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FINAL EVALUATION

of the UNDP-Supported, GEF-Financed Project

“Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia”

(PIMS #3814, GEF ID #3417)



Map showing the 3 demonstration sites (1. Goris, 2. Kapan, 3. Meghri). Courtesy of the project

Final Report

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List of Abbreviations and Acronyms

ALM	Adaptation Learning Mechanism
APR	Annual Progress Report
AWP	Annual Work Plan
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)
CC	Climate Change
CBD	Convention on Biological Biodiversity
CDR	Combined Delivery Report
CEPF	Critical Ecosystem Partnership Fund
CNF	Caucasus Nature Fund
CO	Country Office
DO	Development Objective
ENVSEC	Environment and Security
FAO	Food and Agriculture Organization
FE	Final Evaluation
FMP	Forest Management Plan
FNC	First National Communication
FSP	Full Size Project
GEF	Global Environment Facility
GIZ	German International Development Agency
GMFC	Global Fire Management Center
GOA	Government Of Armenia
ILO	International Labor Organization
IPSAS	International Public Sector Accounting Standards
KfW	Kreditanstalt für Wiederaufbau (German Government-owned Development Bank)
LFA	Logical Framework Analysis
LPAC	Local Programme Appraisal Committee
MAVA	Maja, André, Vera, and Daria (Foundation for the Nature)
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MES	Ministry of Emergency Situations
METT	Management Effectiveness Tracking Tool
MNP	Ministry of Natural Protection
MOA	Ministry Of Agriculture
MSP	Medium Size Project
MTA	Ministry of Territorial Administration
MTE	Medium Term Evaluation
NEX	National Execution
NGO	Non-Governmental Organization
OSCE	Organization for Security and Cooperation in Europe
PA	Protected Area
PB	Project Board
PIMS	Project Information Management System
PIR	Project Implementation Review
PM	Project Manager
PRSP	Poverty Reduction Strategy Paper
RCU	Regional Coordination Unit
REC	Regional Environmental Center
SGP	Small Grant Programme
SMB	Sustainable Management of Biodiversity, South Caucasus
SNC	Second National Communication
SNCO	State Non-Commercial Organization
SPA	Strategic Priority on Adaptation
SPAN	Special Protected Area Network
TOR	Terms of Reference
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme

UNEP	United Nations Environmental Programme
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change
UNSAS	United Nations System of Accounting Standards
UNV	United Nations Volunteer
USD	United States Dollar
WWF	World Wildlife Fund
WB	World Bank

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DISCLAIMER

This report is the work of an independent consultant and does not necessarily represent the views, or policy, or intentions of the United Nations Development Programme (UNDP).

1. Main Conclusions and Recommendations¹

1.1. Background - Introduction

This report presents the findings of the Final Evaluation of the UNDP-Supported, GEF-Financed Project “*Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia*”. This final evaluation was performed by Mr. Jean-Joseph Bellamy on behalf of the United Nations Development Programme (UNDP).

Armenia’s forest ecosystems have been identified as a global conservation priority. It has been listed by WWF as a Global 200 Ecoregion, and by Conservation International as a biodiversity hotspot. The high level of biodiversity is one of the most important features of the Syunik region in south-eastern Armenia. This region, however, has also been identified as a critically vulnerable region of the country, especially in terms of the risk posed by climate change to its unique mountain forest ecosystems.

Several barriers exist preventing the adaptation of these ecosystems to climate change. They include: (i) a planning process that did not take into account climate change; (ii) a limited institutional and individual capacity to understand climate change, its impact and how to adapt; and (iii) no concrete experience of implementing adaptation response measures.

As a response, the project has been addressing these barriers. It was designed to increase the adaptive capacity of Armenia’s south-east mountain forest ecosystems to be resilient to climate change. Its goal was to assist Armenia in beginning a process by which strategies to moderate, cope with, and take advantage of the consequences of climate change are enhanced, developed, and implemented. In addition to the GEF resource, the Government has also allocated its own resources to achieve a normative situation whereby the forestry and biodiversity sectors in the Syunik region are managed in a way that forest ecosystems are better able to adjust to climate change.

The Armenia forest adaptation project is a UNDP supported, GEF financed project with a grant of USD 0.9 million and an expected co-financing of \$1.9 million. UNDP is the GEF implementing agency and the Ministry of Nature Protection is the executing agency. It is implemented under the National Execution (NEX) modality of UNDP. It is a 4-year project that started in May 2009 and it should be completed in June 2013.

Within this context, the specific objective of the project was to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region; which have been achieved through three outcomes:

- *Outcome 1:* The enabling environment for integrating climate change risks into management of forest ecosystems is in place
- *Outcome 2:* Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems
- *Outcome 3:* Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed

This final evaluation report documents the achievements of the project and includes five chapters. Chapter 1 presents the main conclusions and recommendations; 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 evaluation. Lessons learned are presented in Chapters 5 and relevant annexes are found at the back end of the report.

¹ Conclusions and Recommendations are in Chapter 1 with a brief background section. It is structured as an Executive Summary and a stand-alone section presenting the highlights of this final evaluation.

1.2. Conclusions

Project Design / Formulation

Conclusion 1: An extensive contextual analysis was conducted for the formulation of this project.

An extensive contextual analysis was conducted at the outset of this project during the formulation phase; including an extensive review of relevant interventions. It also included the review of the geographical and political context, socio-economic context, biodiversity context (forest ecosystems; and forest management), water resources context, climate change context (climate variability in the Syunik region; impact of climate variability on forests and biodiversity in the Syunik region; projected climate change in the Syunik region; impact of expected climate change on mountain forest ecosystems in the Syunik region), and legislation and policy context. This extensive review included the review of interventions related to sustainable development, protected areas and sustainable management of forest ecosystems, and, environmental policy and law.

Findings from this extensive review were used and incorporated into the design of this project. The analysis was concluded with the identification of critical barriers. The identification of these barriers helped to “position” this project with its focus on proposing adaptation measures to climate change into the management and protection of mountain forest ecosystems. As a result, the design of this project was solidly grounded in this contextual analysis and has been a direct response mechanism to national needs and priorities.

Conclusion 2: The review of the monitoring indicators and their respective targets revealed that they could be more specific and easier to measure.

The review of these indicators and their respective targets revealed that they could be more specific and easier to measure; particularly their respective targets. As they stand, these indicators are not specific enough to measure the progress of the project. As a result, the monitoring relies on lengthy qualitative statements. What was needed was a few additional capacity-based indicators with specific and easy to measure targets to complement the qualitative statements made in progress reports. It would have strengthened the reporting of progress made with more solid measured arguments to justify the progress.

This weakness was particularly true to measure the progress made at the objective level. The only indicator used was “*Enhanced resilience of mountain forest ecosystems in the Syunik region due to adaptation measures (such as better management of forest fires, pest holes)*”. The target at the end of the project was “*At least two types of resilience-enhancing measures employed by the project upon its completion, covering approximately 87% of forest covered area in Syunik (65,000 ha under the forest enterprises and 10,000 ha under SPANs)*”. It is true that if this target was met, it would contribute to the objective of the project that was “*To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region*”. However, a more in-depth analysis of this indicator reveals that (1) the target was somewhat unrealistic to impact 87% of the forest covered area in the Syunik region; and (2) the main objective of the project was to enhance adaptive capacities for these ecosystems. A few (1-2) capacity-based indicators to measure progress at the objective level would have greatly enhanced the monitoring framework of the project. It was also noted that this aspect was already commented by the mid-term Evaluator, who suggested “*additional robust, quantitative objective indicators to measure the impact of the project at the objective level*”.

Nevertheless, despite this weakness in the choice of indicators, the Evaluator noted that progress reporting was done in a very professional manner compensating for the lack of specificity and easy to measure indicators. All progress reports – particularly the APR/PIRs – were all comprehensive reports with ratings well supported/justified with good analysis of progress.

Project Implementation

Conclusion 3: 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 GOA procedures for the implementation of the project. The review indicates that project achievements are well aligned with the project document that was endorsed by stakeholders. The log-frame included in the project document had been used as a guide 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 and the project progress was well monitored.

However, what was particularly successful was the extensive use of adaptive management to secure project deliverables while maintaining adherence to the overall project design. Adaptive management was used regularly to adapt to a changing environment. It was particularly used as a flexible mechanism to respond to stakeholders' needs and priorities. As a result, activities supported by the project benefited from a good participation of stakeholders. Adaptive management was also used as a management approach to identify and decide where the project financial resources would be allocated. On one hand, the log-frame gave the project team an overall plan on how to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region; on the other hand the project team keeps some management flexibility to properly allocate financial resources available by collaborating with partners to implement jointly activities related to the management of mountain forest ecosystems.

A good example using adaptive management is when the project partnered with OSCE for organizing and funding a succession of events in 2011. The project provided equipment for managing and preventing forest fires to the forest enterprises in Goris and Kapan and to the Arevik National Part Administration. In parallel, OSCE provided financial support to organize a one-day training for firefighters and foresters on fire management with the technical support from the Global Fire Management Center (GFMC) out of Germany. This event was followed by a drill on fire management organized in the Syunik region, coordinated by the Ministry of Emergency Situations, and using the equipment procured by the project. Then on the third day, a Conference "*Forecast, Prevention and Suppression of Forest and Grassland Fires*" and a Round Table on "*Fire Management*" took place in Yerevan. The round table concluded with the need to form a permanent national task force on forest and grassland fire management to review the progress made on fire management and identify an action plan for the way forward. The use of adaptive management allowed the project management team to coordinate this succession of events with OSCE's initiative providing flexibility in the organization of such joint events.

Conclusion 4: The project found good synergies through the cooperation with key related projects/partners.

The partnerships of the project with the related interventions in Armenia were good and provided excellent synergies among these programmes. These partnerships led to some excellent synergies among partners including among the donor community and the relevant government departments/services. As mentioned in a project communication "*The joint venture of the parties set a good example on how partnership can create change beyond individual efforts*".

One example of partnership was the succession of events that took place in 2011 where joining forces to develop forest and grassland fire management capacity in Armenia was seen as a partnership to create the required change. Together, UNDP, the Armenian Rescue Service, the OSCE office in Yerevan and the Global Fire Monitoring Center from Germany supported a series of events aiming at developing forest and grassland fire management capacity in Armenia. These events were organized over a three-day period and reached over 300 participants from various organizations. Additionally, these events led to the establishment of a National Task Force on Wildfire Management to coordinate and review the work that had been implemented by all partners and to draft and review the soon-to-be finalized National Programme on Wildfire Management.

Other examples include the good partnership with the Rescue Service from the Ministry of Emergency Situations. The forest fire equipment procured by the project was replicated by the Armenian Rescue Service that decided to purchase 100 additional backpack pumps for fire and rescue detachments in Syunik, Lori, Tavush and Aragatsotn Marzes. The project also cooperated well with the National Task Force on Forest and Grassland Fire Management managed by MES. It provided significant technical assistance, including the analysis of forest fire trends and forest fire preparedness as well as the development of the National

Programme and Action Plan on Improved Wildfire Management to be implemented over the period 2013-2015².

Also, the project supported the local NGO-led initiative to legally ban the burning of agricultural waste and stubble field. Recommendations for eliminating wild fire spreading were introduced in an Amendment to the Article 21 of the RA Law “On Atmospheric Air Pollution”, which was adopted by the National Assembly on September 14, 2011 (AL-250-N).

A final example is the partnership with CNF and the “Arevik National Park” SNCO to demonstrate a pest control programme over 500ha located in the park. Pest monitoring started before the 2012-2013 winter, then an assessment of monitoring data was conducted and on May 30-31, 2013, an aerial spray took place over 500ha in the Park. The project procured 1,000kg of biological insecticide, and the CNF funded the cost of the aerial work through the “Arevik National Park” SNCO, which hired a company with a helicopter outfitted with sprayers to conduct this aerial work.

Conclusion 5: The project leveraged a much higher level of co-financing when compared to what was anticipated at the outset of the project.

The co-financing commitments at the outset of the project totaled the amount of USD 1,900,000 that was to be provided in-kind by “Hayantar” SNCO. This amount was reviewed and confirmed during the inception phase. Additionally, a potential risk that this co-financing commitment may not be translated into actual co-financing was identified.

However, at the end of the project, figures indicate that the project was able to leverage a much higher level of co-financing: \$3.4M versus \$1.9M. This difference is mostly due to the various partnerships that the project participated in. At the outset of the project the plan and commitment was only with “Hayantar”. However, as the project moved into implementation, it partnered with relevant initiatives in Armenia such as WWF, OSCE and CNF. In addition, the Rescue Service of MOA got truly involved into this initiative as well as the “Arevik National Park” SNCO. Finally, the project also benefited from the presence of a UN Volunteer for over 2 years funded by the Government of Finland.

These numbers reflect the good partnership arrangements that the project management team established during the implementation, allowing good synergies for an effective implementation of activities and contributing to a good cost-effectiveness of the project.

Conclusion 6: The UNDP Climate Change Information Center of Armenia played a key-backstopping role to the project.

The UNDP Climate Change Information Center of Armenia played a key-backstopping role to the project. This center was created in 1997 within the framework of the UNDP/GEF “*Armenia - Country Study on Climate Change*” Program and of the First National Communication under the UNFCCC. The primary goal of creating the Center was to assist in the preparation of the First National Communication through collecting the relevant information and making it accessible to national partners and experts. In addition, the Center was also aimed at identifying and creating the network of national and international information sources, finding partners with international climate change potential who might collaborate also in future programs. Currently, the Center also provides regular exchange of information with the use of its website. The Centre has been a major tool to backstop the project by providing technical expertise and also to store and disseminate information from the project making it available to the general public through its web site. Working as a team of experts, the Center was able to provide a broader skill set to the project.

2 Since this review, the government approved this national programme on May 29, 2013 titled “*On the Approval of the Republican Target Programme and Complex Action Plan towards Improving Fire Safety in Forest and Other Vegetation Covered Areas*”. The programme and action plan covers a wide range of measures to be implemented, including revision of legal acts, increase of public awareness and educational reforms, fire risk reduction and improved fire preparedness, increase of capacities for early response to fires, etc.

Project Results

Conclusion 7: The implementation of the project was effective in achieving its expected results.

The project was successful and effective in delivering its expected results. It was able to achieve what it was intended to achieve in the planned timeframe. The project used adaptive management extensively to provide flexibility in the project's approach working with partners and related government institutions. As a result, the project was seen as a response to national needs and with a good ownership and stakeholders were engaged on all project activities. The review found that three critical success factors explain partially this effectiveness: (i) the project was well designed, responding to national needs and benefitting from an excellent engagement and participation of stakeholders; (ii) an excellent project team – including experts and consultants - to implement this project with good participative and collaborative principles; (iii) a good flexibility in allocating project resources and implementing activities to be able to respond to stakeholders needs and search for cost-effectiveness through partnerships.

In addition to the logic model composed of three outcomes, the project team used also another logic to implement the project on a day-to-day basis. When reviewing the project strategy (log-frame), the project team had, first, to pilot climate change adaptation measures through demonstrations. Then, on the basis of lessons learned from these demonstrations, these measures were validated by stakeholders and proposed to the government as adaptation measures to be mainstreamed in key policy, procedures and institutions. A large part of the implementation of the project was directed at three areas of forest management: (i) forest regeneration; (ii) forest fires; and (iii) pest management. Demonstrations in these 3 areas formed the basis of the results of this project. This is from these results that the project management team was able to draft a series of guidelines, manuals, proposals to improve the data collection and interpretation, identification of pre-conditions for an early warning and response system, design public awareness campaigns, conducting professional training and identification of policy directions related to climate change risks and adaptation to be mainstreamed in the environmental management framework of Armenia.

Conclusion 8: The project was highly relevant for Armenia and also for GEF in the context of its strategic priority to “*Pilot an Operational Approach to Adaptation*”.

The timing of this project was excellent to be part of a global initiative to pilot an approach to adaptation to climate change. It was also excellent to address needs to adapt to climate change in specific regions of Armenia; particularly the Syunik region, which was highlighted as vulnerable to climate change in the Second National Communication (SNC) to UNFCCC. Within this context, the project provided lessons learned from the piloted initiatives supported by the project, which will be used to advance the climate change adaptation agenda in Armenia but also globally through the dissemination of results on the web.

At the time of the design, the mountain forest ecosystems in the Syunik region were identified as a global conservation priority and were listed by WWF as a Global 200 Ecoregion, and by Conservation International as a biodiversity hotspot. In 1998, under the First National Communication (FNC) to the UNFCCC a comprehensive vulnerability and adaptation assessment concluded that the forest in the south-east region of Armenia was a critically vulnerable region in the country, especially in terms of the risk posed by climate change to its unique mountain forest ecosystems.

During the formulation of this project, several barriers were identified, including: (i) a planning process that did not take into account climate change; (ii) a limited institutional and individual capacity to understand climate change, its impact and how to adapt; and (iii) no concrete experience of implementing adaptation response measures. As a result, this project was designed to address these barriers and provide resources to pilot adaptation measures to climate change for mountain forest ecosystems in the Syunik region with the aim of increasing the capacity of Armenia's south-east mountain forest ecosystems to be resilient to climate change. The timing and the objective of this project made it very relevant for Armenia.

At the global level, this project was part of a set of 26 adaptation projects that were funded by the GEF under its “*Strategic Priority on Adaptation (SPA)*”. It was the first group of adaptation projects funded by the GEF. These projects were to pioneer on-the-ground interventions for adaptation to climate change and to learn

lessons from each of these 26 projects. The SPA was established by the GEF in 2004 as a response to UNFCCC guidance and it allocated \$50 million from the GEF Trust Fund to finance it.

Conclusion 9: The country ownership of the project and its achievements is good.

The project was a response to national priorities and needs; it was designed on the basis of a strong assessment of the sector and it addressed critical barriers to implement a climate change adaptation agenda for mountain forest ecosystems in Armenia. It partnered with all key relevant initiatives in Armenia and the country ownership was largely due to a good participation of stakeholders including all key government ministries and agencies. For each major activity, key stakeholders were part of the decision making process including the decision on the design of activities and the allocation of project resources.

For instance, the four reforestation demonstrations (Goris, Tatev, Kapan and Meghri) were initiated following a detailed design phase. Experts led the process with the participation of local forest enterprises (Goris and Kapan) and the Arevik National Park to identify the areas to be reforested matching the selection criteria related to the objective of the project in this area. All key stakeholders reviewed these design documents and it was only when a consensus was reached that project resources were mobilized and the implementation of reforestation demonstrations went ahead. The design process was an excellent process to develop a good ownership from all stakeholders involved in the implementation of these reforestation demonstrations.

The same approach was used to procure forest fire equipment. A first list of equipment was collated together with help of an international expert on fire management and with the support of the Global Fire Management Center (GFMC) out of Germany. This list was reviewed and revised by key stakeholders including Hayantar and the Rescue Service from the Ministry of Emergency Situations. Once all stakeholders agreed on the list, the project team mobilized the resources and launched the procurement process to acquire the forest fire equipment. As a result, recipients of this equipment were eager to receive it and the drill conducted in 2011 in Goris and Kapan using this equipment was a major success. The provision of new modern forest fire equipment strengthened the services mandated – forest enterprises and Rescue services - to prevent and manage forest fires. Additionally, the forest enterprises found additional ways to use this equipment, such as using the “slip-on-unit” (a removable water tank with an engine and a pump mounted on a pickup truck to extinguish fires) for other tasks such as watering young trees planted recently and that need to be water a few times during the first few years if needed.

It is also expected that this good country ownership will contribute to the long-term sustainability of project achievements. It is particularly critical for the current phase that is to learn from the demonstrations supported by the project and to mainstream the results on climate change adaptation measures into the environmental management framework in Armenia. The good country ownership should ensure the scaling up of project achievements.

Conclusion 10: The prospect for the long-term sustainability of project achievements is good.

The review indicates that the achievements are likely to be sustainable. The demonstrations were conducted successfully and they should become part of the day-to-day work of the respective agencies: forest enterprises of Goris and Kapan, Monastery of Tatev and the Arevik National Park Administration. They also committed to continue the necessary maintenance for the reforested areas following their own guidelines for reforestation. Regarding the forest fire equipment, it is used and they will continue to use it more and more as it becomes a “must have” equipment in this region to respond to forest fires.

Furthermore, the results from these demonstrations have been used to draft sets of guidelines, manuals and policy directions that have been submitted to the government with the objective of being mainstreamed in relevant policies, legislation, institutional mandates and procedures, etc. The Project Team has already used these results to establish guidelines to mainstream climate change risks into the formulation of forest management plans. Some lessons learned were already published and are available on the web³. A manual to

³ <http://www.undp-alm.org/resources/case-study/building-wildfire-management-capacities-enhance-adaptation-vulnerable-mountain>

integrate climate change risks in forest management is being drafted and should be submitted to the MNP and Hayantar for their use before the end of the project. A new model to elaborate Action Plans for the prevention and suppression of forest fires is also being drafted, emphasizing the roles and responsibilities of each agency at the local level. This model should be soon (before the end of project) submitted to the Ministry of Emergency Situations and the Ministry of Territorial Administration for replacing/strengthening the current forest fire planning process done at the district level. The results from the pest control demonstration are used to improve an existing database on pest monitoring at the American University of Armenia, which is used in related university programmes and to conduct research. Templates for pest monitoring and reporting were developed and are already used by the Arevik National Park rangers. In the medium term, it is expected that all foresters and rangers in Armenia will use these templates. There are also ongoing discussions with the hydro-met office to develop an early warning system to prevent forest fires. All these achievements are already or on the way to be institutionalized; therefore, their long-term sustainability should be ensured.

Conclusion 11: Local forest and protected area authorities need a lot more capacity development including skills and knowledge, adequate resources, and more empowerment to manage local natural resources, enforce existing laws and involve local communities into the management of natural resources.

Based on the review conducted for this final evaluation, the Evaluator noted that despite the good work of this project and other initiatives and partners engaged in Armenia to strengthen the government's capacity to manage and protect forests and protected areas, there is still a sense that these activities are mostly "peripheral" to the core issues of this sector that is a low capacity to manage and protect forests and protected areas, including limited resources (lack of budget), weak law enforcement capacity, poor planning process and complex institutional setup with procedures and mechanisms in need to be upgraded.

It seems to be a critical area that would need attention for any major improvement in this sector over the medium and long-term. Institutions with the mandate of managing and protecting forests and protected areas need the necessary resources, the proper procedures, the skills and the knowledge to perform their duties effectively.

1.3. Recommendations

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

Recommendation #1

It is recommended to publish key project findings on the UNDP Adaptation Learning Mechanism (ALM) and also on the GEF Global Knowledge Sharing Platform⁴.

Issue to Address

The project produced good information products reflecting the achievements of the project. Currently, the UNDP Climate Change Center provides a web platform for this information to be disseminated through its website⁵. Most information products are already posted on this site. Additionally, lessons learned from the experience on forest fire management were compiled and published in 2012 under the title "*Building wildfire management capacities to enhance adaptation of the vulnerable mountain forests of Armenia - Lessons from recent experience*". This publication was posted at the following websites: UNDP Adaptation Learning Mechanism (ALM), UNDP-GEF site, UNDP Armenia, Ministry of Nature Protection of Armenia, and UNDP Climate Change Information Center of Armenia. Finally, a video on "*Adapting to Climate Change Impacts in Mountain Forest Ecosystems of Armenia*" as well as a case study on the project were posted on the GEF Adaptation Learning Mechanism web site.

Recognizing that a lot of information is already available on the web, it is recommended to post more of these publications on global sites such as the UNDP Adaptation Learning Mechanism and the GEF Global

⁴ <http://www.adaptationlearning.net>

⁵ <http://www.nature-ic.am/en/index>

Recommendation #2

It is recommended to organize a final workshop on the management of mountain forest ecosystem in association with existing related initiatives and upcoming projects in Armenia.

Issue to Address

The project is ending at the end of June 2013. It is important to maximize the sharing of its accumulated body of knowledge before it closes. In addition, this is a good timing with few upcoming projects such as the CLIMA East project funded by the EU and implemented by UNDP, a REDD+ project funded by GEF and implemented by UNDP, a FAO forest inventory project. It would be recommended to organize such event in cooperation with the exiting partners such as WWF, OSCE, CNF and GIZ.

One focus of this event should be on the capacity of local authorities and community engagement/participation in the management of local natural resources/forests. If the timing allows, the event and the proceedings could coincide with the finalization of the National Strategy on Fire Management and the review of the revised guidelines for elaborating Forest Management Plans.

Recommendation for future projects focusing on natural resources/forest management

Recommendation #3

It is recommended to focus more on community involvement in the management of natural resources – including forests - in Armenia.

Issue to Address

It was noted during the review that community involvement in environmental management in Armenia is not yet well developed. The attempt made by the project to involve communities was good but more is needed in this area, including better guidelines in the Forest Management Plans (FMPs) on what local communities can contribute to the management of local forest resources and how to involve these local communities.

It is not an area that was emphasized by the project and the experience worldwide indicates that community involvement should become a greater priority in strengthening the management of local natural resources in Armenia. It is now well known worldwide that the management of local natural resources includes the involvement of local communities, recognizing that people and their livelihoods rely on the health and productivity of their landscapes, and their actions play a critical role in maintaining this health and productivity.

1.4. Rating Table

Below is the rating table as requested in the TORs. It includes all the required performance criteria rated as per the rating scales presented in Annex D of the TORs.

Table 1: Rating Table

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

2. CONTEXT AND OVERVIEW OF THE PROJECT

1. Armenia's forest ecosystems have been identified as a global conservation priority in as much as they fall under the Caucasus-Anatolian-Hyrcanian Temperate Forests Ecoregion that has been listed by WWF as a Global 200 Ecoregion, and by Conservation International as a biodiversity hotspot. The high level of biodiversity is one of the most important features of the Syunik region in south-eastern Armenia. The region's ecosystems form part of the eco-corridor of the Eastern Lesser Caucasus that has been identified as a conservation priority by the Ecoregional Conservation Plan for the Caucasus. Recognizing the need to protect the unique biodiversity of this region, the government has established five specially protected areas, and is in the process of establishing three others. This region, however, has also been identified as a critically vulnerable region of the country, especially in terms of the risk posed by climate change to its unique mountain forest ecosystems. This conclusion comes from the first comprehensive vulnerability and adaptation assessment undertaken for Armenia under the aegis of its First and Second National Communications to the UNFCCC.

2. Several barriers exist preventing the adaptation of these ecosystems to climate change. They include: (i) the planning process that governs management of forest ecosystems does not include the climate change threat as a criterion in decision making; (ii) institutions and individuals do not have the technical capacity to observe and forecast adaptive capacity of forests, understand changes in forest species spurred by climate change including impacts on communities reliant on forest resources, identify options for autonomous and planned adaptation, and then to use this information to raise awareness and mobilize programmatic choices regarding the protection of forest ecosystems in the face of climate change; (iii) there are no concrete experiences with implementing adaptation response measures, which can be leveraged to motivate wide scale acceptance and adoption of such measures.

3. As a response, the project has been addressing these barriers. It was designed to increase the adaptive capacity of Armenia's south-east mountain forest ecosystems to be resilient to climate change. Its goal was to assist Armenia in beginning a process by which strategies to moderate, cope with, and take advantage of the consequences of climate change are enhanced, developed, and implemented. In addition to the GEF resource, the Government has also allocated its own resources to achieve a normative situation whereby the forestry and biodiversity sectors in the Syunik region are managed in a way that forest ecosystems are better able to adjust to climate change.

4. The Armenia forest adaptation project is a UNDP supported, GEF financed project with a grant of USD 0.9 million and an expected co-financing of \$1.9 million. UNDP is the GEF implementing agency and the Ministry of Nature Protection is the executing agency. It is implemented under the National Execution (NEX) modality of UNDP. It is a 4-year project that started in May 2009 and it should be completed in June 2013.

5. Within this context, the specific objective of the project was to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region; which will be achieved through three outcomes:

- *Outcome 1:* The enabling environment for integrating climate change risks into management of forest ecosystems is in place
- *Outcome 2:* Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems
- *Outcome 3:* Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed

3. EVALUATION FRAMEWORK

6. This final evaluation (a requirement of UNDP & GEF procedures) has been initiated by UNDP Armenia as the GEF Implementing Agency. This evaluation will provide an in-depth assessment of project achievements and recommendations for other similar UNDP-supported, GEF-financed projects in the region and worldwide.

3.1. Objectives

7. The objectives of the evaluation is 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. More specifically, the evaluation:

- Assessed the overall performance against the project objective and outcomes as set out in the project document, project's logical framework and other related documents;
- Assessed the effectiveness and efficiency of the project;
- Analyzed critically the implementation and management arrangements of the project;
- Assessed the progress to date towards achievement of the outcomes;
- Reviewed planned strategies and plans for achieving the overall objective of the project within the timeframe;
- Assessed the sustainability of project's interventions;
- Listed and documented lessons concerning project design, implementation and management;
- Assessed project relevance to national priorities (including achieving gender equality goals);
- Provided guidance for closing project activities.

3.2. Scope

8. Below is a summary of the elements that were covered by this evaluation. Each element was assessed and those marked with an "*" were rated as per the TOR. These elements are:

- **Project Formulation**
 - Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
 - Assumptions and Risks
 - Lessons from other relevant projects (e.g., same focal area) incorporated into project design
 - Planned stakeholder participation
 - Replication approach
 - UNDP comparative advantage
 - Linkages between project and other interventions within the sector
 - Management arrangements
- **Project implementation**
 - Adaptive management (changes to the project design and project outputs during implementation)
 - Partnership arrangements (with relevant stakeholders involved in the country/region)
 - Feedback from M&E activities used for adaptive management
 - Project Finance
 - Monitoring and evaluation: design at entry and implementation (*)
 - Contribution of Implementing and Executing Agencies (*)
- **Project results (outputs, outcomes and objectives)**
 - Overall results (attainment of objectives) (*)
 - Relevance (*)
 - Efficiency (*)
 - Country ownership
 - Mainstreaming
 - Sustainability (*)
 - Impact (*)

3.3. Methodology

9. The methodology used to conduct this final evaluation complied with international criteria and professional norms and standards; including the norms and standards adopted by the UN Evaluation Group.

3.3.1. Overall Approach

10. The evaluation was conducted in accordance with the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects⁶. It was undertaken in-line with GEF principles, which are: *independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility and utility*. It considered the two GEF evaluation objectives at the project level: (i) promote accountability for the achievement of GEF objectives; including the global environmental benefits; and (ii) promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners.

11. The Evaluator developed tools in accordance with the UNDP and GEF policies to ensure an effective project evaluation. The evaluation was conducted and the findings were structured around the GEF five major evaluation criteria; which are also the five internationally accepted evaluation criteria set out by the Development Assistance Committee of the Organization for Economic Co-operation and Development. There are:

- *Relevance* relates to an overall assessment of whether the project was in keeping with donors and partner policies, with national and local needs and priorities as well as with its design.
- *Effectiveness* is a measure of the extent to which formally agreed expected project results (outcomes) have been achieved, or can be expected to be achieved.
- *Efficiency* is a measure of the productivity of the project intervention process, i.e. to what degree the outcomes achieved derive from efficient use of financial, human and material resources. In principle, it means comparing outcomes and outputs against inputs.
- *Impacts* are the long-term results of the project and include both positive and negative consequences, whether these are foreseen and expected, or not.
- *Sustainability* is an indication of whether the outcomes (end of project results) and the positive impacts (long term results) are likely to continue after the project ends.

12. In addition to the UNDP and GEF guidance for project evaluation, the Evaluator applied to this mandate his knowledge of evaluation methodologies and approaches and his expertise in global environmental issues. 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 was immediately referred to the client if needed; and (iii) *Respect and anonymity*: All participants had the right to provide information in confidence.

13. The evaluation was conducted following a set of steps presented in the table below:

Table 2: Steps Used to Conduct the Evaluation

<p><u>I. Review Documents and Prepare Mission</u></p> <ul style="list-style-type: none"> ▪ Collect and review project documents ▪ Elaborate and submit Inception Report ▪ Prepare mission: agenda and logistic 	<p><u>III. Analyze Information</u></p> <ul style="list-style-type: none"> ▪ In-depth analysis and interpretation of data collected ▪ Follow-up interviews (if necessary) ▪ Elaborate and submit <u>draft evaluation report</u>
<p><u>II. Mission / Collect Information</u></p> <ul style="list-style-type: none"> ▪ Mission to Armenia ▪ Interview key Stakeholders ▪ Further collect project related documents ▪ Mission debriefings 	<p><u>IV. Finalize Evaluation Report</u></p> <ul style="list-style-type: none"> ▪ Circulate draft report to UNDP/relevant stakeholders ▪ Integrate comments and submit <u>final report</u>

14. Finally, the Evaluator signed and applied the “*Code of Conduct*” for Evaluation Consultant. The

⁶ UNDP Evaluation Office, 2012, *Project-Level Evaluation – Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects*.

Evaluator conducted evaluation activities, which were independent, impartial and rigorous. This final evaluation 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

15. The evaluation provided evidence-based information that is credible, reliable and useful. The findings were triangulated through the concept of “multiple lines of evidence” using several evaluation tools and gathering information from different types of stakeholders and different levels of management. 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 TOR, the project log-frame and the review of key project documents (*see Annex 2*). This matrix is structured along the five GEF 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.

Documentation Review: The Evaluator conducted a documentation review in Armenia and in Canada (*see Annex 3*). In addition to being a main source of information, documents were also used as preparation for the mission of the Evaluator. 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 was completed during the mission.

Interview Guide: Based on the evaluation matrix, an interview guide was developed (*see Annex 4*) to solicit information from stakeholders. As part of the participatory approach, the Evaluator ensured that all parties view this tool as balanced, unbiased, and structured.

Mission Agenda: An agenda for the mission of the Evaluator to Armenia was developed during the preparatory phase (*see Annex 5*). The list of Stakeholders to be interviewed was reviewed, ensuring it represents all project Stakeholders. Then, interviews were planned in advance of the mission with the objective to have a well-organized and planned mission to ensure a broad scan of Stakeholders’ views during the limited time allocated to the mission.

Interviews: Stakeholders were interviewed (*see Annex 5*). The semi-structured interviews were conducted using the interview guide adapted for each interview. All interviews were conducted in person with some follow up using emails when needed. Confidentiality was guaranteed to the interviewees and the findings were incorporated in the final report. A stakeholder workshop on initial findings was held in Yerevan on March 28th, 2013 (*see List of Participants in Annex 5*).

Achievement Rating: The Evaluator rated project achievements according to the guidance provided in the TORs and consisting of four specific rating scales for rating (1) Outcomes, Effectiveness, Efficiency, M&E and Execution; (2) Sustainability; (3) Relevance; and (4) Impact.

3.4. Limitations and Constraints

16. The approach for this terminal evaluation is based on a planned level of effort of 15 days, including a one-week mission to Armenia to interview key stakeholders, collect evaluative evidence and a two-day visit to the Syunik region. Within the context of these limited resources, the independent Evaluator was able to conduct an assessment of actual results against expected results and successfully ascertains whether or not the project met its main objective - as laid down in the project design document - and whether or not the project initiatives are, or are likely to be, sustainable after completion of the project.

17. Based on the findings the Evaluator also made a few recommendations that may be useful to reinforce the long-term sustainability of project achievements. Finally, this report also contained lessons learned and best practices, which could be further taken into consideration during the development and implementation of other similar GEF projects in the region and elsewhere in the world.

4. EVALUATION FINDINGS

18. This section presents the findings of this final evaluation adhering to the basic structure proposed in the TOR and as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

4.1. Project Design / Formulation

19. This section discusses the assessment of the formulation of the project and its overall design; particularly its relevance to the implementation of the project.

4.1.1. Analysis of Logical Framework (LFA)/Results Frameworks

20. The logical framework matrix identified during the design phase of this project and reviewed during the inception phase presents a set of clear expected results. The review of the objective, outcomes and outputs indicates a good and logical “*chain of results*”. Project resources were used to implement activities to reach a set of expected outputs, which together turned into higher level results (outcomes) and contributed to achieve the overall objective of the project. This logical framework was used as a “blueprint” on a day-to-day basis by the implementation team. It was used as a guide all along the implementation of the project.

21. The logic model of the project presented in the LFA is presented in the table below. It includes one objective, three outcomes and a set of 9 outputs. For each expected outcome and objective, performance indicators were identified with their respective baseline value, target at the end of the project and the source of verification. It is a coherent model that was developed “*to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region*”.

Table 3: Project Logic Model

PROJECT OBJECTIVE
To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.
<p>Outcome 1: The enabling environment for integrating climate change risks into management of forest ecosystems is in place</p> <ul style="list-style-type: none"> • Planning documents that govern forest management modified to take account of climate change risks • An early warning and response system to climate change risks based on clearly defined institutional roles and responsibilities
<p>Outcome 2: Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems.</p> <ul style="list-style-type: none"> • Comprehensive system for data collection and interpretation to feed into scenario development and identification of adaptation measures • Measures to mitigate elevated pest outbreak risks due to climate change, including variability • Measures to mitigate elevated forest fire risk due to climate change, including variability • Measures to reduce forest fragmentation and improve ecological restoration
<p>Outcome 3: Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed.</p> <ul style="list-style-type: none"> • Training and sharing of experiences with foresters and community members from other regions/ sub-regions in Armenia to develop their capacities to integrate adaptive measures in forest management • A user-friendly manual on how to integrate climate change risks in forest management is developed and widely disseminated • A results-based monitoring, evaluation and learning system is in place

4.1.2. Assumptions and Risks

22. Risks and assumptions were identified for each expected outcome (3) and objective (1) and presented in the project document as part of the Strategic Results Framework (logframe). These risks and assumptions were changed only slightly during the inception phase. The review of these risks and assumptions indicates that most of them could be qualified as basic project risks and assumptions; including the need for the project to benefit from continued political support from the government and the acceptance by Stakeholders (both institutions and communities) of the proposed adaptation measures for ecosystems’ management. A third

category of risk was identified during the inception phase and pertaining to the co-financing of the project by “Hayantar” SNCO the forest agency of the Government of Armenia (GOA). These risks were all critical points for ensuring the success of the project but it was noted that the project had an early stakeholders engagement that led to a good ownership of project achievements (particularly with Hayantar NSCO and its forest enterprises in Goris and Kapan and with the Arevik National Park SNCO), which, in fact, turned out to be the major mitigating measure to manage these risks.

23. The list of risks and assumptions identified at the outset of the project and reviewed during the inception phase is presented in the table below.

Table 4: List of Risks and Assumptions Identified at the Design Phase

Project Strategy	Assumptions	Category	Critical	Management Responses
Objective: To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.	<ul style="list-style-type: none"> In the pilot sites, baseline activities aimed at promoting sustainable forest management in general and addressing anthropogenic pressure on forest resources including threats to biodiversity, in particular, might not be successful in meeting their baseline objectives. 	<ul style="list-style-type: none"> Operational Political 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> The project will maintain constant and close dialogue with forest and other relevant authorities to ensure that baseline sustainable forest management is seen as an essential foundation on which additional institutional and policy enhancements to specifically respond to climate change are built.
Outcome 1: The enabling environment for integrating climate change risks into management of forest ecosystems is in place.	<ul style="list-style-type: none"> Recommendations for strengthening of forest sector documents and institutional roles and responsibilities might not be supported and approved by the government. 	<ul style="list-style-type: none"> Political 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> The project will maintain constant and close dialogue with forest and other relevant authorities to ensure ownership of recommended institutional and policy enhancements to respond to climate change.
Outcome 2: Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems.	<ul style="list-style-type: none"> Local forest enterprises and communities in the Syunik region might not support proposed adaptation measures in ecosystem management activities. 	<ul style="list-style-type: none"> Political Operational 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> In order to mitigate this risk the project will put specific emphasis on building awareness of the regional forest management bodies and communities (under Outcome 2; Outputs 2.1 to 2.3) and putting in place guidance and supervision of “Hayantar” SNCO (authorized agency of forest management in the country) as a legitimate mechanism for their active participation in the identification and implementation of adaptation measures. The project will also involve local specialized NGOs in project activities. Further, by identifying, testing, selecting and implementing proper technologies and measures that are appropriate for the pilot areas, the project will secure buy-in from local stakeholders.
Outcome 3: Capacities for adaptive management, monitoring and evaluation, learning, and replication of	<ul style="list-style-type: none"> Forest enterprises and others responsible for implementing conservation plans in other regions of Armenia do not handle cooperation and trustful relations with 	<ul style="list-style-type: none"> Operational Financial 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> It will be mitigated through an emphasis on participatory and cooperative schemes for implementation of proposed measures, and inviting representatives from other regions to participate in training sessions and site visits. Local communities will be fully aware and will be involved in adaptation aimed forest

Project Strategy	Assumptions	Category	Critical	Management Responses
project lessons are developed.	neighboring communities for integrating adaptation measures.			works. The transparency of project activities will be ensured through periodic meetings with partners, specialized scientific institutions, NGO, as well as through the project website.
	<ul style="list-style-type: none"> The "Hayantar" (ArmForest) SNCO might not be able to fully handle the planned parallel project financing due to the global financial crisis influence. 	<ul style="list-style-type: none"> Financial 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> The Government of Armenia might revise the state budget allocations for forest management/protection due to global financial crisis influence.
	<ul style="list-style-type: none"> Institutional resistance to appropriate delegation of the responsibilities for implementation of measures on forest adaptation among the forest protection/ management and other administrative agencies (Ministry of Nature Protection, Ministry of Agriculture including "Hayantar" (ArmForest) SNCO, Ministry of Emergency Situations, Regional authorities, communities) 	<ul style="list-style-type: none"> Other (Institutional) 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> Forest management and protection responsibilities are shared between the Ministry of Nature Protection and Ministry of Agriculture. The latter is responsible for administration in the field of forest management and the former - for supervision over the forest resources management. Fire administration responsibilities are delegated to the Ministry of Emergency Situations.

Source: MSP prodoc and Inception Report (September 2009)

24. The Project Team continued to monitor these risks and reviewed the assumptions made to mitigate these risks. These risks were logged and monitored using Atlas, the project management system of UNDP. Over the years, these risks evolved. The log of risks as of March 2013 is presented in the table below:

Table 5: List of Risks and Assumptions

Risks	Type	Date Identified	Critical
1. The project implementation scheme envisaged by the project document and approved by the LPAC meeting might be revised	Other	01-03-2010	N
2. The "Hayantar" (ArmForest) SNCO might not be able to fully handle the planned parallel project financing due to the global financial crisis influence	Financial	09-02-2009	Y
3. The revision of project implementation scheme envisaged by the project document and approved by the LPAC meeting might delay the start of the pilot projects	Organizational	31-12-2012	N
4. Institutional resistance to appropriate delegation of the responsibilities for implementation of measures on forest adaptation among the forest protection/ management and other administrative agencies (MNP and MOA)	Other	01-03-2010	N
5. Full scale implementation of the planned environmentally sound pest control in forests with use of biological measures might be hindered due to necessity to apply it along with similar government project planned for 2012 in compliance with corresponding	Operational	31-01-2012	N

Source: Atlas print out as of April 2013

25. The differences between the two tables indicate that the list of risk evolved over the implementation years. However, the analysis of the five risks monitored in the Atlas system indicates that the risks identified

at design/inception are “embedded” in the current list, which is now more holistic. Most of the initial risks were around the issue of institutional resistance, which is now one risk (4th) in the list. Other risks were added over time such as the fifth one that is linked with the pest control initiative.

4.1.3. Lessons from other Relevant Projects Incorporated into Project Design

26. An extensive review of relevant interventions was incorporated into the design of this project. It was part of the extensive contextual analysis done for the project, including the review of the geographical and political context, socio-economic context, biodiversity context (forest ecosystems; and forest management), water resources context, climate change context (climate variability in the Syunik region; impact of climate variability on forests and biodiversity in the Syunik region; projected climate change in the Syunik region; Impact of expected climate change on mountain forest ecosystems in the Syunik region), and legislation and policy context. This extensive review included the review of interventions related to sustainable development, protected areas and sustainable management of forest ecosystems, and, environmental policy and law.

27. The review of these interventions were presented as part of the baseline scenario of this project whereby – in addition to the regular mandate of the Syunik Forest Enterprises and the Arevik National Park SNCO - the GOA was to continue to promote sustainable development, poverty alleviation, protection of the region’s forest ecosystems through protected areas and sustainable forest management. These measures were to help reduce human induced threats to forest biodiversity.

28. The contextual analysis – including the review of these interventions - led to the identification of gaps and also of the following barriers:

- The planning process that governs management of forest ecosystems did not include climate change threats as a criterion in decision making;
- Institutions and individuals managing forest ecosystems did not have the capacity to observe and forecast adaptive capacity of forests, understand forest species change instigated by climate change and options for combined efforts for autonomous and planned adaptation, and then to use this information to raise awareness and mobilize programmatic choices regarding protection of forest ecosystems in the face of climate change;
- A systematic assessment and understanding of climate change impact on forests that can help identify how communities of forest species will be affected by climate change i.e., what physical and biological changes could take place as a result of changes in temperature, precipitation and aggravation of situation with extreme climate events, was yet to be conducted for the Syunik region;
- There were no concrete experiences with implementing adaptation response measures, which can be leveraged to motivate wide scale acceptance and adoption of such measures.

29. The identification of these barriers helped to “position” this project with its focus on proposing adaptation measures to climate change into the management and protection of mountain forest ecosystems. The design of this project was solidly grounded in this contextual analysis.

4.1.4. Planned Stakeholder Participation

30. During the project preparation phase, a detailed stakeholder analysis was conducted. This review was documented in the project document, including the responsibility and the field of activities of each stakeholder and the relevance to the forestry sector. It included about 22 organizations including ministries and their respective agencies, other national institutions, regional administrations and local self-governments. It also included the review of 6 donors intervening in the Syunik region.

31. These stakeholders were also involved in the preparatory phase to design this project. Two main events were noted during this phase: a meeting in April 2008 with partners to present the project concept and discuss possibility of co-financing with partners; and a seminar on the “*Vulnerability of South-East Forests in Armenia and Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of the Marz of*

Syunik” held on May 24-25, 2008 in Kapan, Syunik. This seminar including field visits in the Kapan region and it was an opportunity to present the findings of the preparatory phase and to discuss the project strategy emerging for this project.

32. In addition to these initial consultations, an inception workshop was held on July 3, 2009 to summarize the inception phase. It was another opportunity to engage stakeholders in the project; particularly in its implementation following the inception phase. Following the presentation of the review conducted during the inception phase, the participants confirmed their understanding of the emphasis of the project on adaptation to climate change impacts with primary attention to strengthening resilience of vulnerable mountain forest ecosystems that supports global biodiversity benefits and secondary attention to community involvement in sustainable management of natural resources.

33. From the initial stage of project identification, there was a good approach to engage stakeholders in the design and implementation of the project. Stakeholders participated to the decision making process of the project through the project Board. The implementation team focused its attention on making sure any planned activity was well understood and had full consensus from the targeted stakeholders, including their commitments to fully participate. It was the case, for instance for the procurement of the forest fire equipment to the three project sites (Goris, Kapan and Meghri). The list was established following an extensive review of the need but also with the strong engagement of the stakeholder beneficiaries of this equipment.

34. Following the design and inception phases, the project stakeholders/partners that have been engaged in the implementation of the project include:

- Ministry of Nature Protection (MNP) and several of its agencies: Department of Environmental Strategic Programmes and Monitoring (formerly Division of Environmental and Nature Use Economics), Atmospheric Air Policy Division (formerly part of the Environmental Protection Department), Bio-Resources Management Agency, State Environmental Inspectorate, “Arevik National Park” SNCO, “Shikahogh State Reserve” SNCO, Zikatar Environmental Center SNCO;
- Ministry of Agriculture (MOA) and several of its agencies: Silviculture Division (formerly Forestry Development Division of the Crop Production, Forestry and Plant Protection Department), “Forest Monitoring Center” SNCO, “Hayantar” (ArmForest) SNCO and its forest enterprises in Syunik marz (Syunik (Goris), Kapan, and Sisian);
- Ministry of Emergency Situations (MES) and several of its agencies: Rescue Service, “Armenian State Hydrometeorology and Monitoring Service” SNCO;
- Ministry of Territorial Administration (MTA);
- Ministry of Foreign Affairs (MFA);
- National Statistical Service;
- Syunik regional (marz) administration;
- Local self-governments (communities);
- Armenian National Agrarian University;
- Armenian State Pedagogical University;
- UNDP;
- REC;
- KfW;
- WWF Armenia;
- WB;
- OSCE;
- Caucasus Nature Fund (CNF).

4.1.5. Planned Replication Approach

35. The project focused on the mountain forest ecosystems of the Syunik region (Southern part of Armenia), which is known as having a high level of biodiversity. The GOA recognized this importance by establishing specially protected areas in the region. However, the first comprehensive vulnerability and adaptation assessment undertaken for Armenia under the aegis of its First (FNC) and Second National Communications (SNC) to the UNFCCC identified this region as a critically vulnerable region to climate

change due to its unique mountain forest ecosystems; hence the reason for this project.

36. Starting in the Southern part of Armenia, it was anticipated in the project document that the experience of mainstreaming adaptation to climate change impacts in mountain forest ecosystems of the Syunik region would generate useful lessons for other vulnerable mountain forest ecosystems in Armenia. The review also noted that, in fact, Outcome 3 was about replicating the lessons learned by the project. Project resources were specifically allocated to this objective to share experience with key stakeholders in other regions of Armenia to lay the foundation for replication of the project's experience.

4.1.6. UNDP Comparative Advantage

37. The United Nations Development Programme (UNDP) is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone as well as encouraging the protection of human rights and the empowerment of women.

38. UNDP is part of the UN Country Team (UNCT) that is operating in Armenia. Together the UN system in Armenia developed the second UN Development Assistance Framework (UNDAF) for the period 2010-2015 that is in line with the main national development priorities outlined in the second Poverty Reduction Strategy Paper (PRSP). Particular foci in this framework were given to areas that support the achievement of the national MDG targets and goals based on the mandates of different UN Agencies, Funds and Programmes, their global expertise and their ongoing programmes in Armenia. To enhance synergies and cooperation, it has also taken into account the priorities and programmes of other international partners cooperating with Armenia. Finally, the UNCT agreed to prioritize 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.

39. The UNDAF 2010-2015 priorities are in four key areas: (i) Poverty reduction; (ii) Democratic governance; (iii) Basic social services; (iii) Environmental management; and (iv) Disaster risk reduction. It also focuses on the following key results:

- Inclusive and sustainable growth is promoted by reducing disparities and expanding economic and social opportunities for vulnerable groups;
- Democratic governance is strengthened by improving accountability, promoting institutional and capacity development and expanding people's participation;
- Regional disparities in key human development indicators reduced with view to achieving the national MDGs;
- By 2015 national authorities implement environment and disaster risk reduction in the framework of national and local development programmes.

40. UNDP in Armenia has been established in March 1993 and supports the government to reach national development priorities and the Millennium Development Goals by 2015. Its focus is to support Armenia in addressing the challenges of:

- Achieving the MDGs and reducing human poverty
- Fostering democratic governance
- Managing energy and environment for sustainable development
- Supporting crisis prevention and recovery

41. In the environmental area (third challenge), UNDP focuses on two thematic programmes. (i) *Climate change*: UNDP assists the government to develop its National Communications under the UN Framework Convention on Climate Change (UNFCCC) and has been extending its activities to calculate the economic costs of climate change in Armenia. It also provides advice to the government in mainstreaming climate change adaptation measures into relevant national policies; (ii) *Sustainable use of natural resources*: UNDP addresses local environmental issues through the integration of environmental issues into local level participatory planning. In addition, it supports the incorporation of the sustainable management of Protected Areas in national and local policy and planning frameworks. Finally, UNDP also helps the development of institutional and legal capacities and supports the strengthening of environmental monitoring systems for the

management of protected areas.

42. As part of the UN Country Team (UNCT), UNDP has been a very active UN agency in Armenia, including the support to the country to effectively address a broad spectrum of issues. UNDP is well placed to address the strengthening of State institutions and their practices and to support the development of mechanisms for addressing climate change risks and the development of national capacities to adapt to climate change.

43. The comparative advantages of the UNCT lie largely in its breadth of activities supporting the development of Armenia, including priorities to support the implementation of the MDGs; its strong links to global expertise and international best practices; its commitment to help the Government achieve national goals; its relationship of trust with relevant Ministries; and its focus on vulnerable groups such as the poor, women and children, the disabled, elderly and refugees who are being hardest hit by the gaps in economic and human development.

44. UNDP is particularly well placed to address the capacity needs to adapt to climate change in Armenia. It supports the MNP in producing its national communications to UNFCCC including the vulnerability assessment to climate change, which allowed the GOA to prioritize – through broad-based consultations – the areas where adaptation to climate change should be undertaken following a rigorous methodology such as the Syunik region. Within this context, UNDP has been supporting the Climate Change Information Center of Armenia that is located at MNP. It was created in 1997 within the framework of the UNDP/GEF "Armenia - Country Study on Climate Change" Program. The center collects relevant information and makes this information accessible to national partners and experts. It identifies national and international information sources, partners with international climate change potential and it provides regular exchange of information with the use of its website.

45. In conclusion, the project falls under the fourth pillar of the UNDAF 2010-2015 that is "*Environment and disaster risk reduction is integrated into national and local development frameworks*", contributing to its Agency outcome that is "*Armenia is better able to address key environmental challenges including climate change and natural resource management*". The project is part of the UNDP portfolio of projects funded by GEF and implemented by UNDP with a focus on climate change adaptation for mountain forest ecosystem in the Syunik region.

4.1.7. Linkages Between the Project and Other Interventions within the Sector

46. As discussed in Section 4.1.3, the project was formulated on the basis of an extensive review of relevant interventions, whereby lessons learned were incorporated into the design of this project. During its implementation, the project also established and maintained linkages with key related projects/partners that include:

- *World Wildlife Fund (WWF)*: WWF Armenia is much involved in supporting the Protected Area (PA) system in place; including the expansion of PAs in the country. They supported the MNP in establishing the Arevik National Park, which represents about 1% of the total area of Armenia. WWF support includes wildlife monitoring. Their areas of focus include (i) institutional strengthening and capacity building for the management of PAs; (ii) creating a network of protected areas (Econet); (iii) conserving threatened species (Caucasian leopard, Armenian mouflon, Bezoar goat, etc.); (iv) conserving priority biomes: forests, high mountains, wetlands; (v) promoting sustainable use of resources and alternative livelihood in rural communities; and (vi) promoting public awareness on environmental issues. WWF is a partner with UNDP working together on the development and management of the PA system in Armenia.
- *OSCE*: OSCE is the ENVSEC⁷ Coordinator for the South Caucasus region. Under the ENVSEC umbrella, activities are taking place at the regional and national levels. One focus is on strengthening national capacities for fire management and wildfire disaster risk reduction. OSCE

⁷ The Environment and Security (ENVSEC) initiative was founded against the backdrop of the growing acknowledgement of the link between environment and security. It was launched at the fifth environment for Europe Ministerial Conference in Kiev in May 2003 as a joint initiative of the Organization for Security and Cooperation in Europe (OSCE), UNEP and UNDP, which were active in the transition countries of Eastern and South-Eastern Europe, the South Caucasus and Central Asia.

has been involved in the fire management sector for a few years. In 2007 – a year with major forest fires issues – OSCE partnered with the Global Fire Management Center (GFMC⁸) in Germany to start collecting information on forest fires and identifying possible actions. More recently, OSCE commissioned a legal review related to forest and land management and how to reduce and better manage forest fires. This review was conducted in 2012 and identified legislative gaps. The results were presented at a National Round Table to which this project was also a key presenter. This material is now used to develop a National Strategy on Wildfire Management, which should be finalized in 2013.

- *Caucasus Nature Fund (CNF)*: The Caucasus Nature Fund (CNF) is a conservation trust fund created in 2007 and working to protect the Caucasus wilderness for future generations. It is mostly funded by the German KfW and BMZ but also by WWF and Conservation International. Their mission is to contribute to the improvement of the management and the sustainable development of the Caucasus' natural and cultural heritage by providing effective long-term funding support to the protected areas of Armenia, Azerbaijan and Georgia. CNF's programs improve the management of the national parks and nature reserves of the South Caucasus by providing financial support for operating costs as well as capacity-building tools. CNF is, in fact, a financial tool available to the MNP to support the development and the management of the PA system in Armenia through the "50 percent principle". CNF matches but does not exceed State budgets—potentially doubling a specific park's operating funds. To ensure sustainable development in the protected areas, CNF stresses the importance of long-term planning processes that meet international standards, including local community involvement. This support is based on an estimate that Armenia and Georgia spend only about 50 percent of what is needed to cover even basic operating costs for their protected areas, such as salaries, utilities, maintenance, and equipment. CNF has been a partner with the project; they currently negotiate a common approach with the project to fund a pest control programme in the Arevik National Park, almost matching the funds provided by the project.
- *GIZ*: The German technical cooperation agency implements the "Sustainable Biodiversity Management in the South Caucasus" programme. It is a regional programme (Armenia, Georgia and Azerbaijan) that started in 2008 and will terminate in 2015. The Programme is made up of 4 components adapted in each country: (i) Support to the implementation of the CBD; (ii) Sustainable forest management; (iii) Sustainable agro-biodiversity; and (iv) Regional exchange of experience. Focusing on forest, the programme supported the identification of forest monitoring indicators and the setup of a biodiversity monitoring system based on an ecosystem approach. Using remote sensing imaging, the programme has also been supporting the strengthening of the forest inventory in Armenia.
- *REC-Caucasus*: The Country Office of the Regional Environmental Centre (REC) for the Caucasus implemented the "*Fostering Community Forest Policy and Practice in Mountain Regions of the Caucasus*" project. The project was focused on the development of new institutional, legal and technical set-up for community forest management and in particular the support to securing land tenure and forest rights of local communities and implementing institutional arrangements and land use policies for forest conservation and sustainable use. The project also supported awareness raising among local communities and local authorities on sustainable forest management, its relation and impact on other fields such as climate change, poverty reduction, sustainable development etc. In addition immediate reforestation measures under the project seek to solve such problems as landslides, mudflows, avalanches and consequently protect populated areas from natural disasters.

47. The project collaborated with all key initiatives and key partners intervening in the forest management

8 Following the recommendations of the UN-ECE/FAO/ILO Seminar Forest, Fire and Global Change (Russia 1996) and a number of international conferences the UN-ECE/FAO Team of Specialists on Forest Fire proposed the establishment of an institution which at that time was preliminarily designated as a Global Fire Management Facility. On the basis of these recommendations the Government of Germany through the Ministry of Foreign Affairs, Office for the Coordination of Humanitarian Assistance, in June 1998 provided initial funding for the establishment of such an entity which was designated Global Fire Monitoring Center (GFMC). The GFMC was inaugurated at the FAO Meeting on Public Policies Affecting Forest Fires (Rome, October 1998). The GFMC provides a global portal for wildland fire documentation, information and monitoring and is publicly accessible through the Internet. The regularly updated national to global wildland fire products of the GFMC are generated by a worldwide network of cooperating institutions.

sector in Armenia. The review of these initiatives indicates that there are all complementary to each other and all these partners regularly met and participated to related national and local events such as seminars, round tables and workshops. However, it was also noted that despite all these partners engaged in Armenia to strengthen the government's capacity to manage and protect forests and PAs, there is still a sense that these activities are mostly "peripheral" to the core issues of this sector that is a low capacity to manage and protect forest and PAs, including limited resources (lack of budget), weak law enforcement capacity, poor planning process and complex institutional setup with procedures and mechanisms in need to be upgraded.

4.1.8. Management Arrangements

48. The management arrangements planned at the onset of the project included:

- *GEF Implementing Agency*: UNDP served as the GEF implementing agency for the project.
- *Executing Agency*: The Ministry of Nature Protection (MNP) has been the executing agency for the project and which nominated a *National Project Coordinator* whom provided government oversight to the project.
- *Project Board (PB)*: A PB was formed with 11 members and co-chaired by the First Deputy Minister of MNP and the Deputy Resident Representative of UNDP. Its mandate was to provide overall guidance to the project and ensure inter-ministerial coordination and active involvement in the project. Members of this committee included representatives from the Armenia National Statistical Service, the Local Self-Administration Department from the Ministry of Territorial Administration, the UNFCCC Focal Point from MNP, the Armenian Rescue Service from the Ministry of Emergency Situations, "Hayantar"(ArmForest) SNCO from the Ministry of Agriculture, Agriculture and Environment Department, Syunik Marz, International Organizations Department from the Ministry of Foreign Affairs and the Agroecology Department from the Armenian State Agrarian University.
- The *Climate Change Program Unit of UNDP* located at MNP provided the day-to-day implementation support to the project.
- A full time *Project Manager (PM)* has been employed on the project. As a Technical Expert, he provided management and technical backstopping to the UNDP-Climate Change Program Manager. The PM was supported by a part time *Expert Team Assistant*. In addition, a *United Nations Volunteer (UNV)* was posted to the project for 2 years.
- Part time *Consultants/Experts* have been hired to provide technical expertise to the project.
- A *Regional Technical Advisor (CTA)* based at UNDP Regional Office in Bratislava to backstop the project when necessary.

49. From the outset of the project, the project was implemented using the National Execution (NEX) modality of UNDP. The national executing agency (MNP) and UNDP-CO agreed that financial resources be mobilized by the Climate Change Program Unit located at MNP.

50. The review indicates 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. It was noted that four meetings of the PB took place during the lifetime of the project in addition to the Inception Workshop. A first meeting took place in June 2009 as part of the Inception Workshop to approve the 2009-2010 annual work plan. The second meeting took place in July 2010 to review the 2009-2010 progress report and approve the 2010-2011 Annual Work Plan (AWP). The third meeting took place in April 2011 to visit and discuss ongoing works on the reforestation pilot sites in Syunik, to review the 2010-2011 progress report and approve the 2011-2012 AWP. The fourth meeting took place in August 2012 to review the 2011-2012 progress report and approve the 2012-2013 AWP.

51. In addition to these meetings with key stakeholders, the project team developed excellent relationships with all stakeholders at the national level and in the Syunik region. As a result of these relationships, the project team has been constantly in contact with all these stakeholders, communicating directly project plans, achievements and issues and using this approach as a consultation mechanism. The review of these management arrangements and personal relationships indicates that they provided an effective way to communicate and keep stakeholders engaged, contributing to a good national ownership of project achievements.

4.2. Project Implementation

52. 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.

4.2.1. Use of Adaptive Management

53. The project has been well managed. The Project Team followed UNDP and GOA 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 well aligned with the project document that was endorsed by stakeholders. The log-frame – also called Results Framework - included in the project document had been used as a guide 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 and the project progress was well monitored.

54. Adaptive management has been used regularly to adapt to a changing environment. It was particularly used as a mechanism to respond to stakeholders' needs and priorities. As a result, activities supported by the project benefited from a good participation of stakeholders. Each assignment was conducted following well-defined terms of reference and/or feasibility studies.

55. The review of activities that were supported by the project reveals that adaptive management was used as a management approach to particularly identify where the project financial resources would be allocated. On one hand, the log-frame gave the project team an overall plan on how to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region; and on the other hand the project team used adaptive management to properly allocate the financial resources available by collaborating with partners to implement jointly some activities related to the management of mountain forest ecosystem.

56. A good example where the project used adaptive management is when the project partnered with OSCE for organizing and funding a succession of events in 2011. First, the project provided equipment for managing and preventing forest fires to the forest enterprises in Goris and Kapan and to the Arevik National Part Administration in July 2011. Then in September 2011, a one-day training was organized for firefighters and foresters on fire management with the support of the Global Fire Management Center (GFMC) out of Germany and the financial support of OSCE. The following day, a drill on fire management was organized in the Syunik region coordinated by the Ministry of Emergency Situations and financed by OSCE and focusing on dealing with people injury and how to extinguish forest fires; using the equipment procured by the project. Then on the third day, a Conference and a Round Table took place in Yerevan. The conference "*Forecast, Prevention and Suppression of Forest and Grassland Fires*" was held on the 14th of September 2011 in Yerevan with the participation of all stakeholders at both national and regional levels (about 90 participants). Finally, following this conference, a National Round Table was organized with key stakeholders led by international forest fire experts. This round table concluded with the need to form a permanent national task force on forest and grassland fire management to review the progress made on fire management and identify an action plan for the way forward. This Task Force was created in February 2012 by a Minister Order from MES to coordinate few studies on fire management. A second Round Table was organized in December 2012 to review the progress made and, based on the recommendation of this second round table the task force reviewed the assessment made on fire management and reviewed the proposed action plan. The action plan was submitted to Cabinet for final approval in late March 2013. Once this action plan will be finalized the Task Force will be disbanded. Once fully approved the action plan will guide national actions in the fire management sector over the short and medium terms.

57. These events took place in the context of the project procuring forest fire equipment and also in the context of the OSCE programme on wildfire management. It goes without saying that to be able to coordinate these activities, using adaptive management is a requirement.

4.2.2. Partnership Arrangements

58. As discussed in Section 4.1.8, the 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. In addition, the partnerships of the project with the related interventions in Armenia (see Section 4.1.7) were good and provided excellent synergies among these programmes.

59. One of the partnership highlights of this project was the succession of events that took place in 2011 and that was described in the previous sections. Joining forces to develop forest and grassland fire management capacity in Armenia was seen as a partnership to create the required change. The identification of the increasing threat posed by wildfires as well as the shortcomings of wildfire management has led to the establishment of projects and initiatives in Armenia and the larger South-Caucasus region with common objectives addressing national capacities in fire management and wildfire disaster risk reduction, as well as the national capacity to moderate, cope with and take advantage of the consequences of climate change. Together, UNDP, the Armenian Rescue Service, the OSCE office in Yerevan and the Global Fire Monitoring Center from Germany found synergies in developing forest and grassland fire management capacity in Armenia. The series of events organized over a three-day period reached over 300 participants from various organizations. Additionally, these events led to the establishment of a working group and later to a National Task Force on Wildfire Management to coordinate and review the work that had been implemented by all partners.

60. The review conducted for this evaluation indicates that the project partnerships led to some excellent synergies among partners including the donor community and the relevant government departments/services. As mentioned in a project communication *“The joint venture of the parties set a good example on how partnership can create change beyond individual efforts”*. It was also noted that based on these partnerships, the equipment procured by the project was replicated by the Armenian Rescue Service that decided to purchase 100 additional backpack pumps for fire and rescue detachments in Syunik, Lori, Tavush and Aragatsotn Marzes.

61. A second excellent partnership is the recent negotiation between the project, the CNF and the Arevik National Park Administration to develop and fund a pest control pilot programme. The project supported the development of a textbook on forest pest and how to control it targeting rangers, foresters and academia. Using this textbook, a manual was developed to provide a more practical information product to be used by professionals involved in pest management. Part of this manual, templates for pest monitoring and pest reporting were developed in close collaboration/consultation with pest experts, rangers and foresters. In 2012-2013, the project partnered with CNF and the Arevik National Park Administration to demonstrate a pest control programme over 500ha located in the park. Pest monitoring started before the 2012-2013 winter, an assessment of monitoring data is under way in March-April 2013, and a decision will be soon made on which area will be treated with the use of an aerial spray. The cost of this pilot to control pest should be shared among the 3 partners; “stretching” the project dollars in term of impact in the Arevik National Park area⁹.

62. Overall, the project management team enjoyed an excellent collaboration with all stakeholders; particularly key stakeholders such as “Hayantar” SNCO, the forest enterprises of Goris and Kapan, the Rescue Services of the Ministry of Emergency Situations, the “Arevik National Park” SNCO and the non-government partners such as WWF Armenia, OSCE and CNF. This collaboration did not really happen through formal committees and meetings but rather through regular communications among each other to keep everybody abreast of the progress made.

4.2.3. Project Finance

63. As indicated in Section 4.1.8, the implementation modality of the project to allocate, administer and report on the project resources was the UNDP NEX (National Execution) modality. The national executing

⁹ Since this review, the pest control demonstration took place on May 30-31, 2013 over 500ha. The project procured 1,000kg of biological insecticide, and CNF funded the cost of the aerial work through the “Arevik National Park” SNCO, which hired a company with a helicopter outfitted with sprayers to conduct this aerial work.

agency (MNP) and UNDP-CO agreed that financial resources be mobilized by the Climate Change Program Unit located at MNP. In the case of activities taking place under outcomes 2A and 2B, funds were transferred to “Hayantar” SNCO of MOA and “Arevik National Park” SNCO of MNP.

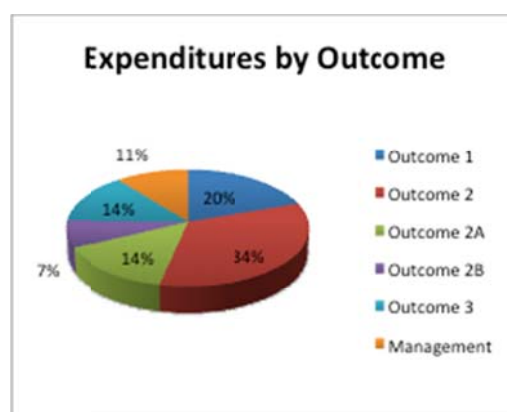
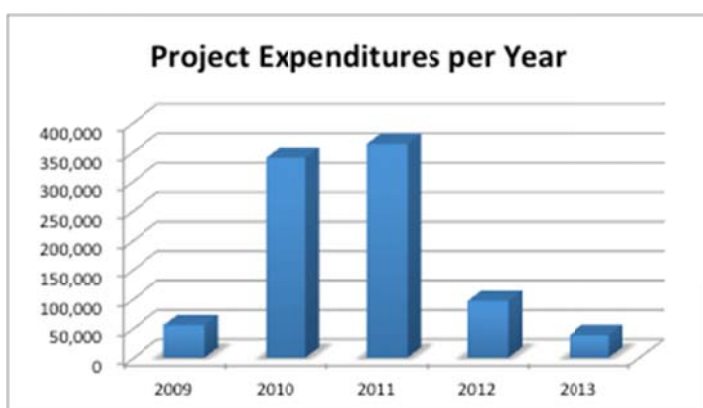
64. The financial records were consolidated into the UNDP-ATLAS system as the accounting and financial system for all UNDP projects; it allowed the project team to obtain financial reports at any time for period up to the last point of data entry. These reports produce financial information that is broken down by line items such as local consultant fees, travel tickets, printing and publications, utilities, etc. It was noted that in 2011, the reporting was improved to be able to produce financial reports - Combined Delivery Reports (CDR) – by outcome (called Activity in the Atlas system); providing better financial information for project managers.

GEF Funds

65. The review of financial records – including both the actual expenditures for the years 2009 to 2012 and estimates for the remaining period in 2013 - indicates that 100% of the original GEF budget will be spent (USD 900,000) by the end of the project in June 2013; an implementation period of 50 months. The breakdown of project expenditures by outcome and by year is presented in the table below.

Table 6: UNDP/GEF Fund Disbursement Status

Component	Budget	2009	2010	2011	2012	2013	Total	Total/ Budget
Outcome 1	\$219,100	\$7,674	\$77,584	\$56,596	\$30,044	\$5,380	\$177,278	81%
Outcome 2	\$431,000	\$20,285	\$109,805	\$133,539	\$11,379	\$27,000	\$302,009	115%
Outcome 2A	\$0	\$13,210	\$70,854	\$28,203	\$15,439	\$0	\$127,706	
Outcome 2B	\$0	\$0	\$14,827	\$36,947	\$14,933	\$0	\$66,707	
Outcome 3	\$154,900	\$0	\$42,401	\$55,849	\$9,371	\$20,796	\$128,417	83%
Management	\$95,000	\$13,869	\$24,105	\$39,937	\$14,396	\$4,400	\$96,707	102%
Foreign Exch. Cur. Loss	\$0	\$0	\$(148)	\$641	\$684	\$0	\$1,176	
TOTAL	\$900,000	\$55,038	\$339,428	\$351,712	\$96,246	\$57,576	\$900,000	100%



Source: UNDP CDRs and Input from the Project Team during the field mission to Armenia.

66. The figures presented on the graph on the right indicate that about 55% of the total GEF budget was allocated to outcome 2 (outcome 2, 2A and 2B) that was “Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems”. It included the transfer of funds to the “Hayantar” SNCO of MOA for its forest enterprises of Syunik (Goris) and Kapan (2A) as well as to the “Arevik National Park” SNCO of MNP (2B) for supporting pilot activities in these areas. The remaining budget was allocated to outcome 1 (20% of total budget)

outcome 3 (14%) and to management of the project (11%). The graph presented on the left above also indicates that 2010 and 2011 were the years of high disbursement for the project. It was also noted during this review that financial resources were used prudently by the project management team; searching constantly for cost-effectiveness when engaging project financial resources.

67. These numbers above do not show a discrepancy (extra expenditure) existing in the Atlas system of \$11,907.12. This amount corresponds to a purchase order of this value that was issued in 2011 and cancelled later in 2012. Due to a change of financial system at UNDP in January 2012 from the UN System of Accounting Standards (UNSAS) to the International Public Sector Accounting Standards (IPSAS), the cancellation has not been inserted yet in the system. For the sake of presenting a true financial picture, this amount was deducted in the 2011 year under the outcome 2.

68. The project finances for the years 2009 and 2010 were audited by the Audit Firm “Baker Tilly Armenia”. The report stated that in their “*opinion, the CDRs present fairly, in all material respects the expenditure of US\$55,038.71 incurred by the project and audited by us for the period 1 January 2009 to 31 December 2009, and US\$ 339,427.75 incurred by the project and audited by us for the period 1 January 2010 to 31 December 2010, in accordance with UNDP accounting requirements*”. Regarding the assets and equipment, the report stated “*the statement of assets and equipment presents fairly, in all material respects the inventory balance of the project amounting to USD 51,715.19 as at 31 December 2010 in accordance with UNDP requirements*”. Finally, the audit also reviewed the cash position and stated that “*the statements of cash position present fairly, in all material respects the cash balance of the project amounting to US\$ 22,296.26 as at 31 December 2009 and USD 11,598.74 as at 31 December 2010 in accordance with UNDP requirements*”.

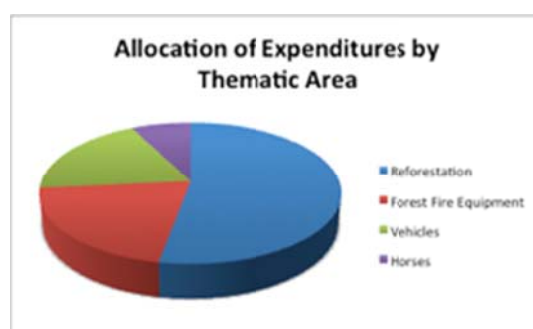
69. An interesting aspect of project expenditures is to disaggregate these total figures and identify the expenditures directly expended on the three pilot areas: Goris, Kapan and Meghri. The table below presents these figures.

Table 7: Direct Expenditures on the Three Pilot Areas

Reforestation (USD; cash transfer)		Forest fire equipment, (USD; transfer of purchased goods)		Pick-up drives (USD; transfer of purchased goods)		Horses (USD; transfer of purchased goods)	Total
Hayantar	Arevik	Hayantar	Arevik	Hayantar	Arevik	Hayantar	
128,267	67,174	50,805	25,475	53,895	16,837	27,432	\$369,885

Source: Input from the Project Team during the field mission to Armenia.

70. This table indicates that 41% of the total budget of the project was spent in the three pilot areas to support four types of activities: reforestation, forest fire equipment, procurement of vehicles and procurement of horses. The Hayantar column represents the project support to both areas in Goris and Kapan under “Hayantar” SNCO whereas the Arevik column is the support given to the “Arevik National Park” SNCO. The graph beside indicates that 53% of these expenditures were expended on the reforestation programme in the three pilot areas. Forest fire equipment represents about 21% followed by 19% for 3 vehicles and 7% on 20 horses for the forest enterprises in Goris and Kapan.



Co-financing

71. The co-financing commitments at the outset of the project totaled the amount of USD 1,900,000 that was to be provided in-kind by “Hayantar” SNCO. The review noted that this commitment was confirmed at the outset of this project; it was also discussed during the inception phase and introduced as a potential risk that this co-financing commitment may not be translated into actual co-financing. The table below presents the co-financing commitment figures as well as the reported actuals co-financing disbursements (estimated).

Table 8: Co-financing Status

Agency	Budget	2009	2010	2011	2012	2013	Total
Hayantar	\$1,900,000	\$180,000	\$260,000	\$220,000	\$250,000	\$127,000	\$1,037,000
Arevik NP SNCO			\$60,000	\$59,300	\$56,600	\$25,200	\$201,100
CNF			\$23,700	\$36,300	\$60,200	\$15,000	\$135,200
MOA					\$262,900		\$262,900
Rescue Service				\$1,850			\$1,850
WWF Armenia			\$986,800	\$310,400	\$124,500	\$242,000	\$1,663,700
OSCE				\$36,000	\$12,000	\$16,500	\$64,500
UNV (Finland)				\$32,500	\$23,250	\$10,200	\$65,950
TOTAL	\$1,900,000	\$180,000	\$1,330,500	\$696,350	\$789,450	\$435,900	\$3,432,200

(*) Source: Prodoc and notes from the Project Team.

72. Figures in the table above indicate that the project was able to leverage a much higher level of co-financing when compared to what was anticipated at the outset of this project: \$3.4M versus \$1.9M (see also Annex 6). This difference is mostly due to the various partnerships that the project participated in. At the outset of the project the plan and commitment was only with “Hayantar” SNCO. However, as the project moved into implementation, it started to partner with relevant initiatives in Armenia such as WWF, OSCE and CNF. In addition, the Rescue Service of MES got seriously involved into this initiative as well as the “Arevik National Park” SNCO of MNP. Finally, the project also benefited from the presence of a UN Volunteer for over 2 years funded by the Government of Finland.

73. These numbers reflect the good partnership arrangements that the project management team established during the implementation. As discussed in Section 4.2.2, these partnerships allowed some good synergies for the effective implementation of activities and contributed to a good cost-effectiveness of the project.

4.2.4. Monitoring and Evaluation (M&E) Approach

74. A brief M&E plan was described in the project document in accordance with UNDP and GEF procedures. However, this plan was not much detailed and no budget was identified for M&E activities. The proposed M&E plan consisted mostly in the identification of a set of performance and impact indicators with their corresponding means of verification that were presented in the logical framework matrix. Furthermore, the section describing the M&E plan concluding by stating that “*The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Meeting following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities*”.

75. Nevertheless, it is also important to note that the log-frame of the project was also done within the context of the UNDP/GEF impact monitoring framework for adaptation projects. Within this framework, the project was within the following category – “*The reduction of anthropogenic stresses on resources experiencing increased stress due to climate change, and enhancement of the resilience and adaptive capacity of natural systems in order that they are sustained in the face of climate change*”; hence the corresponding performance indicators for this framework were customized for this project. They include four main performance indicators: (i) introduction of new policies, regulatory frameworks and management plans that are devised based on scenario planning; (ii) reduction in ecosystem fragmentation containing natural resources of concern, leading to enhanced resilience; (iii) number of sites/locations where stress reduction measures are piloted; and (iv) learning and replication potential. Additionally, based on a review of the METT proxy indicators (tracking tool for mainstreaming biodiversity), two indicators (one relating to territorial coverage (ha) and the other to integration of adaptation measures in the forest sector management planning documents) have been selected.

76. This brief M&E plan included: inception report, annual project implementation reviews, quarterly operational reports, and independent mid-term and final evaluations. The plan was mostly based on the logical framework matrix that included a set of performance monitoring indicators along with their corresponding sources of verification. Despite a marginally satisfactory M&E approach presented in the project document, the review of progress reports indicate a satisfactory overall M&E function on the project. It is rated as *satisfactory*, mostly due to the fact that reporting progress in progress reports was thorough with well justified ratings.

77. A summary of the operating modalities of the M&E plan are as follows:

- A set of performance indicators with their respective baseline and target at end of project as well as their sources of verification were identified and documented in the log-frame.
- An inception phase where the M&E plan was reviewed and discussed at an inception workshop. Minor changes to the list of indicators were done during the inception phase.
- The Project Manager ensured the day-to-day monitoring, particularly to monitor the implementation of annual work plans.
- The Project unit had the responsibility to produce progress reports documenting/measuring the progress made by the project for any given period; it included two main types of progress reports:
 - *(Brief) Quarterly Operational Reports*: This is a UNDP requirement. These reports are produced by the project management unit following UNDP guidelines and submitted to the UNDP Country Office and UNDP-GEF RCU.
 - *Annual Project Reports / Project Implementation Reviews (APR/PIRs)*: These reports are both UNDP and GEF requirements, following specific guidelines. It is an annual progress report measuring the progress made by the project during the past year. It includes two main parts: The DO (Development Objective) tab that monitors the progress made to achieve the overall expected objective and outcomes. Using a set of performance indicators (see below), this progress is measured against established targets at the end of the project cycle; the IP tab (Implementation) monitors the key outputs achieved under each outcome during the past year.
- The PM had the responsibility to report the progress made by the project to the PB, using the above reports.
- Mid-term and final evaluations: Conducted at mid-point and at end of project, these 2 external evaluations were opportunities to assess progress made at specific points in time, including progress made against expected results; reviewing the implementation modalities and identify any need for corrective actions and finally to identify any lessons learned.

78. The set of performance indicators presented in the logical framework matrix was reviewed during this evaluation. It includes a set of 13 key indicators to monitor the performance of the project at the outcome and objective levels. The list of indicators is presented in the table below.

Table 9: List of Performance Indicators

Project Strategy	Performance Indicators
Objective: To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.	1. Enhanced resilience of mountain forest ecosystems in the Syunik region due to adaptation measures (such as better management of forest fires, pest holes)
Outcome 1: The enabling environment for integrating climate change risks into management of forest ecosystems is in place.	2. Forest sector management planning documents for Syunik region include adaptation measures tested through the project and provide for resources to undertake these measures so as to enhance the resilience of biodiversity to CC related risks. 3. Institutions that need to be involved in early warning and response to CC related impacts on forests (such as the local forestry, emergency management agency, fire department) have clarity on their mandate and role in responding to CC risks
Outcome 2: Forest and protected	Ability of forest areas under the jurisdiction of the Syunik (Goris), Kapan and Meghri

Project Strategy	Performance Indicators
<p>area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems.</p>	<p>forest enterprises to provide effective protection to the region’s globally significant biodiversity against CC related risks is increased. Indicators for monitoring this are based on the GEF’s METT approach of using proxy indicators, as follows:</p> <ol style="list-style-type: none"> 4. Landscape coverage 5. Management practices applied: <ol style="list-style-type: none"> 5a) Improved management of pest holes that are being exacerbated by climate change and variability, measured by the following indicators: <ol style="list-style-type: none"> a. Increase in area covered by an improved monitoring system for pest invasions b. Increase in use of environmentally sound aerial pest control using biological treatment c. Increase in capacity of forest enterprises and SPAN staff to monitor and respond to pests 5b) Improved management of forest fires that are being exacerbated by climate change and variability, measured by the following indicators: <ol style="list-style-type: none"> a. Reduction in activities that tend to lead to forest fires (agricultural waste burning and open fires in forest recreational areas in the dry season) b. Increase in awareness of local communities, NGOs, tourist organizations of the importance of fire prevention leading to behavioural change c. Increase capacity of staff to implement an early warning and response system 5c) Reduction in forest fragmentation to enhance ecosystem resilience to climate change and variability, including: <ol style="list-style-type: none"> a. Reforested area b. Recovered (rejoined) area
<p>Outcome 3: Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed.</p>	<ol style="list-style-type: none"> 6. Number of forest enterprises outside the Syunik region that have initiated the process of integrating adaptation to CC in their forest management plans

79. It was noted that two comments about this set of indicators were made in the inception report. The first comment was about the indicator for measuring the achievements against the objective of the project: *“Current project objective indicator relates to coverage only. Suggested additional robust, quantitative objective indicators to measure the impact of the project at the objective level. However this requires further consultation with stakeholders to determine the realistic figures for new indicator”*. The second comment was for the main indicator for measuring progress against outcome 2: *“A set of additional complementary indicators is to be designed to detect the development benefits of the project, such as share of seasonal employment in the Syunik Marz generated by the project”*. These comment were further discussed with a national expert and the MNP; however, no proper solutions to address these comments were identified and the original set of 13 key indicators did not change over the lifetime of the project. They were used yearly to report progress made in the APR/PIR reports. The review conducted for this evaluation confirms the comment made during the inception that the indicator for measuring the progress to achieve the objective was only related to forest coverage, when in fact, the project was more focused on demonstrating climate change adaptation measures and developing the capacity of forest managers in the Syunik region. Another 1 or 2 indicators measuring these aspects would have strengthened the monitoring of the project.

80. The review of these indicators and their respective targets reveals that they could be more specific and easier to measure; particularly their respective targets. As they stand, these indicators are not specific enough to measure the progress of the project the project without rather lengthy qualitative statements. What was needed was a few additional indicators with specific and easy to measure targets to complement the qualitative statements made in the progress reports. It would have strengthened the reporting of progress made with more solid measured arguments to justify the progress.

81. Nevertheless, despite this weakness in the selection of indicators, the Evaluator noted that progress reporting was done in a very professional manner compensating for the lack of specificity and easy to measure indicators. All progress reports – particularly the APR/PIRs – were all comprehensive reports with ratings well supported/justified with good analysis of progress.

4.2.5. Contribution of Implementing and Executing Agencies

82. The overall efficiency of the UNDP Country Office (CO) and Regional Coordination Unit (RCU) and of the MNP - as respectively the GEF implementing agency and the national execution agency of the project - to support the implementation of the project was good; it is rated as *satisfactory*. In their respective area of responsibility, they provided good support to the project team to ensure an efficient use of the GEF resources and an effective implementation of the project. Both agencies participated actively in the design and the implementation of the project.

83. UNDP provided the required guidance to apply UNDP project management procedures such as procurement, hiring and contracting as well as guidance for reporting project progress. UNDP played a role of 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 team throughout the implementation including the participation in the decision-making process for implementing the project, and facilitated the collaboration among projects and external donors.

84. MNP, as the national execution agency, played an important role in the success of this project. The First Deputy Minister of this Ministry is co-chairing the Project Board; providing leadership in guiding the implementation of the project. Overall, the MNP played an important facilitator role for the project, providing the government/institutional context for the legitimization of mainstreaming adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.

85. The MNP has been the government anchor point of the project. However, it is also important to note that the Ministry of Agriculture (MOA) through “Hayantar” SNCO and the Ministry of Emergency Situations through its Rescue Service were also very much engaged in the project and played also a major role in legitimating the objective of the project. They fully supported and facilitated the implementation of the project where necessary.

86. Finally, the Climate Change Information Center of Armenia played also a key-backstopping role to the project. This center was created in 1997 within the framework of the UNDP/GEF "*Armenia - Country Study on Climate Change*" Program and of the First National Communication under the UNFCCC. The primary goal of creating the Center was to assist in the preparation of the First National Communication through collecting the relevant information and making it accessible to national partners and experts. In addition, the Center was also aimed at identifying and creating the network of national and international information sources, finding partners with international climate change potential who might collaborate also in future programs. Currently, the Center also provides regular exchange of information with the use of its website¹⁰. The Centre has been a major tool to backstop the project by providing technical expertise and also to store and disseminate information from the project making it available to the general public through its web site.

4.2.6. Summary of the Mid-Term Evaluation (MTE)

87. An International Consultant conducted an independent Mid-Term Evaluation (MTE) of the project in June-July 2011. The Evaluator reviewed the project at mid-point following the UNDP and GEF evaluation guidelines. It concluded at the time that the implementation of the project was satisfactory. It stated that the project supports Armenia's national priority of conserving its limited forest resources, and the project targets a region of Armenia that has been identified as among the most highly vulnerable to climate change impact. Furthermore, the project was assessed as being cost-effective benefiting from the support from the Climate Change Unit located at MNP. The project was well on track to complete most if not all planned activities by the end of the implementation period. Finally, recognizing that the project will have contributed significantly to increasing the climate resilience of the forests in the Syunik region, the long-term sustainability of project achievements was rated as marginally satisfactory.

88. A set of 9 recommendations was made by the MTE. A management response was developed to plan how to address these recommendations. All recommendations were accepted at the time; UNDP-CO then

¹⁰ <http://www.nature-ic.am/en/index>

identified key actions, timeframe, responsibility and tracking for addressing each recommendation. The table below is a summary of these recommendations and the corresponding management responses.

Table 10: List of MTE Recommendations

Recommendations	Management Responses
<p>1. The project team has identified the necessary legal strategy for formal incorporation of forest management recommendations related to climate change adaptation, and there are no specific risks foreseen for this activity. However, given the importance of this activity and the fact that official government processes often take longer than expected, the project team should pay particular attention to this activity to ensure completion of this critical activity by the end of the project.</p>	<p>This recommendation is considered as useful and appropriate under the current implementation progress of the project. The project has concluded in the past several consultations with several stakeholders and partners (Ministry of Agriculture, Hayantar, FREC, REC, WWF) to proceed smoothly with mainstreaming adaptation recommendations in forest management plans taking into consideration the ongoing parallel and similar processes.</p>
<p>2. This evaluation recommends that, to clarify the potential use of "scenario planning" as an input to the revision and development of forest management plans, the project team should investigate and discuss the tool of "scenario planning" for climate change in forest management (potentially with the input of international expertise), and share information about this tool with FREC for inclusion, as appropriate, in Forest Enterprise management plans. It would also be appropriate for the project to focus on assisting data users in developing need-based data requests to be addressed at the national level. Along similar lines, the scope of the activity on the establishment of an "an early warning and response system" should be clarified.</p>	<p>This recommendation is considered as useful and appropriate under the current implementation progress of the project. The project will seek for additional clarification of "scenario planning" and "early warning and response system" as well as limitation for feasible implementation through consultations with the project's International Technical Adviser and national experts.</p>
<p>3. This evaluation recommends a 6-12 month no-cost extension to facilitate the originally planned 48-month implementation period. The officially expected completion date has as yet not been changed from November 2012, although the project did not begin implementation until six months later than expected, in May 2009 rather than November 2008. The current rate of budget disbursement should allow such an extension.</p>	<p>This recommendation is considered as useful and appropriate under the current implementation progress of the project. The extension need is included in the 2010 PIR and the proper justification will be submitted to the Outcome Board for discussion and approval.</p>
<p>4. Project quarterly operational reports should be organized under the project outcomes and key outputs for increased clarity and understanding of the report contents.</p>	<p>The project progress reports have being developed under the administrative management frameworks since some of the activities were covering different outputs under different outcomes. The project quarterly operational reports will be further prepared to reflect the specific framework of the project outcomes/outputs.</p>
<p>5. The project partners should begin budgeting now for depreciation of the firefighting equipment, each component of which has an expected useful life. If there is no financial mechanism to replace the equipment at the end of its useful life this aspect of the project will have low sustainability, as once the equipment is fully depreciated (some of the equipment has an expected five year life) the benefits gained through its procurement (in the form of fire suppression) will also be lost.</p>	<p>This recommendation is considered as useful and appropriate. The project will conduct consultation with "Hayantar" SNCO on further replacement of the depreciated equipment. Prior consultations discovered that upon successful and feasible results of testing and using of firefighting equipment and tools "Hayantar" SNCO will seek opportunities for procurement of similar equipment/tools either under the state budget allocation or other funding sources. Armenian Rescue Service has also planned to procure some of the introduced equipment and tools for local rescue/fire detachments.</p>
<p>6. The project should identify a way to take advantage of the training on forest management for climate change adaptation that has been suggested by the Director of FREC. Target beneficiaries could be foresters from Hayantar who will be responsible for implementing the forest management plans, as well as others at the policy level who will be involved in overseeing the development and updating of forest management plans in the future.</p>	<p>This recommendation is considered as useful. It will be discussed with forest management authorities at national and local levels during the planned consultations based on detailed proposals on mainstreaming climate change risks into forest management plans elaborated under the project.</p>
<p>7. There have been a number of activities targeted towards raising community-level awareness and understanding related to climate change and forest adaptation issues. This evaluation recommends that the project seek innovative ways to continue and expand these efforts, for example through the replication of the involvement of schoolchildren in the Meghri demonstration site.</p>	<p>This recommendation is considered as useful and appropriate. The project has planned to involve schoolchildren in planting and watering activities during the implementation of fourth forest rehabilitation pilot project planned to contribute into protection of forest biodiversity (wild fruit tree species) around Tatev Monastery in Syunik region. The project will also discuss with Hayantar to apply this opportunity in Goris and Kapan sites.</p>

Recommendations	Management Responses
	Besides the project has conducted 12 public awareness raising event solely targeted on Syunik schoolchildren. The subjects covered climate change issues, forest biodiversity protection, pest infestation and forest fires. Moreover, schoolchildren were assigned to prepare essays on the seminar subjects; the best essays were awarded.
8. The project has overall done an excellent job of leveraging synergies with relevant stakeholders and related initiatives. This evaluation recommends that the project team also seek synergies with the UNDP-GEF Small Grants Programme to support community-based climate resilience initiatives in Syunik region.	This recommendation is considered as useful. In the past the project kept informing community based organizations in Syunik region on UNDP-GEF Small Grant Programme opportunities and assisted in communication between the local organizations and SGP. The project will conclude additional consultations with UNDP-GEF SGP team in Armenia targeted to support community-based climate resilience and afforestation/ reforestation initiatives in Syunik region. Besides, consultations are provided to UNDP DRR project, which is currently planning implementation of the CC risk reduction projects in Syunik Marz.
9. To support wider dissemination of the pest early warning monitoring information, this evaluation recommends the training be conducted using a "train the trainer" approach, or that the training be open to all interested forestry sector professionals, depending on the available resources.	This recommendation is considered as useful and appropriate. The training of trainers on pesthole monitoring based on the monitoring approach developed under the project will be conducted in Spring 2011.

89. The review of these recommendations indicates that these recommendations were implemented as per the described management responses. It was noted that recommendation #5 was addressing the MTE rating of marginally satisfactory for financial sustainability.

4.3. Project Results

90. This section discusses the assessment of project results; how effective was the project to deliver its expected results and how sustainable these achievements will be over the long-term.

4.3.1. Overall Achievements/Results

91. As presented in Sections 4.1.1, the project has been implemented through three outcomes (that were further divided into 9 outputs). The implementation progress was measured through a set of 13 indicators with their respective baseline and target values. Below is a table listing the key results achieved by the project against each outcome and their corresponding targets planned at the end of the project.

Table 11: List of Delivered Results

Expected Results	Targets at End of Project	Key Results
<p>Project objective: To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.</p>		
<p>Outcome 1: The enabling environment for integrating climate change risks into management of forest ecosystems is in place.</p>	<ul style="list-style-type: none"> • At least two management plans include adaptation measures recommended and tested by the project (focusing on fire management and pest control) • Roles and responsibilities are developed and approved on the basis of the comparative advantage of each agency. • Scenario planning exercise becomes part of the forest management decision and routine. 	<ul style="list-style-type: none"> • Initially, the Project had identified the management plans of Kapan forest enterprise (south-east of Armenia), Noyemberyan and Ijevan forest enterprises (north of Armenia) to propose amendments in order to mainstream adaptation measures based on practical experience accumulated by the project and analyses of expected climate conditions in the two regions and their impacts on the forest ecosystems. Similarly, amendments were planned to be included in the planned management plan of Arevik National Park (south-east of Armenia). • Following negotiations with Hayantar, it was identified that the forest management planning and forest management information system in combination with the forest management plans will be significantly improved in the coming years by Hayantar in cooperation with the GIZ "Sustainable Management of Biodiversity, South Caucasus" (SMB) Programme. Under this initiative, GIZ will firstly develop amendments to the current forest management planning instructions and later on will revise the entire forest management planning system. Therefore, it was identified that climate change considerations produced with the support of the project will be included into the current instructions and later on the new instructions guiding the forest management planning process, in order to mainstream climate change considerations into forest management plans and forest management. • In addition to this, the planned management plan for Arevik National Park will not be completed during the implementation period of the UNDP Project. In line with the discussions held with Hayantar, the Project held negotiations with the GIZ SMB Programme, and it was agreed by the two parties that the guidelines for integrating climate change risks into forest management plans will be formally included in the national guidelines for the development of the 10-year forest management plans in cooperation between the UNDP Project and GIZ. To this end, the Project developed amendments to the current instructions on forest management plan development as well as guidelines for incorporating climate change considerations into the forest management planning process to be later on included in the revised instructions. The guidelines comprise approaches for including climate change impact assessment in the description of forest conditions and development, assessment of the impacts of different forest management pathways on the resilience of forests under climate change as well as specific approaches to be considered for instance in forest regeneration (e.g. species, genotypes, reforestation strategies), intermediate cuttings and regeneration harvesting (e.g. stand structure and composition, stocking density, disturbance risk) and forest protection (e.g. prevention, early response and reactive capacities) to ensure forest resilience to climate change. • In order to minimize the wildfire risk caused by agricultural waste and stubble field burning, the project advocated a NGO-led initiative to legally limit these activities. Following a targeted campaign on the need to revise the legislation related to the burning of vegetation on agricultural lands, legal recommendations were made to the government for banning the burning of vegetation. These recommendations were introduced in an Amendment to the Article 21 of the RA Law "On Atmospheric Air Pollution". This amendment was adopted by the National Assembly on September 14, 2011 (AL-250-N) eliminating wild fire spreading: "It is banned to burn stubble, plant residues and dry vegetation areas, vegetation of pastures and meadow lands in agricultural, forest, forest neighboring and specially protected areas of nature". • The Project has actively participated in the works of the Interagency Task Force on Wildfire Management. The Project significantly contributed to (i) conducting the study on the state of art of forest fire preparedness in forest enterprises and protected areas in Armenia and (ii) collecting the detailed information on forest fire incidences in Armenia data (approach different from current statistical data) in order to better identify the measures to be incorporated in the draft Action Plan. • The Task Force finalized the draft Action Plan on Improved Wildfire (forest and other vegetation covered area) Management with

Expected Results	Targets at End of Project	Key Results
		<p>the assistance of the Project. The draft action plan envisages implementation of legal, institutional, educational and public awareness raising measures. The draft Action Plan was formally circulated among stakeholder ministries, whose comments were incorporated into the draft. The draft Action Plan was submitted to the Cabinet for final approval, which is expected in April 2013. The approval and further implementation of the Action Plan will contribute to the sustainability of the Project achievements.</p> <ul style="list-style-type: none"> • The Project has already developed draft documents/papers to further support the implementation of the Action Plan. In particular, the project developed (i) a draft model action plan on forest fire early warning, response and firefighting; (ii) a draft annual operative plan on forest fire management; and (iii) a user-friendly brochure on wildfire management for local communities. • The Development of the National Policy on Wildfire Management and its Implementation Strategy are planned in the draft Action Plan. This task is being implemented under the project “Phase 3 - Enhancing National Capacity in Fire Management and Wildfire Disaster Risk Reduction in the South Caucasus” in the framework of the Environment and Security (ENVSEC) initiative led by OSCE. Global Fire Monitoring Center (GFMC-Germany) is contributing to the development of the policy and strategy. This task will incorporate the lessons learned from the Project. The draft policy and strategy should be finalized in 2013. • In order to support the inclusion of climate change considerations into forest management in Armenia, results of the climate vulnerability assessment of the Syunik Region conducted with the support of the Project were presented to the Project stakeholders and partner organizations in a workshop on scenario planning in forest management in Armenia. Furthermore, opportunities to use hydro-meteorological observation data and forecasts in forest management under changing climate conditions were discussed in the workshop based on a study of the current system of hydro-meteorological observations as well as a survey on weather data/forecast demand and supply conducted in the Syunik region under the Project. The follow up discussion identified specific needs for forest managers with regards to weather data especially to improve the early-warning system together with opportunities to improve co-operation between Forest Enterprises and the Hydro-meteorological Service. A Letter of Understanding should be signed by the parties to improve their co-operation in this regard. • Employment of forest models as decision support tools in forest management in Armenia under changing climate conditions was discussed in the scenario-planning workshop. Participants considered different groups of forest models such as empirical, process-based, hybrid and forest gap models. The models presented were selected based on (i) model applicability under changing environmental conditions; (ii) existing model applications in analysis of forest vulnerability under climate change and in practical forest management to identify adaptive forest management measures; and (iii) geographic range, site qualities and forest types covered by the model. It was discussed that modeling tools are planned to be included in the forest management planning and decision support system, which is being developed by GIZ “Sustainable Management of Biodiversity, South Caucasus” (SMB) Programme. Also the possibility to apply specific forest models over the implementation of upcoming UNDP projects was considered. Modeling approaches were also included in appropriate modules of the Armenian State Agrarian University and the manual on forest management decision support tools developed under the Project was provided to the University as instruction material.
<p>Outcome 2: Forest and protected area management in the Syunik region integrates pilot adaptation measures to</p>	<ul style="list-style-type: none"> • 75,000 ha of forest covered lands (65,000 ha under the forest enterprises and 10,000 ha under SPANs) will benefit from restoration measures designed 	<ul style="list-style-type: none"> • 55 ha of forest land and 1.8 ha of land under the Armenian Apostolic Church stewardship were reforested by two local forest enterprises and «Arevik» National Park with the participation of local community members under the four pilot projects to reduce forest fragmentation, to overcome forest fire and pest outbreak consequences, as well as to protect the local forest wild fruit species. Reforestation was done in compliance with the pilot project designs developed by “Hayantar”(ArmForest) SNCO and «Forest Research Experimental Center» SNCO. Restoration of forest ecosystem integrity and measures towards protection of forest wild fruit species in the area will create better conditions for forest biodiversity leading to enhancement of forest resilience and restoration of ecological balance. Based on lessons learned under the forest regeneration and forest rehabilitation pilot

Expected Results	Targets at End of Project	Key Results
<p>enhance adaptive capacity of mountain forest ecosystems.</p>	<p>specifically to address degradation pressures induced by climate change; the project will also indirectly influence 20,000 ha of non-forest covered lands under the forest enterprises.</p> <ul style="list-style-type: none"> • 4,000 ha (2,000 ha will directly be brought under improved management; an additional surrounding area of 2,000 ha will also benefit). 	<p>projects implemented by the Project, recommendations for adaptive forest management options at forest regeneration, including regeneration strategies, species and genotypes used for regeneration as well as maintenance of forest regeneration sites were developed under the Project. The recommendations are included in the manual “<i>Adapting to climate change in forest management and forest management planning in Armenia</i>”. Furthermore, the resilience building forest regeneration approaches are included in the guidelines for incorporating climate change considerations into the forest management planning process.</p> <ul style="list-style-type: none"> • The forest fire machinery, equipment and tools provided to Syunik (Goris) and Kapan Forest Enterprises and Arevik National Park in Syunik Region, as well as 20 horses provided to the mentioned two forest enterprises are currently prepared to serve forest fires early response on 55,000 ha of forest land managed by forest enterprises and 34,400 ha of forest land managed by the protected area. In case of urgent need these forest fire early response capacities may also serve on 10,000 ha of forests managed by “Shikahogh” State Reserve in Syunik located between Kapan Forest Enterprise and Arevik National Park. The provided forest fires early response machinery, equipment and tools as well as the horses have been used so far to suppress grassland fires, which have occurred on the neighboring community lands to prevent the fires spread towards the forest lands. • «Hayantar» and «Arevik NP» SNCOs are responsible for the maintenance of the provided equipment. The proper maintenance and use of the equipment has been monitored by the Project. “Hayantar” SNCO is seeking additional funds to secure forest enterprises in other regions of Armenia with similar equipment; initial negotiations have been conducted with the Government of Poland and GIZ. Improved measures for forest fire prevention and early response together with improved planning for post-disturbance activities are planned to be made mandatory through the revision of the instructions for forest management plan development and adoption of annual operative forest fire management planning in the Forest Enterprises. Availability of the forest fire early response equipment to local forest management authorities is secured through the National Action Plan on Improved Wildfire Management. • The Rescue Service of the Ministry of Emergency Situations of Armenia replicated part of this project initiative through procurement of 100 back-pack pumps from their own funds for wildfire pre-suppression and distribution among the fire brigades in Syunik, Lori, Tavush and Aragatsotn regions of Armenia in 2011. • A user-friendly Manual on Pest Monitoring and Control was developed based on the textbook “<i>The Main Pests of Armenian Forests and Pest Control Measures</i>” developed and published earlier with the support of the Project. The manual contains general information about current forest pest monitoring/control system in Armenia, approaches and methods of forest pest monitoring and control, identification of the main pest species (insects, rodents) and deceases in Armenia’s forests, introduction of the early warning system for forest insect pest outbreaks. 30 copies of the manual were distributed among the foresters from Syunik (Goris), Kapan and Sisian forest enterprises as well as rangers from the Arevik National Park. They will primarily serve as a tool to monitor the development of insect pest populations and pestholes in the forests. More copies of the manual will be distributed to foresters in other regions of Armenia. The e-version of the manual will be uploaded on the websites of Climate Change Information Center of Armenia and “Hayantar” SNCO. • Monitoring of pestholes conducted in the Arevik National Park in 2012 did not reveal significant insect pest outbreak to make the aerial pest control as feasible. However the probability of outbreak in spring-summer 2013 is high. Taking into account the project completion date (30 June 2013) the project initiated negotiations with the MNP and the CNF. As a result the latter will provide funds (to be transferred to the budget of the Arevik National Park SNCO) to support the implementation of aerial biological insect pest control in the Arevik National Park in May-June 2013 (about US \$10,000). The project will procure the biological insecticide Bitoxibacillin in April-May 2013. The Arevik National Park SNCO will procure aerial works services using the funds provided by CNF. Monitoring and evaluation of the insect pest populations and pestholes will be conducted in April 2013 to finalize the identification of the area to be treated. Aerial biological pest control on 500 ha area will be conducted over

Expected Results	Targets at End of Project	Key Results
	<ul style="list-style-type: none"> ● 16 staff from SPANs and forest enterprises are trained. ● 75,000 ha (65,000 ha of forest covered lands under the forest enterprises and 10,000 ha under SPANs). ● Reduction in these activities by 50% by project end. ● Targeted training workshops are held and tailored material is distributed to all 	<p>the period mid-May through mid-June 2013 (subject to weather and pest development conditions)¹¹.</p> <ul style="list-style-type: none"> ● The Ministry of Agriculture implemented the aerial chemical insect pest control on 9,000 ha of forests managed by “Hayantar” SNCO in June 2012. The control works were done in Aragatsotn, Kotayk, Vayots Dzor, and Syunik regions of Armenia. In the Syunik region the control works were implemented by the Kapan Forest Enterprise. The total amount allocated from the state budget for the control was US \$243,400. ● Knowledge and capacities of the Syunik (Goris), Kapan and Sisian forest enterprises as well as the Arevik National Park were increased through two trainings organized in the Syunik region for 26 officers of these organizations. The training covered the following subjects: general information about current forest pest control system in Armenia; approaches and methods of forest pest monitoring and control; identification of the main pest species (insects, rodents) and deceases in Armenia’s forests; introduction of the early warning system for forest insect pest outbreaks. User-friendly manuals on forest pest monitoring and control developed with the support of the project was distributed among the trainees. ● 35 signboards for the promotion of fire-prevention attitude and actions were installed in the most popular forested recreational areas of the Syunik Marz managed by two forest enterprises and two protected areas (http://www.nature-ic.am/en/PR_F_News/286). 1,300 copies of the thematic poster were distributed to community municipalities, educational institutions (including secondary schools), local NGOs and military units in Armenia calling upon the prevention of agricultural waste burning in the fields to minimize the risks of forest fires. ● The forest fire machinery, equipment and tools provided to two forest enterprises and one national park, as well as 20 horses provided to the mentioned two forest enterprises are currently prepared to serve forest fires early response on 99,400 ha of forest land managed by forest enterprises (55,000 ha) and protected areas (44,400 ha) in the Syunik region. ● A user-friendly brochure on wildfire management was developed and disseminated with the aim of increasing the knowledge of heads and administrations of local communities. The brochure presents the increasing risk of fire in the forests and other vegetation-covered areas under climate change, causes of wildfires, shortcomings of forest fire management in Armenia, and the introduction of improved wildfire prevention and pre-suppression measures. The brochure will also be distributed to communities in Armenia through the channels of the Rescue Service (regional detachments and rescue-fire brigades) as part of the implementation of the Action Plan on Wildfire Management. ● Following the provision of equipment and horses and the capacity development of the local forest management authorities to prevent and manage forest fires, only one forest fire case was registered in the target areas directly managed by Syunik and Kapan forest enterprises and Arevik National Park. On average in the Syunik region, there were 1.4 cases of forest fires along with an average of 37 ha of burned forestland annually (incl. 30 ha of forest covered areas) annually. The maximum annual number of forest fire incidences in Syunik over 2001-2012 was 4 (2006 and 2010) and, during the same period, the maximum burned forest area during one year was 323.3 ha. It is too early to recognize this as an improvement but the first indicators are very encouraging. Analysis of occurrence of the wildfire incidences in the community lands over the recent two years is underway. ● The user-friendly brochure on wildfire management will be also further used by local firefighters to increase the knowledge of local residents on wildfire prevention, including through seminars in the secondary schools. ● An analysis of the success factors and barriers of the approaches implemented by the project was conducted. The lessons learned were compiled into the publication “<i>Building wildfire management capacities to enhance adaptation of the vulnerable mountain</i>”

11 Since this review, the pest control demonstration took place on May 30-31, 2013 over 500ha. The project procured 1,000kg of biological insecticide, and CNF funded the cost of the aerial work through the “Arevik National Park” SNCO, which hired a company with a helicopter outfitted with sprayers to conduct this aerial work.

Expected Results	Targets at End of Project	Key Results
	<p>identified partner groups.</p> <ul style="list-style-type: none"> ● 24 people trained covering foresters from forest enterprises, republican, regional and local administrations, emergency and fire departments, protected area management units and community representatives. ● 15 ha (will directly be brought under improved management and will be rejoined to forested tracts) 	<p><i>forests of Armenia - Lessons from recent experience</i>". By providing illustrative examples of improving wildfire management under climate change, the lessons learned aim to enable replication of forest fire management options in other regions of Armenia as well as in other relevant regions outside of Armenia. The publication was posted at the following websites: UNDP Adaptation Learning Mechanism (ALM) (http://www.undp-alm.org/resources/case-study/building-wildfire-management-capacities-enhance-adaptation-vulnerable-mountain), UNDP-GEF (http://web.undp.org/gef/), UNDP Armenia (http://www.undp.am/?page=Publications), Ministry of Nature Protection of Armenia (http://www.mnp.am/?p=206), and Climate Change Information Center of Armenia (http://www.nature-ic.am/en/Local_News/559).</p> <ul style="list-style-type: none"> ● Proposals to introduce an early warning system of forest insect pest outbreaks was developed and discussed/agreed with stakeholders and local foresters in Syunik. The proposed system comprises of two template sheets (warning sheet and detailed examination sheet) and standardized methodologies for pest monitoring. When rangers and foresters identify an insect population and pestholes, they must complete the warning sheet and submit it to the Head of their Forest Enterprise (or National Park). Following the warning, the Chief Forester and the Forest Pathologist of the Forest Enterprise (or National Park) conduct a detailed examination of the insect population and pestholes and complete the detailed examination sheet. Then the Head of the Forest Enterprise (or National Park) submit the sheet to Hayantar (or MNP). Both template sheets and methodology will be submitted to Hayantar SNCO for formal approval and use. ● 15 ha of fragmented forest area have been reforested in the Goris district since 2009 with 70,000 seedlings of the native tree species to rejoin the area to the neighboring forest tracts. 20 ha of forest land which has been reforested in Meghri district since 2010 with 10,000 seedlings of native tree species to ensure post-disturbance recovery of the burnt forest area also falls under the target of forest fragmentation reduction. ● The project assisted the "Zikatar" Environmental Center of MNP to be involved in the regional project "Utilizing Stream Waters in the Suppression of Forest Fires with the Help of New Technologies" under the Black Sea Basin Joint Operational Program 2007-2013 funded by the European Union. The main objective of the project is to create a complete and holistic soft system for the suppression of forest fires in protected areas with stream waters collected in reservoirs in Greece, Turkey, Romania, Ukraine, Armenia and Moldova. The Project will be launched in 2013.
<p>Outcome 3: Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed.</p>	<ul style="list-style-type: none"> ● 6 forest enterprises 	<ul style="list-style-type: none"> ● A user friendly Manual on Adapting to Climate Change in Forest Management and Forest Management Planning in Armenia was developed based on the project experience and best available international experiences. ● Training for representatives of forest enterprises from the regions of Armenia other than the Syunik region is planned in May 2013. The Manual will serve as the main training material. ● The project also supported a series of public awareness raising activities, including the posting of these activities on the Climate Change Information Center website: <ul style="list-style-type: none"> ○ Seminars on "Sustainable Tourism in Forest Areas under Climate Change Conditions" (http://www.nature-ic.am/en/PR_F_News/464), on "Vulnerability of Mountain Forest Ecosystems and Enhancement of Adaptation to Climate Change Impacts" (http://www.nature-ic.am/en/PR_F_News/278), and on "Forest Biodiversity and Climate Change issues in Syunik Marz" (http://www.nature-ic.am/en/SR_Syunik); ○ A video on "Adapting to Climate Change Impacts in Mountain Forest Ecosystems of Armenia", which was posted on the GEF Adaptation Learning Mechanism (http://www.adaptationlearning.net/experience/alm-case-study-2010-adaptation-climate-change-impacts-mountain-forest-ecosystems-armenia);

Expected Results	Targets at End of Project	Key Results
		<ul style="list-style-type: none"> ○ Environmental education activities with school children (http://www.nature-ic.am/en/PR_F_News/379 and http://www.nature-ic.am/en/PR_F_News/374); ○ A competition for the best article on the Forest Vulnerability and Adaptation to Climate Change Issues (http://www.nature-ic.am/en/PR_F_News/370); ● The project team joined the UNDP’s Knowledge and Innovation Initiative as a volunteer blogger to discuss various aspects of project implementation and inviting participation from all interested parties. These discussions have been posted initially on the UNDP’s (internal) Teamworks platform and are also posted now on the climate change information center website (http://www.nature-ic.am/en/PR_F_News/471)

Source: Adapted from draft PIR-2013.

92. The review of achievements of the project indicates a successful and effective project; its overall progress is rated as *satisfactory*. The project was able to achieve what it was intended to achieve in the planned timeframe. 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. As a result, the project was seen as a response to national needs and with a good ownership, stakeholders were engaged on all project activities. The review found that three critical success factors explain partially this effectiveness: (i) the project was well designed, responding to national needs and benefitting from an excellent engagement and participation of stakeholders; (ii) an excellent project team – including experts and consultants - to implement this project. They implemented the project with good participative and collaborative principles; (iii) a good flexibility in allocating project resources and implementing activities to be able to respond to stakeholders needs.

93. It is also worthwhile to note that in addition to the logic model presented in Section 4.1.1, the project team used another logic to implement the project on a day-to-day basis. In order “*to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region*” – the objective of the project - the project team had, first, to pilot climate change adaptation measures; using a large bulk of the project resources. Then, on the basis of lessons learned, these measures have been validated by stakeholders and proposed to the government as adaptation measures to be mainstreamed in key policy, procedures and institutions. The piloting of climate change adaptation measures focused on three main aspects of forest management: (i) forest regeneration; (ii) forest fires; and (iii) pest management. The project achievements categorized along these 3 areas include:

- **Forest Regeneration:** The project supported the forestation of about 57ha in 4 sites throughout the Syunik region. This reforestation pilots included some areas of fragmented forests with the objective of rejoining the fragmented forested areas into one forest area and of establishing mixed stand to be resilient to climate change impacts. It also included some burnt forest areas to test the post-disturbance recovery. Based on these pilot experiences, lessons learned were published and guidelines were drafted to be incorporated into the guidelines for developing forest management plans.
- **Forest Fires:** The project financed the procurement of 3 sets of fire prevention and fire suppression equipment that were donated to the forest enterprises in Goris and Kapan and also to the “Arevik National Park” SNCO. It included basic equipment for fire control and suppression, a vehicle per site and 10 horses for each forest enterprise in Goris and Kapan. This procurement was also executed in parallel to capacity development initiatives that were supported by OSCE (see Section 4.2.1 and 4.2.2). As a result of these activities to improve fire prevention and fire management, a set of measures was developed and proposed to the government. These measures should be incorporated into the soon-to-be developed national strategy on wildfire management as well as into the work of the forest enterprises and of the Rescue Service throughout Armenia. The project is currently finalizing a draft model action plan for prevention and suppression of forest fires, which will be submitted to the Ministry of Territorial Administration.
- **Forest Pest Control:** In this area, the project supported the development of a textbook on forest pest control and followed by a manual on “*how to monitor forest pests*”. This manual includes template and guidelines for forest pest monitoring and reporting. The project is also finalizing a pest control demonstration in the Arevik National Park over an area of 500ha, which should be co-financed with CNF. The demonstration started before the 2012-2013 winter and it should end up with the possible aerial spray over the identified critical areas to control forest pests.

4.3.2. Attainment of Project Objective

94. The review of project achievements presented in the previous section 4.3.1 reveals that the implementation was successful and met the expected results planned at the outset of the project. Together, these achievements certainly contributed to the attainment of the project objective that was “*to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region*”; it is also rated as *satisfactory*. Armenia is now better capacitated for addressing climate change impacts on vulnerable mountain forest ecosystems. The table below presents the key results of this project against the

objective and its performance indicator.

Table 12: Attainment of Project Objective

Expected Results	Targets at End of Project	Key Results
<p>Project objective: To enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region.</p>	<ul style="list-style-type: none"> At least two types of resilience-enhancing measures employed by the project upon its completion, covering approximately 87% of forest covered area in Syunik (65,000 ha under the forest enterprises and 10,000 ha under SPANs) 	<ul style="list-style-type: none"> Implementation of four forest rehabilitation pilot projects aimed at (i) reducing forest fragmentation (in Goris and Meghri), (ii) restoring burnt juniper forest (in Kapan), (iii) restoring oak dominated burnt forest (in Meghri), and (iv) protecting forest wild fruit species (in Tatev). These 4 sites represents a total area of about 57ha and were implemented by the forest management authorities in the Syunik Region (Syunik Forest Enterprise in the district of Goris and Tatev area, Kapan Forest Enterprise in the district of Kapan, and Arevik National Park in the Meghri district). It also included the direct involvement of local communities. Infilling, agro-technical maintenance and watering were conducted in all pilot project areas (Goris, Kapan, Meghri and Tatev) as per the pilot project implementation designs and further agreed adjustments. Oak coppicing has also been carried out in Meghri to further support the observed natural regeneration. Annual survival rate monitoring of the planted seedlings has been conducted on the forest rehabilitation sites to assess the need for future activities on the sites as well as to evaluate the effects of weather, silvicultural operations and other factors. The survival rate is calculated based on the actual number of seedlings on the site at the time of the monitoring excluding dead seedlings removed during infilling. The most recent field monitoring was conducted in the fall 2012. In the Arevik National Park the average survival rate of the planted seedlings was 59 %, in the Kapan district 40 %, in the Goris district 47 %, and in the Tatev area managed by Tatev Monastery 84 %. Further maintenance of reforestation pilot project areas in Goris and Kapan (35 ha) was handed over to “Hayanar” SNCO. The latter submitted a formal letter confirming its earlier commitment to secure allocation of funds in the budget of “Hayantar” SNCO starting from 2013 in order to handle further maintenance and infilling in the pilot reforestation areas managed by “Hayantar” SNCO. Further maintenance of reforestation pilot project area in Meghri (20 ha) was handed over to Arevik National Park SNCO. As a result of negotiations initiated by the Project with the MNP and the CNF, the latter has committed the provision of funds through the Arevik National Park Administration for the maintenance of the pilot reforestation area in the park in 2013 (about US \$6,000) and possibly in 2014. Further maintenance of reforestation pilot project area in Tatev (1.8 ha) was handed over to the Tatev Monastery and Syunik Diocese of the Mother See of Holy Echmiadzin. As a result of negotiations initiated by the Project with the Armenian Interchurch Round Table Foundation, the latter expressed willingness to provide funds for further maintenance of the pilot project area in Tatev. Based on the Eco-regional Conservation Plan for the Caucasus 2010-2015, which was revised in 2010 with the assistance of the project, WWF Armenia has been implementing activities since 2011 to increase the resilience of forest ecosystems against climate change through the transformation of pure secondary pine stands to mixed species stands. As a project partner, this activity has been considered as co-financing to the project. The total amount of the project is EUR 625,000 and it is estimated that the disbursement as of April 2013 is about \$265,000. This amount is considered as the leveraged resources from WWF Armenia and it is registered as co-

Expected Results	Targets at End of Project	Key Results
		financing for this project.

95. The review of these key results at the objective level reveals only the partial set of results. It highlights the limitation of the choice of indicator - as discussed in Section 4.2.4 - to measure progress made at the objective level. This indicator measures coverage only; other indicator(s) would be needed to measure capacity impacts at the objective level. As discussed in Section 4.3.1, the project demonstrated climate change adaptation measures for mountain forest ecosystems in the Syunik region. These measures were piloted in 3 geographical areas: Goris, Kapan and Meghri and were categorized into 3 group of pilot activities: (i) forest regeneration; (ii) forest fires; and (iii) forest pest control. Then, once stakeholders validated these measures, several proposals have been submitted to the government as adaptation measures to be mainstreamed in key policy, procedures and institutions. The main result at the end of the project is that Armenia is now better equipped with demonstrated climate change adaptation measures to be mainstreamed into the infrastructure in place to manage mountain forest ecosystems, including policy, legislation, institutions, procedures and mechanisms, and skills and knowledge.

4.3.3. Relevance

96. The project was *highly relevant* for Armenia and also in the context of GEF in 2008-2009 with its strategic priority to “*Pilot an Operational Approach to Adaptation (SPSA)*”. Its timing was excellent to be part of a global initiative to pilot an approach to adaptation to climate change but also to address needs to adapt to climate change in specific regions of Armenia; particularly the Syunik region, which was highlighted as vulnerable to climate change in the Second National Communication (SNC) to UNFCCC. Within this context, the project provided lessons learned from the piloted initiatives supported by the project, which will be used to advance the climate change adaptation agenda in Armenia but also globally through the dissemination of results on the web.

97. At the time of the design, the mountain forest ecosystems in the Syunik region – being part of the Caucasus-Anatolian-Hyrcanian Temperate Forests Ecoregion - were identified as a global conservation priority and were listed by WWF as a Global 200 Ecoregion, and by Conservation International as a biodiversity hotspot. In 1998, under the First National Communication (FNC) to the UNFCCC a comprehensive vulnerability and adaptation assessment concluded that the forest in the south-east region of Armenia was a critically vulnerable region in the country, especially in terms of the risk posed by climate change to its unique mountain forest ecosystems. It stated that “*changes are expected to take place: deterioration of conditions for seminal forest renewal, intensification of semi-desert plant species penetration, expansion of hornbeam and oak dry type forests areas, and also some (for 100-150m) upward move of the bottom border of forest. On the height of 1600-1700m above the sea level essential changes will not take place*”.

98. Furthermore, several barriers were identified during the formulation of this project (see Section 2), including: (i) a planning process that did not take into account climate change; (ii) a limited institutional and individual capacity to understand climate change, its impact and how to adapt; and (iii) no concrete experience of implementing adaptation response measures.

99. As a result of this context, this project was designed to address these barriers and provide resources to pilot adaptation measures to climate change for mountain forest ecosystems in the Syunik region with the aim of increasing the capacity of Armenia’s south-east mountain forest ecosystems to be resilient to climate change. The timing and the objective of this project made it very relevant for Armenia.

100. At the global level, this project was part of a set of 26 adaptation projects (17 FSPs and 9 MSPs) that were funded by the GEF under its “*Strategic Priority on Adaptation (SPA)*”¹². It was the “first batch” of adaptation projects funded by the GEF. This set of projects was a pilot to pioneer on-the-ground interventions for adaptation to climate change and to learn lessons from each of these 26 projects. This SPA was established by the GEF in 2004 as a response to UNFCCC guidance and allocated \$50 million from the

¹² <http://www.thegef.org/gef/SPA>

GEF Trust Fund to finance it. An evaluation of this SPA initiative was conducted in 2010. It found that all SPA projects – including this project – were relevant to the GEF mandate and responded to the search for global environmental benefits. It was also found that the projects presented good opportunities for creating synergies among activities that promote sound environmental practices and those that aim at resilience to climate change.

101. It was noted that in this global context, a publication titled “*Building Wildfire Management Capacities to Enhance Adaptation of the Vulnerable Mountain Forests of Armenia - Lessons from Recent Experience*” was produced by the project and posted in 2012 on the UNDP Adaptive Learning Mechanism (ALM). Additionally, a video on “*Adapting to Climate Change Impacts in Mountain Forest Ecosystems of Armenia*” was posted in 2011 on the GEF Adaptation Learning Mechanism¹³ as well as a case study on the project¹⁴.

4.3.4. Efficiency

102. As discussed in some sections above, the project has been efficiently implemented; it is rated as *satisfactory*. The project team prudently allocated project resources, partnering with other initiatives to co-finance activities and get *more bang for the buck*.

103. Furthermore, the discussion in section 4.2.1 focused on the use of adaptive management. The assessment revealed that the project team used adaptive management extensively to secure project deliverables while maintaining adherence to the overall project design. The review indicates that the adaptive management had been used regularly to adapt to a constantly changing environment. It was particularly used as a mechanism to respond to stakeholders’ needs and priorities. As a result, activities supported by the project benefited from a good participation of stakeholders. Each assignment was conducted following well-defined terms of reference and/or feasibility studies.

104. The review of activities that were supported by the project reveals that efficiency was always emphasized when project financial resources would be allocated to specific activities. It included the systematic search for partners in conducting activities; stretching the available dollars and provided a good cost-effectiveness when using project resources. The review noted that 41% of the total project financial resources (*see Section 4.3.3*) were directly allocated to the three pilots: Goris, Kapan and Meghri to finance the reforestation demonstrations and the procurement of forest fire equipment, vehicles and horses. Further funds were also allocated to the pest control demonstration in the Arevik National Park.

105. The good efficiency of the project was also due to an excellent technical assistance used to implement the project. The project management team was very knowledgeable on climate change adaptation issues and also on the context of the Armenian mountain forest ecosystems. The project also used excellent short-term expertise (experts and consultants) for specific activities. Project activities were well led by the Project Manager with a clear process and proper documentation and annual work plans and progress reports were produced timely. It was noted that despite a weak set of indicators (*see Section 4.2.4*), the project was well monitored and progress was well reported in well written progress reports.

106. Despite the fact that it is always difficult to analyze the cost-benefit of such projects, the review of all these management elements 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 the mountain forest management needs to adapt to climate change.

4.3.5. Country Ownership

107. As discussed in other sections of this report, the country ownership is good. The project was a response to national priorities and needs; it was designed on the basis of a strong assessment of the sector and it addressed critical barriers to implement a climate change adaptation agenda for mountain forest

¹³ <http://www.adaptationlearning.net/gallery/undp-gef-spaarmeniaforest-adaptation>

¹⁴ <http://www.adaptationlearning.net/experience/alm-case-study-2010-adaptation-climate-change-impacts-mountain-forest-ecosystems-armenia>

ecosystems in Armenia. It partnered with all key relevant initiatives in Armenia and the country ownership was largely due to a good participation of stakeholders including all key government ministries and agencies. For each major activity, key stakeholders were part of the decision making process including the decision on the design of activities and the allocation of project resources.

108. For instance, the four reforestation demonstrations (Goris, Tatev, Kapan and Meghri) were initiated following a detailed design phase. Experts led the process with the participation of local forest enterprises (Goris and Kapan) and the “Averik National Park” SNCO to identify the areas to be reforested matching the selection criteria related to the objective of the project in this area. All key stakeholders reviewed these design documents and it was only when a consensus was reached that project resources were mobilized and the implementation of reforestation demonstrations went ahead. The design process was an excellent process to develop a good ownership from all stakeholders involved in the implementation of these reforestation demonstrations.

109. The same approach was used to procure forest fire equipment. A first list of equipment was collated together with the help of an International Expert on Forest Fire Management and with the support of the Global Fire Management Center (GFMC) out of Germany. This list was reviewed and revised by key stakeholders including Hayantar and the Rescue Service from the Ministry of Emergency Situations. Once all stakeholders agreed on the list, the project team mobilized the resources and launched the procurement process to acquire the forest fire equipment. As a result, recipients of this equipment were eager to receive it and the drill conducted in 2011 in Goris and Kapan (*see Section 4.2.1 and 4.2.2*) using this equipment was a major success. The provision of new modern forest fire equipment strengthened the services mandated – forest enterprises and Rescue services - to prevent and manage forest fires. In addition to the fact of procuring this new efficient modern equipment, the Evaluator noted during his field mission the catalyst effect of this equipment. Communities noted the strengthened services and, as a result, are more inclined to participate in the prevention and management of fires. Additionally, the forest enterprises found additional ways to use this equipment, such as using the “slip-on-unit” (a removable water tank with an engine and a pump mounted on a pickup truck to extinguish fires, as shown on the picture) for other tasks such as watering young trees planted recently and that need to be water a few times during the first few years if needed.



110. It is also expected that this good country ownership will contribute to the long-term sustainability of project achievements. As described in section 4.3.1, a large part of the project was to demonstrate climate change adaptation measures for mountain forest ecosystems. The project focused mainly on three areas: (i) reforestation, including reforestation of fragmented forested areas; (ii) management of forest fires; and (iii) forest pest control. Then on the basis of lessons learned through these demonstrations, the project has been in the process of drafting sets of guidelines, manuals and policy directions that have been submitted to the government with the objective to be mainstreamed in relevant policies, legislation, institutional mandates and procedures, etc. Having a good country ownership of project achievements is critical for this phase that will continue after the end of the project.

4.3.6. Mainstreaming

111. As described in section 4.1.6, the project strategy has been part of the UNCT programme implemented in Armenia. This project falls clearly under the third priority area – environmental management – of the UNDAF 2010-2015 and contributed to the UNDP expected result “*By 2015 national authorities implement environment and disaster risk reduction in the framework of national and local development programmes*”. Considering this planning framework, the project achievements clearly contributed to mainstreaming climate change adaptation measures into national environmental governance framework. As described in other sections of this report the project demonstrated first several adaptation measures to climate change for mountain forest ecosystems, then on the basis of the results of these demonstrations, lessons learned were identified and used to draft climate change adaptation guidelines, manuals and policy directions that were submitted to the relevant government entities for mainstreaming climate change adaptation in the environmental governance framework.

112. Pilot activities supported by the project including the involvement of local communities. However, it was noted by the Evaluator that community involvement in environmental management in Armenia is not yet well developed. The attempt made by the project to involve communities was good but more is needed in this area, including guidelines in the Forest Management Plans (FMPs) on what local communities can contribute to the management of local forest resources and how to involve these local communities. It is not an area that was emphasized by the project and the experience indicates that community involvement should become one priority in strengthening the management of local natural resources in Armenia. It is now well known worldwide that the management of local natural resources includes the involvement of local communities, recognizing that people and their livelihoods rely on the health and productivity of their landscapes, and their actions play a critical role in maintaining this health and productivity.

4.3.7. Sustainability

113. The prospects for the long-term sustainability of project achievements are good; it is rated as *likely sustainable*. The respective beneficiaries should continue activities demonstrated in the Syunik region: forest enterprises of Goris and Kapan, Monastery of Tatev and the “Arevik National Park” SNCO. At this point, these organizations committed to continue the necessary maintenance for the reforested areas following their guidelines. It includes grass mowing, tilling and watering if needed. Generally, the forest enterprises intervene 5 times a year the first year after plantation, 4 times the second year, 3 times the third year, 2 times the fourth year and 1 time the fifth year. Regarding the forest fire equipment, it is used and they will continue to use it more and more as it becomes a “must have” equipment in this region to respond to forest fires.

114. Furthermore, the results from these demonstrations have been used to draft sets of guidelines, manuals and policy directions that have been submitted to the government with the objective of being mainstreamed in relevant policies, legislation, institutional mandates and procedures, etc. The project Team has already used these results to establish guidelines to mainstream climate change risks into the formulation of forest management plans. Some lessons learned were already published and are available on the web. A manual to integrate climate change risks in forest management is being drafted; once it will be finalized, it will be submitted to the MNP and Hayantar for their use. A new model to elaborate Action Plan for the prevention and suppression of forest fires is also being drafted, emphasizing the roles and responsibilities of each agency at the local level. This model should be soon submitted to the Ministry of Territorial Administration for replacing/strengthening the current forest fire planning process done at the district level. The results from the pest control demonstration are used to improve an existing database on pest monitoring at the American University of Armenia, which is used by Professor to teach and conduct some research. Templates for pest monitoring and reporting were developed and are already used by the Arevik National Park rangers. In the medium term, it is expected that all foresters and rangers in Armenia will use these templates. There are also ongoing discussions with the hydro-met office to develop an early warning system to prevent forest fires.

115. It is difficult to predict the long-term impacts of this project but the review indicates that the achievements should be sustainable. The demonstrations were conducted successfully and they should become part of the day-to-day work of the respective agencies. The results from these demonstrations are now used to strengthen/mainstream climate change risks and adaptation measures into the environmental governance framework of Armenia. However, what is difficult to evaluate at this point is how far these results will impact the way Armenia addresses the needs to adapt to climate change. The paragraph above presents already a good list of potential impacts and more is in the pipeline.

Financial risks

116. When reviewing the sustainability of project achievements – particularly the demonstrations – financial risk is the main area where questions related to sustainability need particularly to be answered. The project invested in some demonstrations – including the procurement of forest fire equipment - and, of course, one may ask the question: What about after the project end? The first action to mitigate this risk was for the project management team to fully engage the beneficiaries into the process from the start. For instance, beneficiaries fully endorsed the choice of the selected areas to be reforested and the choice of forest fire equipment. These demonstrations were implemented with their full participation, including a participative decision making process. The second aspect mitigating this risk is the combination of awareness raising with the effectiveness of these demonstrations. Beneficiaries feel better empowered to do their job, using these new demonstrated measures. It is particularly true for the forest fire equipment. It is

very visible in the communities and the foresters are keen to demonstrate further their effectiveness. As a result, demands for such equipment were made to headquarters and the Rescue Service already purchased more equipment for other units in the country. It is not to say that these agencies are now totally financially sustainable for further developing these demonstrations and procuring more forest fire equipment. However, they have a growing capacity to maintain these demonstrations. It was also noted that other similar initiatives exist in Armenia to continue to support these agencies such as the UNDP-REDD+ project (soon to start), FAO forest inventory project, the soon to be started CLIMA East project funded by the EU and implemented by UNDP, and programmes and projects funded by CNF, GIZ, WWF and OSCE; financial sustainability is rated as *likely sustainable*.

Socio-economic risks

117. Due to the nature of this project, there was little socio-economic impact expected from this project. The main strategy of the project was two-fold: first, to demonstrate climate change adaptation measures for strengthening the resilience of mountain forest ecosystems; and second, to develop climate change adaptation guidelines. The government agencies in charge of managing these forests are now better equipped to address the need to adapt to climate change using the results from the demonstrations supported by the project.

118. In the long-term, the management of local natural resources must also involve local communities, recognizing that people and their livelihoods rely on the health and productivity of their landscapes, and their actions play a critical role in maintaining this health and productivity. The technical measures demonstrated with the support of the project should contribute to the resilience of these ecosystems and, ultimately, over the long-term, the project will, therefore, contribute positively to some socio-economic impacts on these local communities; socio-economic sustainability is rated as *likely sustainable*.

Institutional framework and governance risks

119. As discussed in section 4.3.3, the project was designed to address three barriers preventing the progress in Armenia to address the need to adapt to climate change; particularly in the Syunik region, which was identified as a global conservation priority and were listed by WWF as a Global 200 Ecoregion, and, by Conservation International as a biodiversity hotspot. As a result, the objective of the project was to provide resources to pilot/pioneer adaptation measures to climate change for mountain forest ecosystems in the Syunik region with the aim of increasing the capacity of Armenia's south-east mountain forest ecosystems to be resilient to climate change.

120. Following the demonstrations supported by the project, Armenia is now equipped with some adaptation measures to climate change for mountain forest ecosystems. The results from these demonstrations are now being used to formulate guidelines, manuals, and policy directions that have been submitted to the government with the objective of being mainstreamed in relevant policies, legislation, institutional mandates and procedures, etc. For instance, results from the forest fire component of the project should be incorporated into the National Strategy on Wildfire Management that is currently under development. Another example is the new model to elaborate Action Plan for the prevention and suppression of forest fires is also being drafted, emphasizing the roles and responsibilities of each agency at the local level. This model should be soon submitted to the Ministry of Territorial Administration for replacing/strengthening the current forest fire planning process done at the district level. Finally, a third example is the development of templates for pest monitoring and reporting, which are already used by the Arevik National Park rangers. In the medium term, it is expected that all foresters and rangers in Armenia will use these templates. Many more examples of these types of follow up actions are and will take place over the next few months, including after the project end with the support of the UNDP Climate Change Unit located at MNP. The institutional framework and governance sustainability is rated as *likely sustainable*.

Environmental risks

121. The review did not find any particular environmental risks to the sustainability of project outcomes; it is rated as *likely sustainable*. The project demonstrated adaptation measures to climate change for mountain forest ecosystems and, based on the results of these demonstrations drafted sets of climate change adaptation guidelines, manuals and policy directions that have been submitted to the government with the objective of being mainstreamed in relevant policies, legislation, institutional mandates and procedures, etc. There are no environmental risks involved with the implementation of this project.

4.3.8. Catalytic Role and Long-Term Impact

122. As discussed in section 4.3.3, this project was highly relevant for both Armenia and as a global initiative to demonstrate on-the-ground interventions for adaptation to climate change and to learn lessons from it. It was a demonstration of adaptation measures to climate change geared toward mountain forest ecosystem to increase the resilience of these ecosystems over the long-term. The review indicated that a large proportion of project resources were allocated to these demonstrations. The results from these demonstrations are now being used to draft guidelines, manuals and policy directions, which ultimately should be mainstreamed in relevant policies, legislation, institutional mandates, technical procedures, and other capacity elements necessary for a good management of mountain forest ecosystems, including the adaptation to climate change.

123. From a global and Armenian perspective, this project was to pioneer on-the-ground interventions demonstrating technical measures that could be implemented to increase the resilience of these ecosystems to climate change. Therefore, one of the fundamental logic of this project was to have a catalytic role or also a replication effect. The ultimate impact of the project will be if the results of these demonstrations are replicated throughout Armenia and also in similar ecosystems in the region and worldwide. So far, the review indicates that the project had a good catalytic role and more should come in the coming year. The participation of the project to the organization of national conferences and round tables contributed to this catalytic role as well as the publication of lessons learned from the project experience. Knowledge has been transferred; particularly since 2012 when the project started to have results from the demonstrations. In parallel to this transfer of knowledge, training took place to develop the capacity of key stakeholders in the Syunik region but also nationally. Finally, the drafting of guidelines, manuals and policy directions should also contribute to the catalytic role of the project to strengthen the environmental governance framework in place in Armenia, including the consideration of climate change risks and the adaptation strategies to implement.

124. This is through this latter mechanism that results from the demonstrations supported by the project should be scaled up nationally. For instance, the results from the reforestation demonstrations were used to identify and propose amendments to the guidelines for elaborating forest management plans. Once these amendments will be incorporated into the official forest management planning guidelines (currently in process), all forest management plans in Armenia will integrate adaptation measures to climate change as part of the actions to be implemented by foresters. Another example is the demonstration of forest fire equipment in 2 forest enterprises in Goris and Kapan that has started to be scaled up in other regions of Armenia with the Rescue Service purchasing similar equipment for other regions in Armenia sensitive to forest fires.

125. However, as discussed in section 4.1.7, the review found that despite the several related initiatives in strengthening the management of forest ecosystems and the good catalytic role of this project, there is still a sense that these activities are mostly “peripheral” to the core issues of this sector that is a low capacity to manage and protect forests and PAs, including limited resources (lack of budget), weak law enforcement capacity, poor planning process and complex institutional setup with procedures and mechanisms in great need to be upgraded. It seems to be a critical area that would need attention for any major improvement in this sector. Institutions with the mandate of managing and protecting forests and PAs need the necessary resources, the skills and knowledge to perform their duties effectively.

5. LESSONS LEARNED

126. A summary of lessons learned is presented below. There are based on the review of project documents, interviews with key informants and analysis of the information collected:

- 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.
- A project that is highly relevant, responding to national needs and priorities, is often highly effective in its implementation and enjoys good country ownership.
- A demonstration project needs to end up with a final phase to document the results from the demonstration(s) and to identify the way forward to replicate these results in similar context in the country and in the region.
- A flexible project using adaptive management is a necessary management mechanism to be able to respond to beneficiaries' needs and priorities. It provides the project with the capacity to adapt to changes, including disruptive events and yet keep its overall efficiency and effectiveness.
- A project procuring tangible deliverables selected by the beneficiaries (such as forest fire equipment or other tangible assets) brings tangible results to the 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.
- Having a project strategy that include an outcome focusing on learning and replication of project lessons is a positive feature, mandating the project implementation team to identify early on project lessons and disseminate these lessons and other informational products to a broad audience through the web. It is part of the project strategy and not an “add-on” activities that often is not fully implemented.

Annex 1: Terms of Reference



TERMS OF REFERENCE

TERMINAL EVALUATION OF THE “ADAPTATION TO CLIMATE CHANGE IMPACTS IN MOUNTAIN FOREST ECOSYSTEMS OF ARMENIA” UNDP-SUPPORTED GEF-FINANCED PROJECT (PIMS 3814)

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I. INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP-supported 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 “Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia” Project (PIMS 3814).

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

PROJECT SUMMARY TABLE		
Project Title:	Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia	
GEF Project ID:	3417	
UNDP Project ID:	3814	
Country:	Armenia	
Region:	Europe and Central Asia	
Focal Area:	Climate Change	
Operational Program:	SPA	
GEF Implementing Agency:	UNDP	
National Implementing Partner:	Ministry of Nature Protection	
Other Partners involved:	Ministry of Agriculture, Ministry of Emergency Situations	
Project Funds	<i>at endorsement (Million US\$)</i>	<i>at completion (Million US\$)</i>
GEF financing:	0.9	0.9
UNDP own funds:	0	0
Government of Armenia:	1.9	1.01*
Other:	0	1.45*
Total co-financing:	1.9	2.47*
Total Project Cost:	2.8	3.37*
Project duration		
Prodoc Signature (D/M/Y):	11/12/2008	
Date of first expenditure (D/M/Y):	06/05/2009	
(Operational) Closing Date (D/M/Y):	Proposed:	Actual:
	31/05/2013	31/05/2013

* The co-financing data are presented as of 31.06.2012 and will be further updated.

II. OBJECTIVE AND SCOPE

The project was designed to increase the adaptive capacity of Armenia’s south-east mountain forest ecosystems to be resilient to climate change. The long-term development **goal** of this medium size project is to assist Armenia in beginning a process by which strategies to moderate, cope with, and take advantage of the consequences of climate change are enhanced, developed, and implemented. The specific **objective** of the project is to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the Syunik region. The following **outcomes** contribute to the achievement of the project objective:

Outcome 1: The enabling environment for integrating climate change risks into management of forest ecosystems is in place.

Outcome 2: Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems.

Outcome 3: Capacities for adaptive management, monitoring and evaluation, learning, and replication of project lessons are developed.

(The project document can be retrieved from: http://www.thegef.org/gef/project_detail?projID=3417)

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.

III. EVALUATION APPROACH AND METHOD

An overall approach and method¹⁵ for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator (evaluation consultant) is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (Annex C). 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 Armenia, including the Syunik Province of Armenia. Interviews will be held with the following organizations and individuals at a minimum:

Organisations	Individuals (name, position)
UNDP CO Armenia	Ms. Claire Medina, Deputy Resident Representative, Mr. Armen Martirosyan, Portfolio Analyst, Environmental Governance
Ministry of Nature Protection of Armenia	Mr. Simon Papyan, First Deputy Minister, National Director of UNDP Environmental Projects, Mr. Aram Gabrielyan, UNFCCC National Focal Point, Project National Coordinator, Mr. Surik Hovhannisyan, Director, "Arevik National Park" SNCO (Syunik Province)
Ministry of Agriculture of Armenia	Mr. Martun Matevosyan, Director, "Hayantar" SNCO, Mr. Ruben Petrosyan, Deputy Director, Chief Forester, "Hayantar" SNCO, Mr. Armen Ishkhanyan, Head, Syunik Forest Enterprise, "Hayantar" SNCO (Syunik Province), Mr. Vladik Mirzoyan, Head, Kapan Forest Enterprise, "Hayantar" SNCO (Syunik Province),
Ministry of Emergency Situations of Armenia	Mr. Vrezh Gabrielyan, Deputy Director, Rescue Service, Mr. Karen Hovhannisyan, Deputy Head, Department of Population and Territories Protection, Rescue Service
WWF Armenia	Mr. Karen Manvelyan, Director
OSCE Office in Yerevan	Mr. William Hanlon, Deputy Head of Office Mr. Edvard Safaryan, ENVSEC Initiative

The evaluator will review all relevant sources of information, such as the project document, project reports – incl. Annual APR/PIR and other Reports, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other material 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 TOR Annex B of this Terms of Reference.

IV. EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (Annex A), 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

¹⁵ For additional information on methods, see the Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 7, pg. 163

evaluation executive summary. The obligatory rating scales are included in TOR Annex D.

Rating Project Performance		
Criteria	Comments	
Monitoring and Evaluation: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall quality of M&E	(rate 6 pt. scale)	
M&E design at project start up	(rate 6 pt. scale)	
M&E Plan Implementation	(rate 6 pt. scale)	
IA & EA Execution: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Implementation/Execution	(rate 6 pt. scale)	
Implementing Agency Execution	(rate 6 pt. scale)	
Executing Agency Execution	(rate 6 pt. scale)	
Outcomes: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Outcomes	(rate 6 pt. scale)	
Relevance: relevant (R) or not relevant (NR)	(rate 2 pt. scale)	
Effectiveness	(rate 6 pt. scale)	
Efficiency	(rate 6 pt. scale)	
Sustainability: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).		
Overall likelihood of risks to Sustainability:	(rate 4 pt. scale)	
Financial resources	(rate 4 pt. scale)	
Socio-economic	(rate 4 pt. scale)	
Institutional framework and governance	(rate 4 pt. scale)	
Environmental	(rate 4 pt. scale)	
Impact: Significant (S), Minimal (M), Negligible (N)		
Environmental Status Improvement	(rate 3 pt. scale)	
Environmental Stress Reduction	(rate 3 pt. scale)	
Progress towards stress/status change	(rate 3 pt. scale)	
Overall Project Results	(rate 6 pt. scale)	

V. 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 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 financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

VI. 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. In addition, the evaluation will be included in the country office evaluation plan.

VII. IMPACT

The evaluator 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, or c) demonstrated progress towards these impact achievements.

VIII. CONCLUSIONS, RECOMMENDATIONS & LESSONS

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

IX. IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Armenia. The UNDP CO will contract the evaluator and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the evaluator to set up stakeholder interviews, arrange field visits, coordinate with the Government etc. The project will also bear the costs of transportation and interpretation for the evaluator during the in-country mission to Armenia.

X. EVALUATION TIMEFRAME

The total duration of the evaluation will be 15 days according to the following plan:

Activity	Timing	Completion Date *
Preparation	2 days	18 March 2012
Evaluation Mission	6 days	31 March 2012
Draft Evaluation Report	5 days	15 April 2012
Final Report	2 days	29 April 2012

* The completion dates are indicative and to be specified after consultation with the selected International Consultant

XI. EVALUATION DELIVERABLES

The evaluator is expected to deliver the following:

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

XII. EVALUATOR

The TE will be conducted by an international consultant. The evaluator shall have prior 9experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The selected evaluator should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The evaluator must present the following qualifications:

- Advanced university degree in Forest Management, Environmental and/or Natural Resource Management or other related areas;
- Minimum 7 years of relevant professional experience in providing management or consultancy services to the forest and/or environmental management projects;
- Knowledge of UNDP and GEF M&E guidelines and procedures;
- Previous experience with results-based monitoring and evaluation methodologies, particularly with regard to forest and/or environmental management projects.

XIII. EVALUATOR ETHICS

Evaluator will be held to the highest ethical standards and is 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'.

XIV. PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
100%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

XV. APPLICATION PROCESS

The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. Shortlisted and interviewed candidates will be requested to submit a price offer of the assignment indicating: (a) the total cost (including daily fee, per diem and round-trip ticket costs) and (b) the consultancy fee per day.

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.

(For space consideration, the annexes of the TORs were not included)

Annex 2: 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.

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
Evaluation criteria: Relevance - How did the Project relate to the main objectives of GEF and to the environment and development priorities of Armenia at the local, regional and national level?				
<i>Is the Project relevant to GEF objectives?</i>	<ul style="list-style-type: none"> How does the Project support the related strategic priorities of the GEF? Were GEF criteria for Project identification adequate in view of actual needs? 	<ul style="list-style-type: none"> Level of coherence between project objectives and those of the GEF Extent to which the project is actually implemented in line with incremental cost argument 	<ul style="list-style-type: none"> Project documents GEF policies and strategies including CPAP GEF web site 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Is the Project relevant to UNDP objectives?</i>	<ul style="list-style-type: none"> How does the Project support the objectives of UNDP in this sector? 	<ul style="list-style-type: none"> Existence of a clear relationship between project objectives and country programme objectives of UNDP 	<ul style="list-style-type: none"> Project documents UNDP strategies and programme 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Is the Project relevant to Armenia's development objectives?</i>	<ul style="list-style-type: none"> How does the Project support the development objectives of Armenia at the local, regional and national level? How country-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? 	<ul style="list-style-type: none"> Degree to which the project support national environmental and development objectives Degree of coherence between the project and national priorities, policies and strategies 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-GEF criteria 	<ul style="list-style-type: none"> Project documents National policies, strategies and programmes Key government officials and other partners 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Does the Project address the needs of target beneficiaries?</i>	<ul style="list-style-type: none"> How does the Project support the needs of target beneficiaries? Is the implementation of the Project been inclusive of all relevant Stakeholders? Are local beneficiaries and stakeholders adequately involved in Project design and implementation? 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Beneficiaries and stakeholders Needs assessment studies Project documents 	<ul style="list-style-type: none"> Document analysis Interviews with beneficiaries and stakeholders
<i>Is the Project internally coherent in its</i>	<ul style="list-style-type: none"> Is there a direct and strong link between project expected results (log frame) and the Project design (in terms of Project components, choice of partners, structure, delivery mechanism, scope, budget, use of resources etc.)? 	<ul style="list-style-type: none"> Level of coherence between project expected results and project design internal logic Level of coherence between project design and project implementation approach 	<ul style="list-style-type: none"> Program and project documents Key project stakeholders 	<ul style="list-style-type: none"> Document analysis Key Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>design?</i>	<ul style="list-style-type: none"> ▪ Is the length of the Project conducive to achieve project outcomes? 			
<i>How is the Project relevant in light of other donors?</i>	<ul style="list-style-type: none"> ▪ With regards to Armenia, does the Project remain relevant in terms of areas of focus and targeting of key activities? ▪ How do GEF-funds help to fill gaps (or give additional stimulus) that are crucial but are not covered by other donors? 	<ul style="list-style-type: none"> ▪ Degree to which program was coherent and complementary to other donor programming in Armenia ▪ List of programs and funds in which the future developments, ideas and partnerships of the project are eligible? 	<ul style="list-style-type: none"> ▪ Other Donors' policies and programming documents ▪ Other Donor representatives ▪ Project documents 	<ul style="list-style-type: none"> ▪ Documents analyses ▪ Interviews with other Donors
Future directions for similar Projects	<ul style="list-style-type: none"> ▪ 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? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis
Evaluation criteria: Effectiveness – To what extent the expected outcomes of the Project were achieved?				
<i>How is the Project effective in achieving its expected outcomes?</i>	<ul style="list-style-type: none"> ▪ Is the project being effective in achieving its expected outcomes? <ul style="list-style-type: none"> ○ The enabling environment for integrating climate change risks into management of forest ecosystems is in place. ○ Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems. ○ Capacities for adaptive management, learning and replication of project lessons are developed 	<ul style="list-style-type: none"> ▪ New methodologies, skills and knowledge ▪ Change in capacity for information management: Knowledge acquisition and sharing; Effective data gathering, methods and procedures for reporting. ▪ Change in capacity for awareness raising <ul style="list-style-type: none"> ○ Stakeholder involvement and government awareness ○ Change in local stakeholder behavior ▪ Change in capacity in policy making and planning <ul style="list-style-type: none"> ○ Policy reform for adaptation of mountain forest ecosystem ○ Legislation/regulation change to improve adaptation of mountain forest ecosystem ○ Development of national and local strategies and plans supporting adaptation of mountain forest ecosystem ▪ Change in capacity in implementation and enforcement <ul style="list-style-type: none"> ○ Design and implementation of risk assessments ○ Implementation of national and local strategies and action plans through adequate institutional frameworks and their maintenance ○ Monitoring, evaluation and promotion of pilots ▪ Change in capacity in mobilizing resources <ul style="list-style-type: none"> ○ Leverage of resources ○ Human resources ○ Appropriate practices ○ Mobilization of advisory services 	<ul style="list-style-type: none"> ▪ Project documents ▪ Key stakeholders including UNDP, Project Team, Representatives of Gov. and other Partners ▪ Research findings 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Meetings with main Project Partners ▪ Interviews with project beneficiaries

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>How is risk and risk mitigation being managed?</i>	<ul style="list-style-type: none"> How well are risks and assumptions being managed? What was the quality of risk mitigation strategies developed? Were these sufficient? Are there clear strategies for risk mitigation related with long-term sustainability of the project? 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Project Staff and Project Partners 	<ul style="list-style-type: none"> Document analysis Interviews
Future directions for similar Projects	<ul style="list-style-type: none"> What lessons have been learnt for the project to achieve its outcomes? What changes could have been made (if any) to the design of the project in order to improve the achievement of the project's expected results? How could the project be more effective in achieving its results? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis
Evaluation criteria: <i>Efficiency</i> - Was the project implemented efficiently, in-line with international and national norms and standards?				
<i>Is Project support channeled in an efficient way?</i>	<ul style="list-style-type: none"> Was adaptive management used or needed to ensure efficient resource use? Did the project logical framework and work plans and any changes made to them use as management tools during implementation? Were the accounting and financial systems in place adequate for project management and producing accurate and timely financial information? Were progress reports produced accurately, timely and responded to reporting requirements including adaptive management changes? Was project implementation as cost effective as originally proposed (planned vs. actual) Was the leveraging of funds (co-financing) happened as planned? Were financial resources utilized efficiently? Could financial resources have been used more efficiently? How was RBM used during project implementation? Were there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons learned and recommendations pertaining to project design and implementation effectiveness were shared among project stakeholders, UNDP and GEF Staff and other relevant organizations for ongoing project adjustment and improvement? Did the project mainstream gender considerations into its implementation? 	<ul style="list-style-type: none"> 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 design/ implementation approach (i.e. restructuring) when needed to improve project efficiency Existence, quality and use of M&E, feedback and dissemination 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 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Representatives of Gov. and Project Staff Beneficiaries and Project partners 	<ul style="list-style-type: none"> Document analysis Key Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>How efficient are partnership arrangements for the Project?</i>	<ul style="list-style-type: none"> ▪ To what extent partnerships/linkages between institutions/ organizations were encouraged and supported? ▪ Which partnerships/linkages were facilitated? Which one can be considered sustainable? ▪ What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP/GEF and relevant government entities) ▪ Which methods were successful or not and why? 	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ Project Partners ▪ Beneficiaries 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews
<i>Does the Project efficiently utilize local capacity in implementation?</i>	<ul style="list-style-type: none"> ▪ Was an appropriate balance struck between utilization of international expertise as well as local capacity? ▪ Did the Project take into account local capacity in design and implementation of the project? ▪ Was there an effective collaboration with scientific institutions with competence in mountain forest ecosystem management? 	<ul style="list-style-type: none"> ▪ Proportion of total expertise utilized taken from Armenia ▪ Number/quality of analyses done to assess local capacity potential and absorptive capacity 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ UNDP, Project Team and Project partners ▪ Beneficiaries 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews
Future directions for similar Projects	<ul style="list-style-type: none"> ▪ 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? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis
Evaluation criteria: <i>Impacts</i> - <i>What are the potential and realized impacts of activities carried out in the context of the Project? Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/ or improved ecological status?</i>				
<i>How is the Project effective in achieving its long-term objectives?</i>	<ul style="list-style-type: none"> ▪ Will the project achieve its objective that is to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the south-eastern Syunik region of Armenia? ▪ Will achievements contribute to its goal that is to assist Armenia in beginning a process by which strategies to moderate, cope with, and take advantage of the consequences of climate change are enhanced, developed, and implemented in particular in forest ecosystems? 	<ul style="list-style-type: none"> ▪ Change in capacity: <ul style="list-style-type: none"> ○ To pool/mobilize resources ○ For related policy making and strategic planning, ○ For implementation of related laws and strategies through adequate institutional frameworks and their maintenance, ▪ Change in use and implementation of sustainable alternatives ▪ Change to the quantity and strength of barriers such as change in <ul style="list-style-type: none"> ○ Institutions in charge of managing mountain forests ○ Mountain forest management/monitoring system ○ Methodology to conduct forest inventories ○ Organization of forest users ○ Policy and legislation governing mountain forest ecosystems ○ Mountain forest ecosystem infrastructures 	<ul style="list-style-type: none"> ▪ Project documents ▪ Key Stakeholders ▪ Research findings; if available 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Meetings with UNDP, Project Team and project Partners ▪ Interviews with project beneficiaries and other stakeholders

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
		<ul style="list-style-type: none"> o Livelihood of mountain communities 		
<i>How is the Project impacting the local environment?</i>	<ul style="list-style-type: none"> ▪ What are the impacts or likely impacts of the project? <ul style="list-style-type: none"> o On the local environment; o On poverty; and, o On other socio-economic issues. 	<ul style="list-style-type: none"> ▪ Provide specific examples of impacts at those three levels, as relevant 	<ul style="list-style-type: none"> ▪ Project documents ▪ Key Stakeholders ▪ Research findings 	<ul style="list-style-type: none"> ▪ Data analysis ▪ Interviews with key stakeholders
Future directions for the Project	<ul style="list-style-type: none"> ▪ 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? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis
Evaluation criteria: Sustainability - To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?				
<i>Are sustainability issues adequately integrated in Project design?</i>	<ul style="list-style-type: none"> ▪ Were sustainability issues integrated into the design and implementation of the project? 	<ul style="list-style-type: none"> ▪ Evidence/Quality of sustainability strategy ▪ Evidence/Quality of steps taken to address sustainability 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ UNDP, project staff and project Partners ▪ Beneficiaries 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews
<i>Financial Sustainability</i>	<ul style="list-style-type: none"> ▪ Did the project adequately address financial and economic sustainability issues? ▪ Are the recurrent costs after project completion sustainable? 	<ul style="list-style-type: none"> ▪ Level and source of future financial support to be provided to relevant sectors and activities after Project end? ▪ Evidence of commitments from international partners, governments or other stakeholders to financially support relevant sectors of activities after Project end ▪ Level of recurrent costs after completion of project and funding sources for those recurrent costs 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ UNDP, project staff and project Partners ▪ Beneficiaries 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews
<i>Organizations arrangements and continuation of activities</i>	<ul style="list-style-type: none"> ▪ Were the results of efforts made during the project implementation period well assimilated by organizations and their internal systems and procedures? ▪ Is there evidence that project partners will continue their activities beyond project support? ▪ What degree is there of local ownership of initiatives and results? ▪ Were appropriate 'champions' being identified and/or supported? 	<ul style="list-style-type: none"> ▪ Degree to which project activities and results have been taken over by local counterparts or institutions/organizations ▪ Level of financial support to be provided to relevant sectors and activities by in-country actors after project end ▪ Number/quality of champions identified 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ UNDP, project staff and project Partners ▪ Beneficiaries 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews
<i>Enabling Environment</i>	<ul style="list-style-type: none"> ▪ Were laws, policies and frameworks addressed through the project, in order to address sustainability of key initiatives and reforms? 	<ul style="list-style-type: none"> ▪ Efforts to support the development of relevant laws and policies ▪ State of enforcement and law making capacity 	<ul style="list-style-type: none"> ▪ Project documents and evaluations ▪ UNDP, project staff and 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
	<ul style="list-style-type: none"> Were the necessary related capacities for lawmaking and enforcement built? What is the level of political commitment to build on the results of the project? 	<ul style="list-style-type: none"> Evidences of commitment by the political class through speeches, enactment of laws and resource allocation to priorities 	<ul style="list-style-type: none"> project Partners Beneficiaries 	
<i>Institutional and individual capacity building</i>	<ul style="list-style-type: none"> Is the capacity in place at the regional, national and local levels adequate to ensure sustainability of the results achieved to date? 	<ul style="list-style-type: none"> Elements in place in those different management functions, at the appropriate levels (regional, national and local) in terms of adequate structures, strategies, systems, skills, incentives and interrelationships with other key actors 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Project staff and project Partners Beneficiaries Capacity assessments available, if any 	<ul style="list-style-type: none"> Interviews Documentation review
<i>Social and political sustainability</i>	<ul style="list-style-type: none"> 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? 	<ul style="list-style-type: none"> Example of contributions to sustainable political and social change in support of mountain forest management reform 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, project staff and project Partners Beneficiaries 	<ul style="list-style-type: none"> Interviews Documentation review
<i>Replication</i>	<ul style="list-style-type: none"> 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 that support the adaptation of mountain forest ecosystem? 	<ul style="list-style-type: none"> Number/quality of replicated initiatives Number/quality of replicated innovative initiatives Volume of additional investment leveraged 	<ul style="list-style-type: none"> Other donor programming documents Beneficiaries UNDP, project staff and project Partners 	<ul style="list-style-type: none"> Document analysis Interviews
<i>Challenges to sustainability of the Project</i>	<ul style="list-style-type: none"> What are the main challenges that may hinder sustainability of efforts? Have any of these been addressed through project management? What could be the possible measures to further contribute to the sustainability of efforts achieved with the project? 	<ul style="list-style-type: none"> Challenges in view of building blocks of sustainability as presented above Recent changes which may present new challenges to the Project 	<ul style="list-style-type: none"> Project documents and evaluations Beneficiaries UNDP, project staff and project Partners 	<ul style="list-style-type: none"> Document analysis Interviews
Future directions for the Project	<ul style="list-style-type: none"> 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 the project initiatives that must be directly and quickly addressed? How can the experience and good project practices influence the strategies for mountain forest ecosystem adaptation in Armenia and in the region? Are national decision-making institutions (Parliament, Government etc.) in Armenia ready to improve their mountain forest ecosystem adaptation measures? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis

Annex 3: List of Documents Reviewed

Baker Tilly Armenia, December 31, 2010, Audit Report of Project

GEF, August 2007, PIF - Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

GEF, November 2007, PPG - Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

GEF, PIF - Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes of Northeastern Armenia

GEF, Strategy on Adaptation to Climate Change for the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF)

GEF, UNDP, Building Wildfire Management Capacities to Enhance Adaptation of the Vulnerable Mountain Forests of Armenia - Lessons from Recent Experience

GEF, UNDP, Government of RA, Project Document – MSP - PIMS 3814: Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

Government of RA, Annex 1: National Forest Program of the Republic of Armenia (non-official translation from Armenian)

Government of RA, Annex 2: Timetable of National Forest Program Measures Implementation

Government of RA, Annex 3: List of Legal Acts in the Field of Forestry

Government of RA, Decision of the Government of the Republic of Armenia on Approval of the List of Complex Measures Aimed at Improvement of the Fire Safety in the Forest and other Vegetation Covered Areas

Government of RA, Annex to the Decision of the Government of the Republic of Armenia – List of Complex Measures Aimed at Improving the Fire Safety in the Forest and Other Vegetation Covered Areas

Government of RA, October 24, 2005, Forest Code of the Republic of Armenia

MNP, Forest Management Plan for the Noyemberyan Forest Enterprise

OSCE, December 4, 2012, Report on 2nd National Roundtable on Wildfire Management

OSCE, October 15, 2012, Report on the existing national legislative, regulatory and institutional framework of forest and land management in Armenia concerning the reduction of wildfire hazard, prevention and control of wildfires, and the use of fire

OSCE, Project Progress Report “Phase Two - Enhancing National Capacity on Fire Management and Wildfire Disaster Risk Reduction in the South Caucasus”

Project, 2012 Annual Project Review (APR) – Project Implementation Report (PIR)

Project, 2012 Annual Project Review (APR) – Project Implementation Report (PIR) (updated as of March 31, 2013)

Project, 2010 Annual Project Review (APR) – Project Implementation Report (PIR)

Project, 2011 Annual Project Review (APR) – Project Implementation Report (PIR)

Project, AWP 2009 (1)

Project, AWP 2009 (2)

Project, AWP 2010 (1)

Project, AWP 2010 (2)

Project, AWP 2011 (1)

Project, AWP 2011 (2)

Project, AWP 2012

Project, Goris Pilot Project Implementation and Monitoring Fact Sheet

Project, Handout - Forest Fire Early Response Equipment, Tools and Uniform

Project, Kapan Pilot Project Implementation and Monitoring Fact Sheet

Project, List of Personnel

Project, List of Subcontractors and Responsible Parties

Project, Manual “Spread of harmful pests in Armenia forests and measures to combat them and ways to improve pest management” (in Armenian)

Project, Meghri Pilot Project Implementation and Monitoring Fact Sheet

Project, Minutes of the Project Board Meeting – MNP - July 23, 2010

Project, Minutes of the Project Board Meeting – MNP - August 24, 2012

Project, Minutes of the Project Board Meeting – Hotel Olympia, Goris, April 30, 2011

Project, Quarterly Reports – January-March 2009 to July-September 2012

Project, Standard Progress Report – January-December 2009

Project, Standard Progress Report – January-December 2010

Project, Standard Progress Report – January-December 2011

Project, Standard Progress Report – January-December 2012

Project, Tatev Pilot Project Implementation and Monitoring Fact Sheet

REC Caucasus, UNDP, Letter of Intent Between the UNDP and REC for the Caucasus Armenia Branch Office

UN Armenia, UNDAF 2010-2015

UNDP, Atlas – Combined Delivery Report 2009

UNDP, Atlas – Combined Delivery Report 2010

UNDP, Atlas – Combined Delivery Report 2011

UNDP, Atlas – Combined Delivery Report 2012-2013

UNDP, Atlas – Risk Log

UNDP, “Arevik National Park” SNCO, Letter of Agreement Between the UNDP and the “Arevik National Park” SNCO of the MNP

UNDP, GEF, September 2009, Inception Report - Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

UNDP, “Hayantar” SNCO, Letter of Agreement Between the UNDP and the “Hayantar” SNCO

UNDP, MNP, WWF-Armenia, Letter of Intent Between the UNDP, MNP and WWF-Armenia

UNDP, Project Document - Promotion of biodiversity conservation and climate change mitigation through rehabilitation of mountain rangeland and forest ecosystems

_____, Guidelines for incorporating climate change considerations into the forest management planning process

_____, July 22, 2011, Mid-Term Evaluation - Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

_____, June 2011, Mid-Term Evaluation - Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia – Management Response

_____, Manual “Adapting to climate change in forest management and forest management planning in Armenia”

_____, National forest Policy and Strategy of the Republic of Armenia (non-official translation from Armenian)

_____, November 2012, Armenia Development Strategy for 2012-2015 (Final Draft)

_____, Phase Two - Enhancing national capacity on fire management and wildlife disaster risk reduction in the South Caucasus – OSCE

_____, Phase Three - Enhancing national capacity on fire management and wildlife disaster risk reduction in the South Caucasus – OSCE

Main Web Sites Consulted:

Climate Change Information Center of Armenia: <http://www.nature-ic.am/en/index>

European Neighbourhood Policy, http://ec.europa.eu/world/enp/partners/enp_armenia_en.htm

GEF: <http://www.gefweb.org>

GFMC, <http://www.fire.uni-freiburg.de>

SPA, <http://www.thegef.org/gef/SPA>

UNDP Armenia: <http://www.undp.am> (UNDAF and other UN documents)

Annex 4: Interview Guide

Note: This was a guide for the interviewer and 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.

I. RELEVANCE - *How does the Project relate to the main objectives of the GEF and to the environment and development priorities of Armenia at the local, regional and national levels?*

- I.1. Is the project relevant to the GEF objectives?
- I.2. Is the project relevant to UNDP objectives?
- I.3. Is the project relevant to Armenia's development objectives?
- I.4. Does the project address the needs of target beneficiaries?
- I.5. Is the project internally coherent in its design?
- I.6. How is the project relevant in light of other donors?

Future directions for similar projects

- I.7. 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.8. How could the project better target and address priorities and development challenges of targeted beneficiaries?

II. EFFECTIVENESS – *To what extent the expected outcomes of the project were achieved?*

- II.1. How is the Project effective in achieving its expected outcomes?
 - o The enabling environment for integrating climate change risks into management of forest ecosystems is in place.
 - o Forest and protected area management in the Syunik region integrates pilot adaptation measures to enhance adaptive capacity of mountain forest ecosystems.
 - o Capacities for adaptive management, learning and replication of project lessons are developed
- II.2. How is risk and risk mitigation being managed?

Future directions for similar projects

- II.3. What lessons have been learnt for the project to achieve its outcomes?
- II.4. What changes could have been made (if any) to the design of the project in order to improve the achievement of project' expected results?
- II.5. How could the project be more effective in achieving its results?

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

- III.1. Was adaptive management used or needed to ensure efficient resource use?
- III.2. Did the project logical framework and work plans and any changes made to them use as management tools during implementation?
- III.3. Were the accounting and financial systems in place adequate for project management and producing accurate and timely financial information?
- III.4. Were progress reports produced accurately, timely and respond to reporting requirements including adaptive management changes?
- III.5. Was project implementation as cost effective as originally proposed (planned vs. actual)
- III.6. Was the leveraging of funds (co-financing) happening as planned?
- III.7. Were financial resources utilized efficiently? Could financial resources have been used more efficiently?
- III.8. How was RBM used during project implementation?
- III.9. Were there an institutionalized or informal feedback or dissemination mechanism to ensure that findings, lessons learned and recommendations pertaining to project design and implementation

effectiveness were shared among project stakeholders, UNDP and GEF Staff and other relevant organizations for ongoing project adjustment and improvement?

- III.10. Did the project mainstream gender considerations into its implementation?
- III.11. To what extent were partnerships/ linkages between institutions/ organizations encouraged and supported?
- III.12. Which partnerships/linkages were facilitated? Which one can be considered sustainable?
- III.13. What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP/GEF and relevant government entities)
- III.14. Was an appropriate balance struck between utilization of international expertise as well as local capacity?
- III.15. Did the project take into account local capacity in design and implementation of the project?

Future directions for the project

- III.16. What lessons can be learnt from the project on efficiency?
- III.17. How could the project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements etc...)?

IV. IMPACTS - *What are the potential and realized impacts of activities carried out in the context of the Project? Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?*

- IV.1. Will the project achieve its objective that is “to enhance adaptive capacities of the vulnerable mountain forest ecosystems to climate change in the south-eastern Syunik region of Armenia?”
- IV.2. Will the project achievements contribute to “its goal that is to assist Armenia in beginning a process by which strategies to moderate, cope with, and take advantage of the consequences of climate change are enhanced, developed, and implemented in particular in forest ecosystems?”
- IV.3. How is the project impacting the local environment such as impacts or likely impacts on the local environment; on poverty; and, on other socio-economic issues?

Future directions for the project

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

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

- V.1. Are sustainability issues adequately integrated in project design?
- V.2. Did the project adequately address financial and economic sustainability issues?
- V.3. Is there evidence that project partners will continue their activities beyond project support?
- V.4. Are laws, policies and frameworks being addressed through the project, in order to address sustainability of key initiatives and reforms?
- V.5. Is the capacity in place at the national and local levels adequate to ensure sustainability of the results achieved to date?
- V.6. Did 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 the project initiatives that must be directly and quickly addressed?

Annex 5: Evaluation Mission Agenda and List of People Interviewed



Ministry of Nature Protection
of the Republic of Armenia



Empowered lives.
Resilient nations.

PIMS 3814: “Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia” UNDP-supported, GEF-funded Project

MISSION AGENDA

In-country mission of **Mr. Jean-Joseph Bellamy**, International Consultant for Terminal Evaluation,
22–28 March 2013

Mission Purpose:

- Meetings and interviews (UNDP CO, Project Team, Project Implementing Partner and Responsible Parties, and Project partners).
- Field mission to Syunik Province: meetings and interviews at Syunik(Goris) and Kapan Forest Enterprises as well as “Arevik” National Park; site visit to forest rehabilitation pilot project areas.

Time	Venue	Purpose	Other Participants
Friday, 22 March 2013 – Yerevan			
09:30-11:00	Project office	<ul style="list-style-type: none"> • Meeting with the Project Management 	<ul style="list-style-type: none"> • Ms. Diana Harutyunyan, CC Related Projects Coordinator • Mr. Aram Ter-Zakaryan, Project Task Leader
11:00-13:00	UNDP Armenia CO	<ul style="list-style-type: none"> • Meeting at Environmental Governance Portfolio 	<ul style="list-style-type: none"> • Mr. Armen Martirosyan, EG Portfolio Analyst • Mr. Aram Ter-Zakaryan, Project Task Leader
14:30-15:30	Ministry of Emergency Situations of RA (MOES)	<ul style="list-style-type: none"> • Meeting with Project partner 	<ul style="list-style-type: none"> • Mr. Vrezh Gabrielyan, Deputy Director of Rescue Service • Mr. Karen Honhannisyan, Deputy Head of Department, Rescue Service • Mr. Arthur Aroustamov, Interpreter
16:00-17:00	“Hayantar”(ArmForest) SNCO of the Ministry of Agriculture of RA	<ul style="list-style-type: none"> • Meeting with Project Responsible Party 	<ul style="list-style-type: none"> • Mr. Ruben Petrosyan, Deputy Director, Chief Forester • Mr. Arthur Aroustamov, Interpreter
17:20-18:00	Project office	<ul style="list-style-type: none"> • Meeting with the Project Management 	<ul style="list-style-type: none"> • Ms. Diana Harutyunyan, CC Related Projects Coordinator • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Rubina Stepanyan, CC Related Projects Associate • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant
Saturday, 23 March 2013 – Syunik Marz			

09:30-14:30	Transfer: Yerevan-Tatev		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
14:30-15:30	Tatev Monastery area	<ul style="list-style-type: none"> • Visit to reforestation pilot project site 	<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Arman Aleksanyan, Project Local Monitor in Syunik (former) • Ranger of Syunik(Goris) FE • Mr. Ashot Stepanyan, Logistic/Driver
15:30-16:00	Tatev Monastery	<ul style="list-style-type: none"> • Meeting with Father Superior of Tatev Monastery 	<ul style="list-style-type: none"> • Father Superior Michael • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Arman Aleksanyan, Project Local Monitor in Syunik (former) • Mr. Ashot Stepanyan, Logistic/Driver
16:00-17:00	Transfer: Tatev-Goris		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
17:00-18:30	Office of Syunik (Goris) Forest Enterprise (FE) of "Hayantar" SNCO of MOA	<ul style="list-style-type: none"> • Meeting with Chief Forester of Syunik(Goris) FE 	<ul style="list-style-type: none"> • Mr. Lazr Yuzbashyan, Chief Forester of Syunik FE • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Arman Aleksanyan, Project Local Monitor in Syunik (former) • Mr. Ashot Stepanyan, Driver/Logistic
Overnight at Goris city (Mirhav Hotel)			
Sunday, 24 March 2013 – Syunik Marz			
10:00-11:00	Transfer: Goris-Shurnukh		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
11:00-13:00	Syunik (Goris) FE	Visit to forest rehabilitation pilot project site	<ul style="list-style-type: none"> • Mr. Lazr Yuzbashyan, Chief Forester of Syunik FE • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic

13:00-14:00	Transfer: Shumnukh-Kapan		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
14:00-15:30	Office of Kapan Forest Enterprise (FE) of "Hayantar" SNCO of MOA	<ul style="list-style-type: none"> • Meeting with Head of Kapan FE 	<ul style="list-style-type: none"> • Mr. Vladik Mirzoyan, Head of Kapan FE • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
15:30-16:00	Transfer: Kapan-Geghi		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
16:00-17:30	Kapan FE	<ul style="list-style-type: none"> • Visit to forest rehabilitation pilot project site 	<ul style="list-style-type: none"> • Mr. Vladik Mirzoyan, Head of Kapan FE • Mr. Barseghyan, Head of Davit-Bek forest area of Kapan FE • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
17:30-19:00	Transfer: Geghi-Meghri		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
<i>Overnight at Meghri (Guest House)</i>			
Monday, 25 March 2013 – Syunik Marz			
10:00-11:00	Office of "Arevik" National Park" SNCO of MNP	<ul style="list-style-type: none"> • Meeting with Director of "Arevik" NP" SNCO (Project Responsible Party) 	<ul style="list-style-type: none"> • Mr. Suren Hovhannisyan, Director, "Arevik" National Park" SNCO • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Logistic/Driver
11:00-12:00	Transfer: Meghri-Shvanidzor		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic

12:00-15:00	“Arevik National Park” SNCO	<ul style="list-style-type: none"> • Visit to forest rehabilitation pilot project site 	<ul style="list-style-type: none"> • Mr. Suren Hovhannisyan, Director, “Arevik” National Park” SNCO • Mr. Artak Tumanyan, Head of Nyuvadi-Shvanidzor Sector of “Arevik” National Park” SNCO • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Logistic/Driver
15:00-21:30	Transfer: Shvanidzor-Yerevan		<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms Essi Ulander, UNV Expert • Ms. Tatevik Vahradyan, Expert Team Assistant (Interpreter) • Mr. Ashot Stepanyan, Driver/Logistic
Tuesday, 26 March 2013 – Yerevan			
10:00-11:30	Project office	<ul style="list-style-type: none"> • Meeting with the Project Management and Team 	<ul style="list-style-type: none"> • Ms. Diana Harutyunyan, CC Related Projects Coordinator • Mr. Aram Ter-Zakaryan, Project Task Leader • Ms. Rubina Stepanyan, CC Related Projects Associate • Ms Essi Ulander, UNV Expert
11:30-13:00	OSCE Office in Yerevan	<ul style="list-style-type: none"> • Meeting with Project Partner 	<ul style="list-style-type: none"> • Mr. William Hanlon, Deputy Head of Office • Mr. Edvard Safaryan, ENVSEC coordinator
14:30-16:00	WWF Armenia Office	<ul style="list-style-type: none"> • Meeting with Project partner 	<ul style="list-style-type: none"> • Mr. Karen Manvelyan, Director
16:00-17:00	Project office	<ul style="list-style-type: none"> • Meeting with the Project Management 	<ul style="list-style-type: none"> • Mr. Aram Ter-Zakaryan, Project Task Leader
17:00-17:30	Ministry of Nature Protection of RA	<ul style="list-style-type: none"> • Meeting with Project Implementing Partner and Responsible Party 	<ul style="list-style-type: none"> • Mr. Simon Papyan, First Deputy Minister, National Director of UNDP Environmental Projects, Co-chair of the Project Board • Mr. Aram Ter-Zakaryan, Project Task Leader • Mr. Arthur Aroustamov, Interpreter
17:30-19:00	Project office	<ul style="list-style-type: none"> • Meeting with Project National Coordinator 	<ul style="list-style-type: none"> • Mr. Aram Gabrielyan, UNFCCC National Focal Point, Project National Coordinator • Mr. Arthur Aroustamov, Interpreter
Wednesday, 27 March 2013 – Yerevan			
10:00-11:30	Project office	<ul style="list-style-type: none"> • Meeting with the Project Management 	<ul style="list-style-type: none"> • Ms. Diana Harutyunyan, CC Related Projects Coordinator • Mr. Aram Ter-Zakaryan, Project Task Leader
11:30-13:00	Caucasus Nature Fund (CNF)	<ul style="list-style-type: none"> • Meeting with Project partner 	<ul style="list-style-type: none"> • Mr. Arman Vermishyan, Director

14:00-18:00	Project office	<ul style="list-style-type: none"> Meeting with the Project Management and Team 	<ul style="list-style-type: none"> Ms. Diana Harutyunyan, CC Related Projects Coordinator Mr. Aram Ter-Zakaryan, Project Task Leader Ms. Rubina Stepanyan, CC Related AWP's Associate Ms. Essi Ulander, UNV Expert Ms. Tatevik Vahradyan, Expert Team Assistant
Thursday, 28 March 2013 – Yerevan			
10:30-11:00	UNDP CO	<ul style="list-style-type: none"> Debriefing at UNDP Armenia 	<ul style="list-style-type: none"> Mr. Armen Martirosyan, EG Portfolio Analyst Mr. Aram Ter-Zakaryan, Project Task Leader
11:00-12:00	UNDP CO	<ul style="list-style-type: none"> Debriefing at UNDP Armenia 	<ul style="list-style-type: none"> Ms. Sophie Kemkhadze, UNDP Deputy Resident Representative a.i. Mr. Armen Martirosyan, EG Portfolio Analyst Mr. Aram Ter-Zakaryan, Project Task Leader
12:00-13:00	Project office	<ul style="list-style-type: none"> Preparation towards the stakeholder workshop 	<ul style="list-style-type: none"> Ms. Diana Harutyunyan, CC Related Projects Coordinator Mr. Aram Ter-Zakaryan, Project Task Leader Ms. Tatevik Vahradyan, Expert Team Assistant Ms. Essi Ulander, UNV Expert
14:00-16:00	Conference Hall, Aviatrans Hotel	<ul style="list-style-type: none"> Stakeholder workshop (*) 	<ul style="list-style-type: none"> Project Board members Other counterparts (national and international) Project Team
16:00-18:00	Project office	<ul style="list-style-type: none"> Meeting with the Project Management and Team 	<ul style="list-style-type: none"> Ms. Diana Harutyunyan, CC Related Projects Coordinator Mr. Aram Ter-Zakaryan, Project Task Leader

(*) see list of participants to the workshop next page.



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**Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia”
UNDP/GEF/00051202 Medium-sized Project**

STAKEHOLDER WORKSHOP
in the scope of the terminal evaluation of the project
Aviatrans Hotel, Yerevan
28 March 2013

LIST OF PARTICIPANTS

#	Name	Title, Agency
<i>Project Board Members</i>		
1.	Yurik Poghosyan	Member of the State Statistical Council of Armenia (Project Board member)
2.	Hripsime Babayan	Chief Specialist, Local Self-administration Department, Ministry of Territorial Administration (replacing Project Board member)
3.	Aram Gabrielyan	UNFCCC Focal Point, Project National Coordinator (Project Board member)
4.	Daniel Khachatryan	Atache, UN Division, International Organisations Department, Ministry of Foreign Affairs (replacing Project Board member)
5.	Slavik Harutyunyan	Associate Professor, Agroecology Department, Armenian State Agrarian University (Project Board member)
6.	Dshkhuhi Sahakyan	Armenian Branch Office, REC-Caucasus (replacing Project Board member)
<i>Other stakeholders</i>		
7.	Armen Nalbandyan	Head of Reforestation Division, “Hayantar” SNCO, MoA
8.	Andranik Ghulijanyan	Director, “Zikatar Environmental Center” SNCO, MoNP
9.	Luiza Gevorgyan	Chief Specialist, “Zikatar Environmental Center” SNCO, MoNP
10.	Vahe Abovyan	Engineer, “Zikatar Environmental Center” SNCO, MoNP
11.	Hayk Ghulijanyan	Botany Institute, National Academy of Sciences of Armenia
12.	Hamlet Melkonyan	Deputy Director, Armenian Hydrometeorology and Monitoring State Service, MoES
13.	Anahit Hovsepyan	Armenian Hydrometeorology and Monitoring State Service, MoES
14.	Zaruhi Petrosyan	Armenian Hydrometeorology and Monitoring State Service, MoES
15.	Artur Alaverdyan	Project Manager, WWF-Armenia
<i>UNDP Armenia</i>		
16.	Diana Harutyunyan	Climate Change Programme Coordinator
17.	Jean-Joseph Bellamy	International Expert on Final Evaluation
18.	Aram Ter-Zakaryan	Project Task Leader
19.	Essi Ulander	Expert on Adaptive Forest Management, UNV
20.	Tatevik Vahradyan	Expert Team Assistant

Annex 6: Co-financing Table

CO-FINANCING


Co financing (Type/Source)	UNDP Financing (mill US\$)		Government (mill US\$)		Partner Agencies (mill US\$)		Total (mill US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grant								
Loans / Concessions								
* In-kind Support			1.900	1.503		1.929	1.900	3.432
* Other								
TOTAL			1.900	1.503		1.929	1.900	3.432

(*) Source: Prodoc and notes from the Project Team.

PIMS 3814: Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia

UNDP Management Response Template

Terminal Evaluation Date: June 2013

Prepared by: Aram Ter-Zakaryan 

Position: Project Task Leader

Unit/Bureau: UNDP Armenia

Cleared by: Simon Papyan 

Position: First Deputy Minister

Unit/Bureau: Ministry of Nature Protection of RA

Input into and update in ERC: Varsha Redkar-Palepu

Position: Assistant Resident Representative

Unit/Bureau: UNDP Armenia

Evaluation Recommendation or Issue 1.				
It is recommended to publish key project findings on the UNDP Adaptation Learning Mechanism (ALM) and also on the GEF Global Knowledge Sharing Platform.				
Management Response:				
Key Action(s)	Time Frame	Responsible Unit(s)	Tracking*	
			Comments	Status
The recommendation is relevant and acceptable. In addition to the material already posted the Manual "Adapting to climate change in forest management and forest management planning in Armenia" developed as the main learning output of the project will be published at UNDP-GEF global knowledge platforms.	2013	UNDP CO, Climate Change Programme		In process
Evaluation Recommendation or Issue 2.				
It is recommended to organize a final workshop on the management of mountain forest ecosystem in association with existing related initiatives and upcoming projects in Armenia.				
Management Response:				

Key Action(s)	Time Frame	Responsible Unit(s)	Tracking*	
			Comments	Status
The recommendation is relevant and acceptable. A workshop on climate change adaptation measures in forest management in Armenia is planned.	2013	UNDP CO, Climate Change Programme		In process
Evaluation Recommendation or Issue 3.				
It is recommended to focus more on community involvement in the management of natural resources – including forests - in Armenia.				
Management Response:				
Key Action(s)	Time Frame	Responsible Unit(s)	Tracking*	
			Comments	Status
The recommendation is relevant and acceptable. The UNDP CO will focus more on involvement of communities in natural resources management and in forest management, particularly over implementation of the upcoming Clima East and REDD+ projects	2013-2014	UNDP CO		In process