outputs	Budget per Component	Indicative Activities
Outcome 1 - Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management	Output 1.1: Forest management plan guidelines/protocols updated for mainstreaming ecosystem, climate risks and biodiversity considerations into forest management planning in North-east Armenia	GEF \$1,175,400	 Review of international and regional best practice in integration of ecosystem perspectives into forest planning decision-making processes; Review of current practices of forest management planning and the extent to which these integrate ecosystem, biodiversity and community resource use; Collation and review of key environmental information required to support the updating of protocols, including information on requirements for maintaining species and habitat, ensuring ecosystem services, managing threats to biodiversity and ecosystem services, environmental risks of climate change and environmental hazards and the state of forest and land degradation; Extensive consultation with key stakeholders, including local communities on their expected needs and services from the forests; Revision of protocols to ensure provision of guidance on conservation assessment tools and technologies to identify and prioritize areas for biodiversity and species conservation, restoration and maintenance of ecosystems and habitats and assessing trade-offs between different forest uses.
	Output 1.2: Geo-spatial information systems support forest inventory and mapping for forest management planning, development, implementation and monitoring		 Review of existing inventory and mapping to evaluate the extent to which biodiversity and ecosystem values have been considered; Collection, collating and maintaining key environmental information (forest, land, pasture, agriculture, etc.) to update of inventory and mapping information to correct any existing deficiencies in forest and other land use in the two marzes; Supporting extensive consultations with forest and sector staff, graziers, forest dependents and other community groups to establish norms and criteria to assess needs and trade-offs; Defining clear guidelines to assist in decisions regarding allocation of forest land for different uses and guidance for assessing and defining trade-offs between different users; Providing technical guidance for integration of environmental information into the mapping and planning processes; Providing on-the-ground training and capacity development for forest and other staff on forest inventory and mapping techniques and in the interpretation of information arising from these exercises; Develop a series of revised maps and technical support for guiding the allocation of forest land for different purposes.
	Output 1.3: Revised forest management plans		 Use of systematic biodiversity conservation and ecosystem services assessment tools and technologies (as found appropriate) to identify and prioritize the forest areas for conservation use, improvement and

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Intended Outcomes	Expected Outputs	Budget per Component	Indicative Activities
	integrate considerations of biodiversity, ecosystem services, climate mitigation, and community resource use		protection of ecosystem and climate mitigation functions, mitigation of the impacts of fuel wood extraction on sensitive habitats and species, enhancing sustainable community forest resource use, reducing the impacts of unsustainable grazing pressures and potential natural forest regeneration; For forest areas of high conservation value, facilitation of a consultative process for delineating the areas that are currently outside the protected area network, either as reserved or protected forests; Defining a process for strengthening the management of the delineated high conservation areas, that might include guidelines and procedures for preparation of stand-alone conservation management plans, or the integration of conservation management prescriptions into forest enterprise forest management plans, or the integration of conservation management and adoption on guidelines and procedures for delineating firewood collection areas to mitigate the haphazard harvest and collection of firewood, in particular from sensitive habitats and species in protection forests; Facilitate a consultative process for defining and development of guidelines and procedures for the restoration of degraded grazing lands and their sustainable management by local graziers; Develop criteria for identifying degraded forests for assisted natural regeneration and development procedures for their regeneration. Define, in consultation with forest dependent communities, of a range of measures to ensure sustainable resource use and reduce environmental impacts of unsustainable harvesting of NTFPs; restoration and management; Provision of technical support and on-the-ground training in sustainable forest management planning to forest staff.
	Output 1.4: System for effective monitoring and enforcement of forest management plans, including clear delineation of roles and responsibilities of key partners and management of participatory processes in forest development		 Clarify roles and responsibilities of organizations involved in supervision and enforcement of FMPs; Update monitoring protocols where necessary; Update protocols on technical aspects of implementing integrated forest and land plans to meet SFM and SLM standards; Strengthen compliance monitoring of various aspects of forest services through training targeting planning and monitoring teams comprised of officials from State Forest Monitoring Center, Forest Enterprise Branches and other sectors as relevant.
	Output 1.5: Recommendations for national policy and regulations for facilitating adoption of sustainable forest management practices		 Recommendations will be developed on: Development of structures and methodologies for integrating community participatory forestry or sustainable NTFP and agro-forestry systems into the Forest Management Planning; Definition of options for assessing economic services value of ecosystem functions and climate amelioration; Development of methodologies and criteria for assessing forests and grazing land condition for the purposes of subsequent forest and land use decision making;

Intended Outcomes	Expected Outputs	Budget per Component	Indicative Activities
			 Securing additional finances for SFM/SLM investments and aligning the existing financial contributions in the forestry and rangeland sectors to support SFM/SLM practices; Guidance and resource distribution criteria for allocations – to improve the efficacy of SFM/SLM investments (reduce overlap and redundancy); Regulations for special management in ecological sensitive areas Protocols for identification and demarcation of corridors for wildlife movement; Regulations on identification of ecosystem goods and services that will be mandatory to be addressed in the land use planning.
	Output 1.6: Enhanced capacity for sustainable land and forest management within key agencies and communities		 Conduct a needs assessment to develop a comprehensive and targeted training program with individual training modules; taking into consideration other on-going capacity building activities; Develop a training programme – made up of independent training modules - focusing on enabling stakeholders to apply practical steps in their daily work to strengthen their SLM and SFM capacities; particularly the use of new forest and land planning tools and guidelines and including specific technical training on use of GIS, MIS and satellite imagery techniques for mapping and inventory and valuation of ecosystem services.
Outcome 2 – Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high	Output 2.1: Designation of High Conservation Value Forests covering 85,000 ha of current production and protection forests for species conservation and climate mitigation	GEF \$1,585,499	 Improve the management of one existing protected area (33,765 ha) and eight existing sanctuaries (19,880 ha) that are embedded within the forest estate, the latter are not defined on the ground nor are these managed for biodiversity outcomes. The project will support boundary demarcation, management planning and surveys and monitoring of biodiversity within these sanctuaries; Identify and setting-aside around 34,000 ha intact forests within the forest enterprise branches for environmental and biodiversity conservation that would be defined during the forest inventory and mapping exercises.
conservation forests and maintain flow of ecosystem services	Output 2.2: Restoration of forests and pasture lands, and rehabilitation of multiple use forestlands through community forest resource management		 Forest rehabilitation and restoration activities in the 4,932 ha of degraded lands Review of national and regional best practices in forest restoration; Prepare a rehabilitation plan for the identified sites, including assessment of best silvicultural and soil improvement methodologies, and protection and maintenance measures; Establish and maintain a suitable mix of protection and social fencing measures to reduce grazing and firewood collection pressures; Support the implementation and monitoring of the forest rehabilitation plans; Prepare a manual that describes rehabilitation approaches for different forest types. Rehabilitation of degraded pasture lands Review of national and regional lessons and best practices in pasture and hay fields restoration; Identify and prioritize areas, based on the inventory and mapping, and consultative process with graziers. Develop rehabilitation plans for each of the sites, in consultation with local graziers, that would identify the best possible options for each site, rehabilitation techniques (seeding, soil treatment, grazing regimes, etc.);

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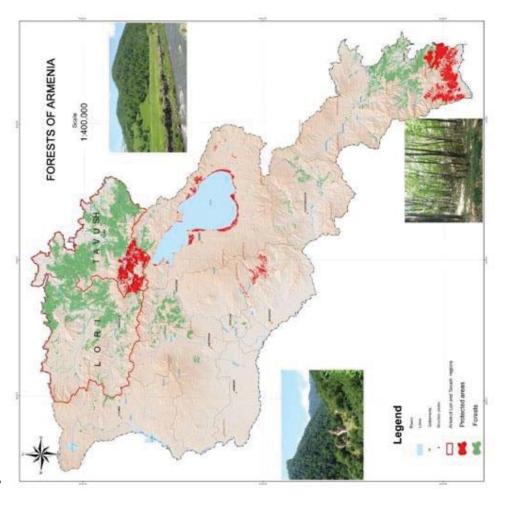
Intended Outcomes	Expected Outputs	Budget per Component	Indicative Activities
			 Agree on maintenance measures, in consultation with graziers for protection and control of the sites during the rehabilitation process; Identify alternative grazing areas and grazing management in these alternative areas; Support the implementation and monitoring of the pasture restoration process; Develop a sustainable grazing management strategy for each of the rehabilitated sites, including livestock numbers, grazing restrictions, maintenance regimes, etc.; Document and disseminate success and failures in pasture rehabilitation Multi-purpose forest investments Review national and regional lessons and best practices in multi-purpose forest initiatives; Assess the interest and support for such initiative, and through the interactive consultative process and supported by the forest inventory and mapping exercise, identify suitable sites and communities for piloting the multi-purpose forest initiative; Assess potential non-timber forest product varieties and sustainable harvest regimes and financial profitability and incomes; Assess potential non-timber of households to be engaged at each site based on NTFP production potentials. forest management, number of households to be engaged at each site based on NTFP production potentials. forest management prescriptions, harvest rates and methods of collection and forest maintenance and monitoring of forest condition; Support processing, value addition, marketing and small business planning and development; Promote agro-forestry and similar tree-crop initiatives in forest and non-forest lands; Document and disseminate best practices
	Output 2.3: Alternative livelihood programs for local communities as incentive to conserve forests and biological resources		 Introduce fruit and timber species and sustainable use of these resources, including processing and marketing of fruits, berries, mushrooms, medicinal plants, etc.; Introduce alternative heating systems (biogas installations, solar heaters, etc.; Promote income generating activities such as beekeeping, fish-breeding, etc.; Promote tourism development, including eco-tourism supporting infrastructure; Develop fruit and timber species nurseries, and orchards, etc.
	Output 2.4: Integrated strategy for management of firewood collection and distribution from forests		 Review current policy, legislation and practice governing the collection, transport and use of firewood; Assess historical patterns of firewood use and impacts on the forests and biodiversity Undertake consultative processes for understanding the needs of the local people and options and perceptions of local community on the provision and use of alternative sources of energy; Review feasibility of alternative options of energy to fuelwood and implications in terms of policy, supply and demand, technical feasibility, economic and social aspects etc. Provide recommendation for dealing with alternative energy needs of local communities, including options for improved management of fuelwood harvest and collection, alternative sources of energy and mechanisms for their implementation

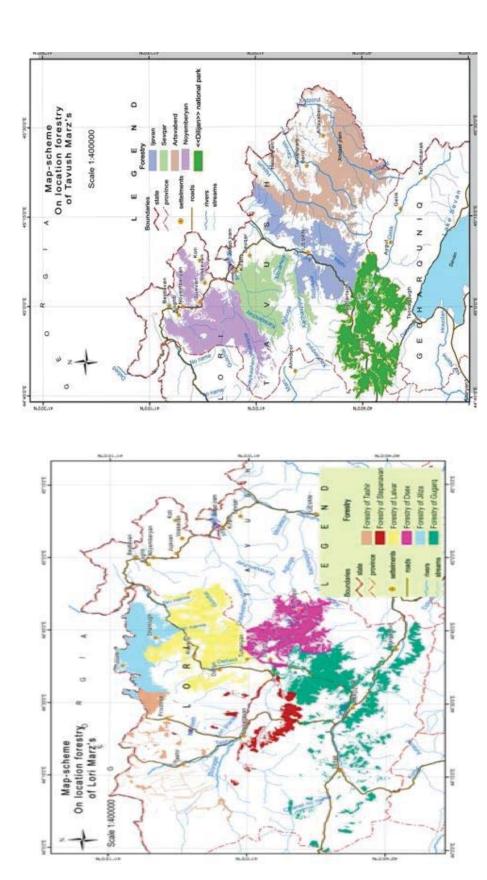
Intended Outcomes	Expected Outputs	Budget per Component	Indicative Activities
	Output 2.5: Carbon stock assessments and coefficients for key forest types in NE Armenia		 Build, modify and integrate <i>field assessment of carbon methodology</i> into the current forest inventory methodology; Track carbon using web-based carbon tracking tools developed by the <i>Carbon Benefits Project (CBP)</i> as the basis for measurement, reporting and verification (MRV) and monitoring of forest carbon.
Component 3 - Monitoring, learning feedback, outreach, and evaluation	Component 3 - Monitoring, learning, adaptive feedback, outreach, and evaluation	GEF \$74,500	
Project Management		GEF: \$141,770	
	Total Budget	GEF: \$2,977,16	GEF: \$2,977,169 + Co-financing: \$13,989,935 = <u>Total Financing: \$16,967,104</u>

Source: Project Document

Annex 2: Maps of Project Sites

The project financed activities in six forest enterprise branches; three in Tavush Marz and three in Lori Marz.





Annex 3: Remarks about conducting evaluations online under COVID-19

This assignment was conducted during the COVID-19 pandemic; the defining global health crisis of our time and the greatest challenge we have faced since World War Two. The virus has spread to every continent except Antarctica and all countries are racing to slow the spread of the virus by testing and treating patients, carrying out contact tracing, limiting travel, quarantining citizens, and cancelling large gatherings such as sporting events, concerts, and schools. We are in uncharted territory. Across the world, businesses are closing, and people are losing jobs and income, with no way of knowing when normality will return. Within this context, UNDP has already been hard at work, focusing on three immediate priorities: supporting the health response including the procurement and supply of essential health products under WHO's leadership; strengthening crisis management and response; and addressing critical social and economic impacts. In the meantime, the GEF and its Partners have continued the implementation of their work programme using more online and remote communication means to conduct their business.

Below are some notes based on recent experiences of conducting evaluations remotely.

Data Collection Process

- Need to pair the international Evaluator with a national Evaluator, both with a good command of English to be able to provide online translation of interviews.
- Spent more time in preparing the data collection phase (interviews and documents gathering),
 particularly the key questions to use for interviews, which, as much as possible, should overlay the
 outline of the report. The better the clarity of questions, the better collected data is resulting in a better
 evaluation report.
- Plan the interviews ahead as if it was a mission agenda, taking into account time differences and allowing a good hour for each interview plus possibly travel time between interviews.
- In addition to the International Evaluator taking notes during online interviews, the National Evaluator should summarize in point-form his/her notes from conducting these evaluations. It provides additional evaluative evidence (including comments on observations and discussion points) collected during the interviews but also possibly before and after interviews and during field visits.
- Where relevant and where it will be technically possible, the National Expert should do his best in
 organizing in field video-calls from project sites to help the International Evaluator observe directly
 relevant project outputs and activities. It will be an opportunity to witness project impacts on
 beneficiaries. Observations made during these visits will be documented in short (point form) reports
 accompanied by photos and short videos where possible.

Technologies

- Use video link as much as possible to conduct interviews. Content of these interviews through video link is richer, allowing the Evaluators to better deepen the understanding of particular areas.
- Use WIFI instead of phone network (generally faster bandwidth).
- Try to set up a 2-point web connection (instead of 3 or more) if travel is authorized in-country; i.e. the National Consultant to go and meet the Interviewees on site. It maximizes the quality of bandwidth.
- Chose a video platform that is used comfortably by all such as Skype, Zoom or others. Note that WhatsApp video is only working on smartphones; not the best set up for interviews.
- Use smartphones to record short videos with comments to provide visuals on the project such as surrounding areas of a project area, activities implemented with the support of the project, and "close up" of goods and services procured by the project.
- If possible, record videos/pictures of field activities from drone if available.
- Set up a dropbox folder (or any other cloud-based system) to upload data.

Annex 4: Terms of Reference

Terminal Evaluation Terms of Reference

Job title: International Consultant on Terminal Evaluation of the Project

Project title: Mainstreaming Sustainable Land and Forest Management in Mountain

Landscapes of North-eastern Armenia

Project: 00091048/00081940

Contract modality: Individual Contract (IC)

Duration: 25 July – 25 October 2020 (estimated 20 consultancy days)

Duty station: Home based and one mission to Armenia (alternatively distant support

(depending on COVID-19 restrictions))

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia (PIMS # 4416.)

The essentials of the project to be evaluated are as follows:

PROJECT SUMMARY TABLE

Project Title: Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia					
GEF Project ID:	GEF ID #5353	Atmenia	at endorsement (Million US\$)	at completion (Million US\$)	
UNDP Project ID:	UNDP PIMS #54416 UNDP Atlas Project ID: 00091048 UNDP Atlas Output ID: 00081940	GEF financing:	\$2,977,169		
Country:	Armenia	IA/EA own (UNDP):	\$180,000		
		UNDP in-kind:	\$720,000		
Region:	CIS	Government cash:	5,095,000		
		Government in-kind:	7,332,235		
		Other cash:	\$662,700		
Focal Area:	Multi-focal: BD/LD/CCM/ SFM	Other-local communities (Berd, Gugarq, Margahovit, Yenoqavan)	17,520.14		
FA Objectives, (OP/SP):	GEF-6: SFM: Good management practices applied in existing forests LD 2: Sustained flow of services in forest ecosystems in drylands LD 3: Enhanced, crosssectoral enabling environment for integrated landscape scale management CCM-5: Promote conservation and	Total co-financing:	\$14,007,455.14		

	enhancement of carbon stocks through sustainable management of land use, land use change and forestry BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation			
Executing Agency:	UNDP	Total Project Cost:	\$16,984,624.14	
Other Partners involved:		ProDoc Signature (date project began):	December 24, 2015
mivorved.	Ministry of Environment	(Operational) Closing	Proposed:	Actual:
	-	Date:	December 24, 2019	December 24, 2020

OBJECTIVE AND SCOPE

The project was designed to achieve the shift from current unsustainable to sustainable forest and land use practice.

The **project objective** is to ensure sustainable land and forest management to secure continued flow of multiple ecosystem services. The main cause of land and forest degradation in North-Eastern Armenia, where 64% of the forests of the country are located is the deforestation and overexploitation of forest resources. sustainable land and forest management approaches as being postulated under the project.

The sustainable land and forest management would be achieved through two main components, namely:

- (i) Integration of sustainable forest and land management objectives into planning and management of forest ecosystems to reduce degradation and enhance ecosystem services in two marzes covering 0.65 million hectares; and
- (ii) Sustainable Forest Management practices effectively demonstrating reduced pressure on high conservation forests and maintaining flow of ecosystem services.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

EVALUATION APPROACH AND METHOD

An overall approach and method ¹³ for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the <u>UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects</u>. A set of questions covering each of these criteria have been drafted and are included with this TOR (<u>Annex C</u>) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to Lori and Tavush regions of Republic of Armenia (alternatively distant support (depending on COVID-19 restrictions)) including the following project sites: Tavush region- Ijevan, Berd and Noyemberyan consolidated communities; Lori region-Mets Parni, Margahovit, Gugarq, Vahagni and Odzun consolidated communities. Alternatively, the evaluator would have opportunity of on-line video-interviews with project stakeholders, experts and beneficiaries, if field mission wouldn't be possible due to COVID-19. Interviews will be held with the following organizations and individuals at a minimum:

¹³ For additional information on methods, see the <u>Handbook on Planning, Monitoring and Evaluating for Development Results</u>, Chapter 7, pg. 163

- Project Coordination Unit staff;
- UNDP Country Office in Armenia;
- Members of Project Board;
- National government stakeholders, including: Ministry of Environment, State forest committee and "Hayantar" SNCO;
- National Contractors and partners of the Project;
- National consultants involved in the project (at least two);
- International organization, implementing similar projects.

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see <u>Annex A</u>), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of **relevance**, **effectiveness**, **efficiency**, **sustainability and impact**. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in <u>Annex D</u>.

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		Overall likelihood of sustainability:	

PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own (mill. US\$)	financing	Government (mill. US\$)		Partner Ag (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants	\$180,000	\$180,000	\$5,095,000	\$5,095,000	\$662,700	\$668,22 0.14	\$5,925,700	\$5,943,220.11
Loans/Concessions								
In-kind support	\$720,000	\$720,000	\$7,332,235	\$7,332,235			\$8,052,235	\$8,052,235

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with

other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender equality.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated:

- a) verifiable improvements in ecological status,
- b) verifiable reductions in stress on ecological systems, and/or
- c) demonstrated progress towards these impact achievements.14

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of conclusions, recommendations and lessons.

IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Armenia. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluator. The Project Team will be responsible for liaising with the Evaluator to set up stakeholder interviews, arrange field visits, coordinate with the Government or organize any distance support for desk reviews, online interviews etc.

EVALUATION TIMEFRAME

The total duration of the evaluation will be 20 days according to the following plan:

Activity	Timing	Completion Date
Preparation	3 days	5 August
Evaluation Mission (alternatively distant support (depending on COVID-19 restrictions))	5 days	15 September
Draft Evaluation Report	9 days	05 October
Final Report	3 days	25 October

EVALUATION DELIVERABLES

The evaluator is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception	Evaluator provides	No later than 2 weeks before	Evaluator submits to UNDP CO
Report	clarifications on timing	the evaluation mission,	
	and method	interviews, desk-reviews.	
Presentation	Initial Findings	End of evaluation mission	To project management, UNDP CO
Draft Final	Full report, (per annexed	Within 3 weeks of the	Sent to CO, reviewed by RTA, PCU,
Report	template) with annexes	evaluation mission	GEF OFPs
Final Report*	Revised report	Within 1 week of receiving	Sent to CO for uploading to UNDP
		UNDP comments on draft	ERC.

^{*}When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

TEAM COMPOSITION

The evaluation will be performed by one international evaluator. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project

¹⁴ A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: ROTI Handbook 2009

related activities.

Key qualifications:

- Education: advanced degree in environmental management and policy, public administration.
 Minimum 10 years of relevant professional experience (natural resources management, public administration), including minimum 5 years of experience in monitoring and evaluation of similar projects;
- Proven experience and knowledge in UNDP-GEF projects evaluation, UNDP and GEF procedures and requirements;
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal areas: Multi-focal areas Good management practices applied in existing forests (SFM), Sustained flow of services in forest ecosystems in drylands (LD2), Enhanced, cross-sectoral enabling environment for integrated landscape scale management (LD3), Promote conservation and enhancement of carbon stocks through sustainable management of land use, land use change and forestry (CCM-5) and Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation (BD-2):
- Fluency in English is required (written and oral), knowledge of Russian is an asset.

EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'

PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
60%	Following submission and approval of the 1ST draft terminal evaluation report
40%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

Interested individual consultants must submit the following documents/information to demonstrate their qualifications.

- a) Letter of Confirmation of Interest and Availability using the template provided by UNDP;
- b) CV and a Personal History Form (P11); indicating all past experience from similar projects; as well as the contact details (email and telephone number) of the candidate and at least three (3) professional references;
- c) Brief description of approach to work/technical proposal of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology to complete the assignment; (max 1 page)
- d) Financial Proposal that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc.), supported by a breakdown of costs.

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

ANNEXES TO THE TE TOR

ANNEX A: Project Logical Framework

ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

ANNEX C: EVALUATION QUESTIONS

ANNEX D: RATING SCALES

ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

ANNEX F: EVALUATION REPORT OUTLINE

ANNEX G: EVALUATION REPORT CLEARANCE FORM

Annex 5: Evaluation Matrix

The evaluation matrix below served as a general guide for the evaluation. It provided directions for the evaluation; particularly for the collection of relevant data. It was used as a basis for interviewing people and reviewing project documents. It also provided a basis for structuring the evaluation report as a whole.

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Review criteria: I	Review criteria: Relevance - How does the project relate to the main objectives of the GEF, UNDP and to the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?	objectives of the GEF, UNDP and to the enhanc	cement of sustainable lar	nd and forest
How is the Project relevant to GEF objectives?	 How does the Project support the related strategic priorities of the GEF? What regional & international commitments/agreements did the project contribute to? 	Level of coherence between project objectives and those of the GEF Level of contribution to GEF tracking tools Participation at international meetings	Project documents GEF policies and strategies GEF web site	Documents analyses Interviews with government officials and other partners Field visits
How is the Project relevant to UNDP objectives?	 How does the project support the objectives of UNDP in this sector? 	 Existence of a clear relationship between project objectives and country programme objectives of UNDP 	 Project documents UNDP strategies and programme 	Documents analyses Interviews with government officials and other partners Field visits
How is the Project relevant to the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?	 Does the project follow governments' stated priorities? How does the Project support the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services? Does the project address the identified problems? How countries-driven is the Project? Does the Project adequately take into account national realities, both in terms of institutional framework and programming, in its design and its implementation? To what extent were national partners involved in the design of the Project? 	 Degree of coherence between the project and local, regional and national priorities, policies and strategies; related to the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services? Level of community ownership in country (national and local levels) Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities? Level of involvement of Government officials and other partners into the project Coherence between needs expressed by national stakeholders and UNDP criteria 	 Project documents National policies, strategies and programmes Key government officials and other partners 	Documents analyses Interviews with government officials and other partners
How does the Project address the needs of target beneficiaries?	 How does the project support the needs of target beneficiaries? Is the implementation of the project being inclusive of all relevant Stakeholders? Are local beneficiaries and stakeholders adequately involved in project formulation and implementation? 	Strength of the link between project expected results and the needs of target beneficiaries Degree of involvement and inclusiveness of beneficiaries and stakeholders in project design and implementation	Beneficiaries and stakeholders Needs assessment studies Project documents Field observations	Document analysis Interviews with beneficiaries and stakeholders Field visits

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Future directions for similar Projects	 What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment between the project and the Partners' priorities and areas of focus? How could the project better target and address priorities and development challenges of targeted beneficiaries? 		■ Data collected throughout evaluation	■ Data analysis
Review criteria: C	Review criteria: Coherence – How well does the project fit with intern continued flow of multiple ecosystem services?	with interventions to enhance sustainable land and forest management in the NE Armenia to secure	management in the NE A	rmenia to secure
How is the coherence between the project and other interventions carried out by the same project's Partners?	 Are there contradictions between the different projects' objectives of Partners? Are there duplications between their activities? Are there any interlinkages and synergies between the project and other projects implemented by the Partners? To what extent is the project coherent with international norms and standards as well as international obligations that Armenia signed up to? Is there convergence between the objective of the project and those of the project's Partners? 	 Level of coherence between the project objective and those of the project's Partners Level of coherence between the project and international norms and standards as well as international obligations committed by Armenia 	 Project documents Partners policies and strategies Partners' web sites Documents from other projects 	Documents analyses Interviews with government officials and other Partners/projects Field visits
Is the Project internally coherent in its design?	 Were GEF criteria for project identification adequate in view of actual needs? Was the project sourced through a demand-driven approach? Is there a direct and strong link between project expected results (Result and Resources Framework) and the project design (in terms of project components, choice of partners, structure, delivery mechanism, scope, budget, use of resources etc.)? Is the length of the project conducive to achieve project outcomes? 	 Level of coherence between project expected results and internal project design logic Level of coherence between project design and project implementation approach 	 Program and project documents Key project stakeholders 	■ Document analysis ■ Key Interviews
How is the coherence between the project and other relevant interventions?	 Is the project coherent in terms of areas of focus and targeting of key activities within the context of other donors' strategies? How does GEF help to fill gaps (or give additional stimulus) that are crucial but are not covered by other donors? To what extent interventions undertaken by different donors support (or undermine) the same objective of the project? Is there any overlap (or not) between the project and other similar interventions in Armenia which are implemented by other donors? If any, to what extent efforts are being made to minimize/eliminate them? Are the design and implementation of similar interventions implemented by other donors harmonized and coordinated to avoid duplication of effort? In what ways? 	■ Degree to which the project was coherent and complementary to another donor programming ■ List of programs and funds in which future developments, ideas and partnerships of the project are eligible?	 Other Donors' policies and programming documents Other Donor representatives Project documents 	■ Documents analyses ■ Interviews with other Donors

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Future directions for similar Projects	■ What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment, its coherence and complementarity between the project and other relevant interventions?		■ Data collected throughout evaluation	 Data analysis
Review criteria:	Review criteria: Effectiveness – To what extent have the expected outcomes and objectives of the project been achieved?	tcomes and objectives of the project been achieve	ed?	
How is the Project effective in achieving its expected outcomes?	 How is the project being effective in achieving its expected outcomes? Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services What are the factors which contributed to these achievements? Were they any delays? Were there any factors beyond the control of the project and government which affected the implementation of the project? 	■ Level of execution of outputs under outcomes ■ Degree to which the project contributes to the enhancement of sustainable land and forest management in the NE Amenia to secure continued flow of multiple ecosystem services? ■ New methodologies, skills and knowledge acquisition and sharing; effective data gathering, methods and procedures for reporting. ■ Change in capacity for information management: knowledge acquisition and sharing; effective data gathering, methods and procedures for reporting. ■ Change in capacity for awareness raising ○ Stakeholder involvement and government awareness of change in local stakeholder behavior. ■ Change in capacity in policy making and planning related to the enhancement of sustainable land and forest management in the NE Amenia to secure continued flow of multiple ecosystem services: ○ Policy reform ○ Legislation/regulation change ○ Development of national and local strategies and plans of Development of national and local strategies and action plans through adequate institutional frameworks and their maintenance ○ Monitoring and evaluation ■ Change in capacity in mobilizing resources ○ Leverage of resources ○ Leverage of resources ○ Human resources ○ Appropriate practices ○ Mobilization of advisory services	Rey stakeholders including UNDP, Project Team, Representatives of Gov. and other Partners Research findings Observations	Documents analysis Meetings with main Project Partners and Project Team Interviews with project beneficiaries Field visits
How is risk and risk mitigation being managed?	 How well are risks and assumptions being managed? What is the quality of risk mitigation strategies developed? Are they sufficient? Are there clear strategies for risk mitigation related with long-term sustainability of the project? 	 Completeness of risk identification and assumptions during project planning Quality of existing information systems in place to identify emerging risks and other issues? Quality of risk mitigations strategies developed and followed 	 Atlas risk log Project documents and evaluations UNDP, Project Team and Project Partners 	 Document analysis Interviews

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Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Future directions for similar Projects	 What lessons have been learnt for the project to achieve its outcomes? What changes could have been made (if any) to the formulation of the project in order to improve the achievement of project's expected results? How could the project be more effective in achieving its results? 		Data collected throughout evaluation	■ Data analysis
Review criteria: l	Review criteria: Efficiency – Was the project implemented efficiently,	efficiently, in-line with international and national norms and standards?	nd standards?	
Is Project resources channeled in an efficient way?	 Is adaptive management used or needed to ensure efficient resource use? Does the Project Results Framework and work plans and any changes made to them used as management tools during implementation? Are accounting and financial systems in place adequate for project management and producing accurate and timely financial information? How adequate is the M&E framework (indicators & targets)? Are progress reports produced accurately, timely and responded to reporting requirements including adaptive management changes? Is project implementation as cost effective as originally proposed (planned vs. actual) Is the leveraging of funds (co-financing) happened as planned? Are financial resources utilized efficiently? Could financial resources have been used more efficiently? How is RBM used during project implementation? Is the project decision-making effective? Does the government provide continuous strategic directions to the project's formulation and implementation? Are there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons leamed and recommendations pertaining to project formulation and implementation effectiveness were shared among project stakeholders, UNDP staff and other relevant organizations for ongoing project adjustment and improvement? Does the project mainstream gender considerations into its implementation? 	Technical and financial delivery of annual work plans Availability and quality of financial and progress reports Timeliness and adequacy of reporting provided Level of discrepancy between planned and utilized financial expenditures Planned vs. actual funds leveraged Cost in view of results achieved compared to costs of similar projects from other organizations Adequacy of project choices in view of existing context, infrastructure and cost Quality of RBM reporting (progress reporting, monitoring and evaluation) Occurrence of change in project formulation/ implementation approach (i.e. restructuring) when needed to implementation mechanism to share findings, lessons learned and recommendation on effectiveness of project design. Cost associated with delivery mechanism and management structure compare to alternatives Gender disaggregated data in project documents	Project documents and evaluations UNDP, Representatives of Gov. and Project Team Beneficiaries and Project partners	■ Document analysis ■ Key Interviews
How efficient are partnership arrangements for the Project?	 How does the government demonstrate its ownership of the project? Did government provide counterparts to the project? To what extent partnerships/linkages between institutions/ organizations are encouraged and supported? 	Level of ownership of project amongst project Partners Level of community ownership and implementation of activities Level of stakeholder collaboration and support for execution of activities	Project documents and evaluations Project Partners UNDP, Representatives of Gov. and Project Team	Document analysis Interviews
TE of the UNDP-GEF Proje	TE of the UNDP-GEF Project: "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia"	n Landscapes of North-eastern Amenia" 68		

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
	 Which partnerships/linkages are facilitated? Which one can be considered sustainable? What is the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP and relevant government entities) Which methods were successful or not and why? 	 Identification and justification for activities beyond control of government Specific activities conducted to support the development of cooperative arrangements between partners, Examples of supported partnerships Evidence that particular partnerships/linkages will be sustained Types/quality of partnership cooperation methods utilized 	■ Beneficiaries	
Does the Project efficiently utilize local capacity in implementation?	 Was an appropriate balance struck between utilization of international expertise and local capacity? Does the project support mutual benefits through sharing of knowledge and experiences, training, technology transfer among developing countries? Did the Project take into account local capacity in formulation and implementation of the project? Was there an effective collaboration with scientific institutions with competence in community resilience to climate change variability and risks? 	 Proportion of total expertise utilized taken from Armenia Number/quality of analyses done to assess local capacity potential and absorptive capacity 	Project documents and evaluations UNDP, Project Team and Project partners Beneficiaries	■ Document analysis Interviews
Future directions for similar Projects	 What lessons can be learnt from the project on efficiency? How could the project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements etc)? What changes could have been made (if any) to the project in order to improve its efficiency? 		■ Data collected throughout evaluation	■ Data analysis
Review criteria: I forest managemen	Review criteria: Impacts - Are there indications that the project has contributed to securing the continued flow of ecosystem services through sustainable land and forest management in the Northeastern Armenia?	ontributed to securing the continued flow of eco	system services through	sustainable land and

How is the	•	 Will the project achieve its objective that is "Sustainable land 	•	 Contributions of ii 	ons of i
Project effective		and forest management in the Northeastern Armenia secures		ecological stress	stress
in achievino its		continued flow of ecosystem services?"	•	Changes in capaci	ı capaci
1.:	•	Did the project contribute to the reduction of environmental		o To pool/mobiliz	mobiliz
oejecuve.		stress and/or ecological stress?		o To provide an e	ide an e
				 For implementa 	lementa
				through adequal	adequa
				maintenance,	ance,

Project documents Key Stakeholders	Research findings Observations			
 Contributions of impacts to environmental stress and/or ecological stress 	Changes in capacity:	 Changes in use and implementation of sustainable alternatives 	Changes to the quantity and strength of barriers such as change in:	o inacequate planning, regulatory and institutional framework for integrated Forest and Land Resource Management
bı S				

Documents analysis
 Meetings with UNDP, Project Team and project Partners
 Interviews with project beneficiaries and other stakeholders
 Field visits

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
		o Minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground o Lack of incentives and benefits to local communities to participate in forest management and conservation o Lack of financial resources		
How is the Project impacting local environment?	What are the impacts or likely impacts of the project on? Local environment; Poverty, and, Other socio-economic issues.	■ Provide specific examples of impacts at those three levels, as relevant	 Project documents Key Stakeholders Research findings Observations 	Data analysis Interviews with key stakeholders Field visits
Future directions for the Project	 How could the project build on its successes and learn from its weaknesses in order to enhance the potential for impact of ongoing and future initiatives? 		 Data collected throughout evaluation 	 Data analysis
Review criteria: Sresults?	Review criteria: Sustainability - To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?	nstitutional, social-economic, and/or environmer	ntal risks to sustaining lo	ong-term project
Are sustainability issues adequately integrated in Project design?	 Were sustainability issues integrated into the formulation and implementation of the project? Does the project employ government implementation and/or monitoring systems? Is the government involved in the sustainability strategy for project outcomes? 	 Evidence/Quality of steps taken to address sustainability 	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries 	 Document analysis Interviews
Did the project adequately address financial and economic sustainability issues?	 Did the project adequately address financial and economic sustainability issues? Are the recurrent costs after project completion sustainable? 	 Level and source of future financial support to be provided to relevant sectors and activities after project end? Level of recurrent costs after completion of project and funding sources for those recurrent costs Level of financial support to be provided to relevant sectors and activities by in-country actors after project end Evidence of commitments from international partners, governments or other stakeholders to financially support relevant sectors of activities after project end 	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries 	 Document analysis Interviews
Are there organizational arrangements and continuation of activities issues?	 Are project results well assimilated by organizations and their internal systems and procedures? Is there evidence that project partners will continue their activities beyond project support? Has there been a buy-in process, or was there no need to sell the project and buy support? What degree is there of local ownership of initiatives and results? Were appropriate 'champions' being identified and/or supported? 	 Degree to which project activities and results have been taken over by local counterparts or institutions/organizations Number/quality of champions identified 	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries 	Document analysisInterviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Is there an adequate enabling enabling environment to sustain project achievements?	 Are laws, policies and frameworks addressed through the project, in order to ensure sustainability of key initiatives and reforms? Are the necessary related capacities for lawmaking and enforcement built? What is the level of political commitment to build on results of the project? 	 Efforts to support the development of relevant laws and policies State of enforcement and law-making capacity Evidence of commitment by the political class through speeches, enactment of laws and resource allocation to priorities 	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries 	Document analysisInterviews
Will institutional and individual capacities adequate at the end of the project	 Is the capacity in place at the national, and local level adequate to ensure sustainability of results achieved to date? 	■ Elements in place in those different management functions, at appropriate levels (national and local) in terms of adequate structures, strategies, systems, skills, incentives and interrelationships with other key actors	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries Capacity assessments available, if any 	 Interviews Documentation review
Are there any social and/or political sustainability issues?	 Did the project contribute to key building blocks for social and political sustainability? Did the project contribute to local Stakeholders' acceptance of the new practices? 	 Example of contributions to sustainable political and social change with regard to the management and monitoring of the environment 	 Project documents and evaluations UNDP, Project Team and project Partners Beneficiaries 	 Interviews Documentation review
Will achievements be replicable?	 Were project activities and results replicated elsewhere and/or scaled up? What was the project contribution to replication or scaling up of innovative practices or mechanisms? Does the project have a catalytic role? 	 Number/quality of replicated initiatives Number/quality of replicated innovative initiatives Volume of additional investment leveraged 	 Other donor programming documents Beneficiaries UNDP, Project Team and project Partners 	Document analysisInterviews
Are there any challenges to sustainability of the Project	 What are the main challenges that may hinder sustainability of efforts? Have any of these been addressed through project management? What could be possible measures to further contribute to the sustainability of efforts achieved with the project? 	 Challenges in view of building blocks of sustainability as presented above Recent changes which may present new challenges to the project 	 Project documents and evaluations Beneficiaries UNDP, Project Team and project Partners 	Document analysisInterviews
Future directions for the Project	 Which areas/arrangements under the project show the strongest potential for lasting long-term results? What are the key challenges and obstacles to the sustainability of results of project initiatives that must be directly and quickly addressed? Are national decision-making institutions (Parliament, Government, etc.) ready to improve measures for the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services? 		■ Data collected throughout evaluation	■ Data analysis

Annex 6: UNEG Code of Conduct for Evaluation Consultants

Evaluators / Consultants:

- 1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
- 2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
- 3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
- 4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
- 5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
- 6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
- 7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed in Ottawa on August 27, 2020

Signed in Yerevan on August 28, 2020

Signature:

Signature

Names:

Jean-Joseph Bellamy

Vardan Tserunyan

Annex 7: List of Documents Reviewed

Anastas Aghazareyan, August 2014, Evaluation United Nations Development Assistance Framework (2010-2015) Republic of Armenia

BDO, March 2018, Independent Auditor's Report for the Year Ended December 31, 2017

ESA, ADB, A Portfolio of Twelve Earth Observation Projects Supporting Asian Development Bank Activities

ESA, Eo Clinic, September 2, 2020, Characterization of Dilijan National Park Forest Ecosystems, Armenia

EU, The World Bank, IUCN, WWF, April 2011, FLEG – Understanding the Forestry Sector of Armenia: Current Conditions and Choices

EU, The World Bank, IUCN, WWF, ENPI-FLEG II - Final Report – Review and Analysis of Current Forestry-Related Legislation, Institutional and Administrative Structure

EU, The World Bank, IUCN, WWF, ENPI-FLEG II – Outcomes and Results

FAO, 2014, Global Forest Resources Assessment 2015 - Country Report - Armenia

GEF, April 26, 2011, Proposal for Enhancing the Visibility of the GEF

GEF, Brand Guidelines & Graphic Standards

GEF, GEF-5 Focal Area Strategies

GEF, GEF-6 Programming Directions

GEF, GEF Secretariat Review for F/MS Projects: Armenia: Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes

GEF, June 18, 2015, Letter from GEF-CEO to Council Member on Armenia: Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes

GEF, March 22, 2013, Fifth Overall Performance Study of the GEF – First Report: Cumulative Evidence on the Challenging Pathways to Impact

GEF, Ministry of Environment, UNDP, Backstopping Carbon Benefits Project (CBP) Workshop for Armenia

GEF, Project Identification Form (PIF): Armenia: Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes

GEF, Request for CEO Endorsement: Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes of Northeastern Armenia

GEF, UNDP, Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects

Geoscan, February 19, 2020, Quotation for Areal Mapping and Cadastral Registration

GIZ, August 2019, Management of Natural Resources and Safeguarding of Ecosystem Services for Sustainable Rural Development in the South Caucasus (ECOserve)

GIZ, Energy Demand, Supply and Efficiency in Rural Armenia: Baseline Data Collection and Analysis

GIZ, Government of Armenia, Integrated Biodiversity Management, South Caucasus (IBIS) – Lessons Learned 2015-2019

Scientific and Technical Advisory Panel, October 1, 2013, STAP Scientific and Technical Screening of the Project Identification Form (PIF)

SFM Project, 2018-2020, Report on project work aimed at studying degraded community pastures of the RA Lori and Tavush marzes, assessment results, implemented rehabilitation measures and organizing works of land cultivation, sowing of fodder crops in demonstrative areas of uncultivated arable lands, as well as providing professional consultation

SFM Project, 2020, Assessment of Effectiveness of Initiatives Implemented in Tavush and Lori Marzes (Brief version)

SFM Project, Annual Project Progress Report 2016, 2017, 2018, 2019 and Semi-annual 2020

SFM Project, Atlas Risk Log

SFM Project, AWPs 2016, 2017, 2018, 2019, 20210

SFM Project, Back to Office Reports from 2016 to 2020

SFM Project, CDRs 2016, 2017, 2018, 2019, 20210

SFM Project, Co-financing Factual Reports

SFM Project, Efficient Pasture Management, Degraded Pasture Restoration and Improvement

SFM Project, List of Tangible Assets

SMF Project, Management Board Meetings Minutes August 16, 2016, March 31, 2017, December 21, 2017, February 13, 2018, December 20, 2018 and December 24, 2019

SFM Project, PIRs 2017, 2018, 2019 and 2020

SFM Project, September 8, 2020, Report to Terminal Evaluation Team

SFM Project, Terms of Reference for Mid-Term Review of the UNDP/GEF Project: "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern part of Armenia"

SFM Project, Tracking Tools LD-PMAT, Climate Change Mitigation, Sustainable Forest Management (SFM) REDD, and Biodiversity completed at design, mid-term and terminal evaluation

SFM Project, Videos and Photos

Sinergetika & Avenue Consulting, February 9, 2020, *Towards a Sustainable Development of Biomass Use for Heating in Armenia – Roadmap*

Sinergetika & Avenue Consulting, January 7, 2020, Sustainable Development of Biomass Use for Heating in Armenia (Final Draft)

UN, Agreement Between the Government of the Republic of Armenia and the UNDP Regarding Assistance to and Cooperation with the Government

UN, April 14, 2015, Country Programme Document for Armenia (2016-2020)

UN, Government of Armenia, Armenia - United Nations Development Assistance Framework 2016-2020

UN, Government of Armenia, United Nations Development Assistance Framework 2010-2015 - Armenia

UN, January 9, 2014, UNDP Gender Equality Strategy 2014-2017 – The Future We Want: Rights and Empowerment

UN, June 2020, Final Evaluation of the United Nations Development Assistance Framework (UNDAF) for Armenia (2016-2020)

UNDP, GEF, Government of Armenia, August 2016, Inception Report – "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern part of Armenia" Full-sized Project

UNDP, GEF, Government of Armenia, Project Document: Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia

UNDP, Government of Armenia, Country Programme Action Plan Between the Government of the Republic of Armenia and the UNDP 2016-2020

UNDP, July 1, 2011, National Implementation by the Government of UNDP Supported Projects: Guidelines and Procedures

UNDP, Project Document Addressing Climate Change Impact Through Enhanced Capacity for Wildfires Management in Armenia

UNDP, Project-Level Evaluation – Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects

UNDP, SGP, July 18, 2017, Letter of Intent on Collaboration Between the UNDP-GEF SGP and Sustainable Land and Forest Management Project

UNDP, Strengthening the National System of Forest Inventory in the Republic of Armenia (not approved)

UNDP IEO, Independent Country Programme Evaluation – Armenia

UNECE, FAO, 2020, Overview of the State of Forests and Forest Management in Armenia

Valentina Bodrug-Lungu, December 2018-January 2019, Report on Gender Analysis within the Framework of the Project: Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern Armenia

Yeva Danielyan, February 20-22, 2019, Criteria and Indicators for Sustainable Forest Management for Armenia
, Annex 1: 2016-2020 Country Programme Results and Resources Framework, Revised in 2018
, Annex III. Mid-Term Report Final Recommendations and Management Response
, Bringing Beechand Oak Trees Back: UNDP Supports the Natural Growth of Forest in Tavush
, December 4, 2018, Mid-Term Review Report of Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes - Armenia
, December 4, 2019, Output 2.5 Carbon Stock Assessment and Coefficients for Key Forest Types in Armenia – Project Close Out Report (version 1.1)
, December 10, 2015, Strategy of the Republic of Armenia on Conservation, Protection, Reproduction and Use of Biological Diversity
, Exchange of Letters for project time extension
, Government Protocol Decision N38, Sept. 30, 2004, National Forest Policy and Strategy of the Republic of Armenia
, Government Protocol Decision N1232, July 2005, National Forest Programme of the Republic of Armenia
, Illegal Logging and Trade of Illegally-Derived Forest Products in Armenia
, List of indicators relevant for the Project, based on target communities (gender disaggregated)
, May 2020, UN Common Country Analysis for the Cooperation Framework and the 2030 Agenda – Republic of Armenia
, October 9, 2019, Forest Carbon Stock Measurements – Guidelines for Measuring Carbon Stocks in the North Eastern Forests of Armenia (version 1.5)
, Project Extension Request Form: 4416 PIMS Armenia - "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern Armenia" project
, Recommendations for the Creation of the National Strategy for the Inventory of Forests in the Republic of Armenia
, Report On the assessment of reduction in direct and indirect impact of human activity on forests are on sustainable land management thanks to the "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern Armenia" project
, Terms of Reference – Expert on "Forest Seed / Nursery and Reforestation / Afforestation Technologies"
, Title: Lintab – The "Ranger" Microscope
, Title: Herbs of Grandpa's Letters
, Title: "Dressing" Own Future
, Title: Cheese Threads that "Tie" to the Homeland
, Turning Waste into Money and Heat – A Win-win for People and the Environment
, UNDP Armenia 2016-2020 Country Programme Document – Mid-term Review – Interim Results, Lessons Learned and Proposed Changes

Website Consulted

www.thegef.org

https://www.am.undp.org

http://www.sgp.am

https://biodivers-southcaucasus.org

http://www.mnp.am/en/site/index

http://www.enpi-fleg.org

https://www.unece.org/unece/search?q=Forest+in+armenia&op=Search

Annex 8: Interview Protocol

<u>Note</u>: This interview protocol is a guide for the interviewer (a simplified version of the evaluation matrix). Not all questions were asked to each interviewee; it was a reminder for the interviewer about the type of information required to complete the evaluation exercise and a guide to prepare the semi-structured interviews. Confidentiality was guaranteed to the interviewees and findings were "triangulated" before being incorporated in the evaluation report.

- **I. RELEVANCE** How does the project relate to the main objectives of the GEF, UNDP and to the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?
- I.1. How is the Project relevant to GEF objectives?
- I.2. How is the Project relevant to UNDP objectives?
- I.3. How is the Project relevant to the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?
- I.4. How does the Project address the needs of target beneficiaries?

Future directions for similar projects

- I.5. What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment between the project and the Partners' priorities and areas of focus?
- I.6. How could the project better target and address priorities and development challenges of targeted beneficiaries?
- **II. COHERENCE** How well does the project fit with interventions to enhance sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?
- II.1. How is the coherence between the project and other interventions carried out by the same Partner?
- II.2. Is the Project internally coherent in its design?
- II.3. How is the coherence between the project and other relevant interventions?

Future directions for similar projects

II.4. What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment, its coherence and complementarity between the project and other relevant interventions?

III. EFFECTIVENESS – To what extent have the expected outcomes and objectives of the project been achieved?

- II.1. How is the Project effective in achieving its expected outcomes?
 - Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management
 - o Investment in demonstrating improved sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services
- II.2. What are the factors which contributed to these achievements?
- II.3. Were they any delays?
- II.4. Were there any factors beyond the control of the project and government which affected the implementation of the project?
- II.5. How were the risks managed and risk mitigation measures undertaken?

Future directions for similar projects

- II.6. What lessons have been learnt for the project to achieve its outcomes?
- II.7. What changes could have been made (if any) to the formulation of the project in order to improve the achievement of project's expected results?
- II.8. How could the project be more effective in achieving its results?

IV. EFFICIENCY - Was the project implemented efficiently, in-line with international and national norms and standards?

- III.1. Is adaptive management used or needed to ensure efficient resource use?
- III.2. Do the *Project Results Framework* and work plans and any changes made to them used as management tools during implementation?
- III.3. Are accounting and financial systems in place adequate for project management and producing accurate and timely financial information?
- III.4. How adequate is the M&E framework (indicators & targets)?
- III.5. Are progress reports produced accurately, timely and respond to reporting requirements?

- III.6. Are financial resources utilized efficiently? Could financial resources have been used more efficiently?
- III.7. Is the leveraging of funds (co-financing) happening as planned?
- III.8. Is project implementation as cost effective as originally proposed (planned vs. actual)
- III.9. How is Results-Based-Management (RBM) used during project implementation?
- III.10. Are there an institutionalized or informal feedback or dissemination mechanism for lessons learned for ongoing project adjustment and improvement?
- III.11. Does the project mainstream gender considerations into its implementation?
- III.12. How does the government demonstrate its ownership of the project?
- III.13. To what extent are partnerships / linkages between institutions / organizations encouraged and supported?
- III.14. Which partnerships/linkages are facilitated? Which one can be considered sustainable?
- III.15. What is the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP, and relevant government entities)
- III.16. Is an appropriate balance struck between utilization of international expertise and local capacity?
- III.17. Did the project take into account local capacity in design and implementation of the project?

Future directions for the project

- III.18. What lessons can be learnt from the project on efficiency?
- III.19. How could the project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements, etc.)?
- **V. IMPACTS** Are there indications that the project has contributed to securing the continued flow of ecosystem services through sustainable land and forest management in the Northeastern Armenia?
- IV.1. Will the project achieve its objective that is "Sustainable land and forest management in the Northeastern Armenia secures continued flow of ecosystem services?"
- IV.2. Did the project contribute to the reduction of environmental stress and/or ecological stress?
- IV.3. How is the Project impacting local environment and socio-economic issues?

Future directions for the project

IV.4. How could the project build on its successes and learn from its weaknesses in order to enhance the potential for impact of ongoing and future initiatives?

VI. SUSTAINABILITY - To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?

- V.1. Were sustainability issues adequately integrated in project formulation?
- V.2. Did the project adequately address financial and economic sustainability issues?
- V.3. Are laws, policies and frameworks being addressed through the project, in order to ensure sustainability of key initiatives and reforms?
- V.4. Is the capacity in place at national and local levels adequate to ensure sustainability of results achieved?
- V.5. Is there evidence that project partners will continue their activities beyond project support?
- V.6. Does the project contribute to key building blocks for social and political sustainability?
- V.7. Are project activities and results being replicated elsewhere and/or scaled up?
- V.8. What are the main challenges that may hinder sustainability of efforts?

Future directions for the project

- V.9. Which areas/arrangements under the project show the strongest potential for lasting long-term results?
- V.10. What are the key challenges and obstacles to the sustainability of results of project initiatives that must be directly and quickly addressed?

Are national decision-making institutions (Parliament, Government, etc.) ready to improve measures for the enhancement of sustainable land and forest management in the NE Armenia to secure continued flow of multiple ecosystem services?

Annex 9: List of People Interviewed

Preliminary List of Stakeholders to be Interviewed TERMINAL EVALUATION

UNDP-GEF project "Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia"

Mr./Ms.	Name of Stakeholder	Organization	Involvement in the project	Contacts (Email and Phone #)
		National, Regi	National, Regional, and Local Stakeholders	
-	Vardan Melikyan (Mr.)	Ministry of Environment (MoE)	Responsible for the forestry sector	vardan.melikyan@gmail.com +37491213489
2	Arusyak Vardanyan (Ms.)	Committee of Forest of Ministry of Environment	Head of committee, Responsible for the forestry sector programs	asiradeghyan.forestcommittee@gmail.com +37493189389
3	Vahe Matsakyan (Mr.)	"Hayantar" ("Armforest") SNCO, MoE	Head of "Armforest" SNCO, Responsible for daily management of forest sector	<u>forester.vahe@gmail.com</u> +37455600694
4	Ruben Petrosyan (Mr.)	"Hayantar" ("Armforest") SNCO, MoE	Adviser to director on forest programs and activities	ruben.armforest@gmail.com +37495653262
5	Arman Avagyan (Mr.)	Ministry of Environment	Forest monitoring division of "Hydrometeorology and monitoring" Agency, Forest monitoring issues	arman.avayan@gmail.com +37493500960
9	Samvel Kharatyan (Mr.)	Lori regional administration	Division of agriculture and nature protection (Project focal point)	<u>lori.gyugh@mta.gov.am</u> +377080044
7	Samvel Gevorgyan (Mr.)	Tavush regional administration	Division of agriculture and nature protection (Project focal point)	<u>tavush@mta.gov.am</u> +37494331140
∞	Gagik Palyan (Mr.)	Head of "Mets Pami" community, Lori region (Community representative)	Mets Parni public climatic revolving fund, Model briquetting facility	gagik-palyan@mail.ru +37455523565
6	Harut Manucharyan (Mr.)	Head of Berd consolidated community, Tavush region (Community representative)	Large-scale restoration of degraded pastures	hasmikmeligyan@list.ru +37493998844
³ O	mponent 1. Enabling environ	ment for the marzes in Northeaste	ern Armenia to plan, monitor and adap	Component 1. Enabling environment for the marzes in Northeastern Armenia to plan, monitor and adapt sustainable forest and land management
1	Inesa Zargaryan (Ms.)	Division of Forest policy and legislation of Ministry of Environment	Forest policy, legislation and by-laws	inesa.zargaryan@env.am +37494134237
2	Andranik Ghulijanyan (Mr.)	Young foresters National NGO	Drafting forest management plans	zikatar center@yahoo.com +37493453070
3	Arman Kandaryan (Mr.)	Geomap LLC	Cadastral mapping, Forest enterprises	geomap.am@gmail.com

Mr./Ms.	Name of Stakeholder	Organization	Involvement in the project	Contacts (Email and Phone #)
			borders correction	+37491542709
Compo	Component 2. Investment in demonstrating improved		nable forest and land management practices to re maintain flow of ecosystem services	sustainable forest and land management practices to reduce pressure on high conservation forests and maintain flow of ecosystem services
1	Moso Gharagyozyan (Mr.)	Noyemberyan forest enterprise	Chief forester - support in drafting of forest management plans and forest restoration activities	+37493807485
2	Armine Nerisyan (Ms.)	"Bridge of Hope" National NGO	Energy efficient solutions for kindergartens and schools, EE solutions to save forests	bridge ijevan@yahoo.com +37494100089
3	Suren Kostandyan (Mr.)	Vahagni community (Community Representative)	Installation of energy efficient ovens plus restoration of degraded pastures	<u>smb435@mail.ru</u> +37498661662
		N	UNDP Country Office	
	Georgi Arzumanyan (Mr.)	UNDP	Programme Policy Adviser, Climate, Environment and Resilience Portfolio	georgi.arzumanyan@undp.org +37499005065
7	Tatevik Koloyan (Ms.)	UNDP	Programme Manager Innovation, Acceleration and SDG Finance	tatevik.koloyan@undp.org +37491248070
3	Hovhannes Ghazaryan (Mr.)	UNDP	UNDP-GEF SGP coordinator, SLM/SFM project conducted certain activities in collaboration with SGP	hovhannes.ghazaryan@undp.org +37491200281
		Project Tea	Project Team, Experts and Consultants	
-	Hovik Sayadyan (Mr.)	UNDP	SLM/SFM Project Technical Task Leader	hovik.sayadyan@undp.org +37491382978
2	Lusine Sargsyan (Ms.)	UNDP	SLM/SFM Project Assistant	lusine.sargsyan(@undp.org +37494582584
С	Andrew Heywood (Mr.)	International expert	Consultancy on Forest carbon inventory and monitoring national system	<u>ahaywood3@gmail.com</u> +61414510359 +34610125898
4	Gevorg Petrosyan (Mr.)	Expert	Bio-residuals potential study, development of Mets Parni briquetting facility, Project interventions efficiency study	gevpetrosyan@gmail.com +374 93 71 45 33
S	Gagik Tovmasyan (Mr.)	Expert	Designed and monitored the implementation of restoration of ca.	arniltd1@rambler.ru +37491428079

Mr./Ms.	Name of Stakeholder	Organization	Involvement in the project	Contacts (Email and Phone #)
			1000 ha degraded forest pasture	+37498428079
9	Armen Nalbandyan (Mr.)	Expert	Selected and monitored the results of restoration of degraded forest	aarmennalbandyan@yahoo.com +37493189333
			ecosystems	
7	Karen Aghababyan (Mr.)	Expert	Development of bird and butterfly species Indicators	karen.aghabab <u>yan@gmail.com</u> +37491207751
		Intern	International Organizations	
1	Siranush Galstyan (Ms.)	GIZ-Armenia	Collaborative activities on forest management issues	siranush.galstyan@giz.de +374 43 001370
2	Karen Manvelyan (Mr.)	WWF-Armenia	Collaborative activities on forest biodiversity issues	kmanvelyan@wwfcaucasus.org +374 10 58 89 83

Interviewed 27 people (6 women and 21 men)

Annex 10: Rating Scales

As per UNDP-GEF guidance, the TE Evaluator used the following scales to rate the project:

- A 6-point scale to rate the project effectiveness, efficiency, overall project outcome Rating, M&E,
 IA & EA Execution
- A 4-point scale to rate the sustainability of project achievements;
- A 2-point scale to rate the relevance of the project; and
- A 3-point scale to rate the impact of the project.

	ntings for Project effectecution	tiveness, efficiency, overall project outcome Rating, M&E, IA & EA
6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice".
5	Satisfactory (S)	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.

Ra	Ratings for Sustainability				
4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved			
		by the project's closure and expected to continue into the foreseeable future			
3	Moderately Likely	Moderate risks, but expectations that at least some outcomes will be sustained			
	(ML)	due to the progress towards results on outcomes at the Midterm Review			
2	Moderately Unlikely	Significant risk that key outcomes will not carry on after project closure,			
2	(MU)	although some outputs and activities should carry on			
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained			

Ra	Ratings for Progress Relevance				
2	Relevant (R)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice".			
1	Not Relevant (NR)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.			

R	Ratings for Impact				
3	Significant (S)	Significant impact			
2	Minimal (M)	Minimal impact			
1	Negligible (N)	Negligible impact			

A	Additional ratings where relevant	
	Not Applicable (N/A)	
	Unable to Assess (U/A)	

Annex 11: AUDIT TRAIL

The Terminal Evaluation Audit trail is annexed in a separate file

Annex 12: Evaluation Report Clearance Form

Evaluation Report Clearance Form

Evaluation Report Reviewed and Cleared by						
UNDP Country Office Dmitri Mariassin Name:						
Signature: Date:						
UNDP RTA Name:Maxim Vergeichik	_					
Signature: Date:17 Dec 2020						