

**Validated Terminal Review of the UNEP-GEF Project
“Enhancing livelihoods in rural communities of Armenia
through mainstreaming and strengthening agricultural
biodiversity conservation and utilization”**

(GEF ID 5483)

2016 – 2018





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(Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization)

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(09/23)

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The reviewer would like to express her gratitude to all persons met and who contributed to this review, as listed in Annex 2.

The review team would like to thank the national project team and in particular Mr. Armen Danielyan for their contribution and collaboration throughout the review process. Sincere appreciation is also expressed to the Technical Committee members, the Institute of Botany and academic community representatives who took time to discuss key issues during the review mission visit and provide comments to the report. The reviewer would also like to thank the Forest Committee, the Ministry of Nature Protection, the FAO and the GIZ offices in Yerevan as well as the UN Resident Coordinator's office for their input and time.

Special acknowledgements go to Ararat region's Vedi community officials, Khoy community farmers, Gegharkunik region's youth and farmer's representatives for sharing their insights about the project and the overall agricultural situation of the country during the mission visit.

The reviewer hopes that the findings, conclusions and recommendations will contribute to the formulation of a next phase and to the continuous improvement of similar projects in Armenia as well as in other countries and regions.

BRIEF EXTERNAL CONSULTANT(S) BIOGRAPHY

Nara Luvsan brings on board over 27 years of development aid experience within the UN and the World Bank in key positions in country, regional and headquarters. Her considerable experience in Mongolia, Central Asia, the Trans-Caucasus, Russia, China and former Soviet sphere as well as in Western Europe has provided her with an in-depth understanding of the associated economic conditions, legal structures, governmental operations and social needs and realities of the region. She has extensive experience in evaluation preparation, process and methodologies. Nara has successfully lead/contributed to country evaluations, regional and global multi-agency programme mid-term and final reviews. The sectors covered include i.a. reviewing the new strategy and Regional Action Plan for Environment for Central Asia, UNDAFs, nexus of environment and poverty reduction, aspects of BRI as well as green economy policy.

Throughout her career, in her capacity as Senior Programme Policy Officer and Regional Adviser with specialised UN agencies Nara was instrumental in designing, managing, leading and closing complex country and regional programmes that required deep understanding of political sensitivities, governance issues and implementation hurdles faced by international, national and local counterparts.

ABOUT THE REVIEW

Joint Review: No

Report Language(s): English

Review Type: Terminal Review

Brief Description: This report is a management-led Terminal Review of a UNEP-GEF funded project implemented between 2016 and 2019. The project's overall development goal was to improve rural livelihood using agrobiodiversity, especially through sustainable farming of local varieties of fruit trees and their better utilization and conservation. The review sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the Donor¹ and the relevant agencies of the project participating countries.

Key words: Biodiversity, Agrobiodiversity, Sustainable Land Management; Forest Governance; Climate Change; Ecosystem Management.

Primary data collection period: June; part of August; part of September 2023

Field mission dates: 26 – 30 June 2023

¹ GEF

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LIST OF ACRONYMS

ABD	Agro-biodiversity
ANAU	Armenian National Agrarian University
ASRC	Agricultural Support Republic Centre
AT	Aichi Target
BA	Bachelor of Arts
CBD	Convention on Biological Diversity
CEO	Chief Executive Officer
CGRFA	Commission on Genetic Resources for Food and Agriculture
EOU	Evaluation and Oversight Unit of UNEP
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GNP	Gross National Product
ITPGRFA	International Treaty for Plant Genetic Resources for Food and Agriculture
M&E	Monitoring and Evaluation
MA	Master of Arts
MA	Ministry of Agriculture
Min AG	Ministry of Agriculture
MinEcon	Ministry of Economy
MNP	Ministry of Nature Protection
MTE	Mid-term evaluation
N/A	Not applicable
NAS	National Academy of Sciences
NGOs	Non-governmental Organisation
NPC	National Project Coordinator
NPIF	Nagoya Protocol Implementation Fund
PA	Protected area
PIF	Project Identification Form
PIR	Project Implementation Report
PMU	Project Management Unit
PPG	Project Preparation Grant
PSC	Project Steering Committee
Q	Quarter
RA	Republic of Armenia
SCCF	Special Climate Change Fund
TAC	Technical Advisory Committee
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme
Y	Year
YSU	Yerevan State University

PROJECT IDENTIFICATION TABLE

Table 1. Project Identification Table

UNEP PIMS ID:	GFL - 11207	14AC003	SB-00690.10.02	
DONOR (GEF/GCF etc) ID:	5483			
Implementing Partners	Executing Agency: Bioersivity International (IPGRI) Project partners: <ul style="list-style-type: none"> • Ministry of Nature Protection of the Republic of Armenia • Institute of Botany of Academy of Sciences • Armenian Forest NGO • Env Public Alliance NGO • Agro X Fund NGO • Armenian Agrarian University 			
Relevant SDG(s):	UNDAF 2016-20, PA 4: Environmental sustainability and resilience-building Outcome 7: By 2020 Sustainable development principles and good practices for environmental sustainability resilience building, climate change adaptation and mitigation, and green economy are introduced and applied SDG2 (2.4.1, 2.5.1); SDG 4 (4.7.1); SDG5 (5.5.2)			
Sub-programme:	Subprogram 3 – Healthy & Productive Ecosystems	Expected Accomplishment(s):	The health and productivity of marine, freshwater, and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels	
UNEP approval date:	16 November 2015	Programme of Work Output(s):	POW 2018-19 Subprogramme 3 Healthy and Productive Ecosystems	
Expected start date:		Actual start date:	18 November 2015	
Planned completion date:	31 October 2019	Actual operational completion date:	31 December 2019	
Planned project budget at approval:	5,735,705 USD	Actual total expenditures reported as of [30 June 2020]:	6,273,861 USD	
GEF Grant:	883,242 USD	Actual GEF Grant expenditures reported as of [30 June 2020]:	862,748 USD	
Planned Extra-Budgetary Financing: PPG GEF cost	30,000 USD	Secured Extra-Budgetary Financing:		
Planned Extra-Budgetary Financing: MSP/FSP Co-financing	4,852,463 USD	Actual Extra-Budgetary Financing expenditures reported as of [30 June 2019]:	5,477,113 USD	
First disbursement:	16 March 2016	Planned date of financial closure:	30 June 2024	
No. of formal project revisions:	4 budget revisions	Date of last approved project revision:	2019	
No. of Steering Committee meetings:	3	Date of last/next Steering Committee meeting:	Last:	Next:

			4-5 December 2019	
Mid-term Review/ Evaluation (<i>planned date</i>):	2018	Mid-term Review/ Evaluation (actual date):	PIR for 2018 used as MTR	
Terminal Review (<i>planned date</i>):	June 2020	Terminal Review (actual date):	June-September 2023	
Coverage - Country(ies):	Armenia	Coverage - Region(s):	National, Europe	
Dates of previous project phases:	N/a	Status of future project phases:	N/a	

EXECUTIVE SUMMARY

Project background

1. The richness of Armenia's agricultural biodiversity is of national and global significance. Over 2500 species Armenia's flora were evaluated as crop wild relatives, around 70% of all plant species native to the country². Due to this abundance of wild relatives of cultivated plants the country was defined by Vavilov³ as one of the centres of cultivated plant diversity. Over 200 wild plant resources are of direct economic and social value to communities through direct harvest, utilization and informal marketing.
2. Despite this diversity (most of which is poorly understood and researched) Armenia has witnessed serious problems of genetic erosion, and the loss of globally significant traits, as well as the undermining of traditional agricultural systems as a result of the spread of modern agriculture, globalization and other factors. Changes in climate are already impacting many poor smallholder farmers in the country.
3. The UNEP -GEF- funded project "Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization" was a timely response to the above challenge. The project included three sequentially linked components of (1) *Improving the national capacity and institutional framework to strengthen national cooperation and coordination for sustainable management of agricultural biodiversity*, (2) *Mainstreaming of diversified agricultural biodiversity-friendly practices and products* and (3) *Improved market opportunities for agro-biodiversity and derived products* .
4. The project was planned to be implemented over 36 months starting from 2016. However, due to the 2018 velvet revolution, the presidential election and ensuing major government changes, the project's final financial closure could only be undertaken in 2020. The total planned budget was USD 5,385,845 of which GEF contributed USD 1,235,845.

This Review

5. This Terminal Review has been conducted in 2023 four years after the project's completion due COVID pandemic-related delays and the political situation prevailing in the country. The purpose of the Review was twofold: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP, Bioversity International and the Ministry of Nature Protection of the Republic of Armenia. Thus, the Review has identified lessons of operational relevance for future project formulation and implementation.
6. The main aim of the terminal review has been to facilitate reflection and learning with a view to improving future similar projects' design, quality and impact. Therefore, the target audience for the results of this review are UNEP staff related to GEF projects, the evaluation office, and the regional office for Europe. The target audience includes project stakeholders, namely the participating ministries and agencies in the area of biodiversity, agriculture, land and forest management, local governments, academia and research institutes, the private sector, as well as NGOs and farmer communities in the project intervention sites. Key UN partner agencies including the Resident Coordination

² study conducted within framework of UNEP/GEF project "In-situ conservation of crop wild relatives through enhanced information management and field application

³ Nikolai Vavilov was a renowned Soviet agronomist, botanist and geneticist who identified the centers of origin of cultivated plants.

Office, FAO, and multilateral agencies working in the area of sustainable management of environment and natural resources will also be included in the dissemination list of this report.

Key findings

7. The main focus of the project on traditional, more resistant local varieties of fruits, nuts and vegetables, is highly relevant given that more than half of Armenia's territory is arid and semi-arid and subjected to erosion as well as climate change impacts. The project design as per PIF and Endorsement documents was very well formulated, almost close to book-perfect, by identifying key barriers, root causes, capturing pertinent outputs and outcomes result chains and with complete list of annexes. Work and budget plans for key deliverables, monitoring and oversight, implementation arrangements with strong multi-stakeholder participation were all well planned, consulted with relevant partners and thus preparatory phase was executed to a satisfactory level. However, weaker aspects concerned inadequate assumptions of risks, and no clear exit strategy, insufficient attention to coordination with other initiatives and projects during implementation as well as the absence of a concrete tool to qualitatively assess the social and environmental aspects.
8. Despite the hard work of the project team and the overall sound implementation of the activities and outputs, the overall impact of the project was below the satisfactory level. The main detracting factors were the unforeseen major change in the external context and the effects of having set national level outcomes too high at the outset. For one cycle of a 36 months project with a moderate financial resources, to have a functional National-level Coordination Committee solely devoted to agrobiodiversity and implementing a supply chain approach was overly ambitious. Political upheaval, combined with major and protracted government restructuring halted key actions and considerably limited the achieving of these overambitious goals, especially in respect of national-level outcomes. Outputs at the regional and local levels met the criteria of satisfactory in terms of quantity, quality, and timeliness.
9. There was a notable difference in terms of continuity and thus sustainability of results, between national and sub-national levels. No obvious evidence could be found for sustainability of national level outputs. Whereas the interventions at the regional and farmer's communities level could continue despite the unstable situation at the central government level and certain level of sustainability of results could be determined during the review interviews.

Main Conclusions

10. The project was well aligned with relevant GEF, UNEP, UNDAF and SDG objectives. The main focus of the project on traditional local varieties of fruits and nuts is highly relevant given that more than half of the territory is arid and semi-arid. The local varieties are more resistant to drought risk and other climate change-induced variations than modern crops, including hybrid and imported varieties for intensive agriculture, that tend to have a higher environmental footprint.
11. In addition to its favourable environmental impact, an agrobiodiversity-friendly approach to farming is relevant for Armenia's food security goals and complies with SDG indicator 2.5.1. (Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities).
12. The project team has proactively engaged with all stakeholders and interacted and supported them in delivering service and products as agreed. During the project duration there was a high level of cooperation between the various stakeholders. Public awareness campaigns reached out to the general public quite successfully. However, a

plan to cement the multi-stakeholder participatory approach in institutional mechanisms was lacking and this prevented the sustainability of this strategic aspect beyond the project.

13. A certain attention was devoted to both gender and youth aspects during the project design and implementation stage. Around 25% of participants in training workshops, rounds table discussions, and exchange visits on sharing good practices and knowledge in agrobiodiversity management were women. One of the two Farmers' Cooperatives established by the project was chaired by a woman. Two Young generation Agricultural Clubs were established by the project to maintain interest of youth in farming and agrobiodiversity conservation as well as to involve them in the decision-making process, including value adding and marketing of agrobiodiversity products. There is, however, a lack of available data and a targeted socio-economic assessment on gender and youth issues. Therefore, it is not clear if the project had a different impact on women and men, their status, access to resources and income.
14. The UNEP/GEF Environmental and Social Safeguards Checklist was duly completed at the outset of the project implementation, and no high risk was identified. By the nature of the project targeting species that can grow in degraded, arid land, and using little or no chemical inputs for cultivating the fruit and nut trees, as well as vegetables such as organic asparagus, indeed the project had no or minimal negative environmental footprint and/or social impact.
15. Altogether 86 public awareness materials were produced by the project. The campaign materials effectively tackled the obstacle of insufficient awareness among the general population, policy makers, decision-makers, farmers, producers, and consumers regarding the significance of wild plant species and agrobiodiversity. The knowledge management component can be given a higher score for sustainability as the project website is still operational and shows that many users have downloaded the manuals, guidelines and other informative materials regarding agrobiodiversity, traditional local varieties of fruit and nut trees and legumes.

Table 1. Summarised rating table

Criterion	Rating
A. Strategic Relevance	Satisfactory
B. Quality of Project Design	Moderately Satisfactory
C. Nature of External Context	Moderately Unfavourable
D. Effectiveness	Moderately Satisfactory
E. Financial Management	Satisfactory
F. Efficiency	Satisfactory
G. Monitoring and Reporting	Satisfactory
H. Sustainability	Moderately Unlikely
I. Factors Affecting Performance	Satisfactory
Overall Project Rating	Moderately Satisfactory

Lessons Learned

16. Lesson 1: Overly ambitious goals set during the project preparation and design stage. Goals related to mainstreaming, upscaling, supply chain were unrealistic to be achieved within 36 months.
17. Lesson 2: Underestimation of political risk and external context scenarios, including frequent staff changes in governmental entities. Planning for this eventuality could have mitigated to some extent this risk which was rated as low in the Prodoc.
18. Lesson 3: Sustainability of results beyond the project lacked concrete strategy and plans, though sub-national and local-level interventions were less subjected to the changes and instability at the central government level. An exit strategy with actions targeting the institutionalising of some key results would have helped with sustainability aspects.
19. Lesson 4: Continued documenting, data collecting and monitoring are still weak aspects that require concerted attention by all as there is little motivation and incentives for this task beyond the project's life time.

Recommendations

20. Recommendation 1: Upscaling and mainstreaming of this project's results is still crucial if Armenia is to combat the expansion of arid zones, land degradation and climate-change adverse effects. In fact, a second phase of this project as designed with these mainstreaming and upscaling goals would be a desirable response. Integrating into similar new projects would also be another solution. In any case, joint programming through the UN RC Office is highly recommended.
21. Recommendation 2: Elaborate risk mitigation, sustainability, environmental and social impact strategies and concrete measures during the formulation and design stage of the project, and adjust and refine them during implementation as needed.
22. Recommendation 3: Plan and incorporate concrete strategies and detailed actions of collaboration with the initiatives, programmes, projects that were identified as complementary in the Prodoc. Plan for a lessons learnt South - South lessons-sharing activity with Uzbekistan where programmes for crop wild relatives, traditional varieties of fruit and nut species are more advanced, and with whom they share a common past.

Validation

The report has been subject to an independent validation exercise performed by UNEP's Evaluation Office. The performance ratings for the UNEP -GEF- funded project "Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization", set out in the Conclusions and Recommendations section, have been adjusted as a result. The overall project performance is validated at the 'Moderately Satisfactory' level. The Evaluation Office has assessed the overall quality of the report as 'Moderately Satisfactory' (See Annex X).

I. INTRODUCTION

23. This document presents the Terminal Review for the UNEP-GEF-funded project on *“Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization”*. The project contributes primarily to UNEP’s PoW 2018-19 Subprogramme 3 Healthy and Productive Ecosystems as well as GEF’s strategic objective to Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/Seascapes and Sectors.
24. The project’s GEF CEO Endorsement approval was granted in 2013⁴ and the initial Letter of Agreement was signed in December 2015. The project was planned to be implemented over 36 months starting from 2016. However, due to the presidential election and ensuing major changes in the government, an amendment for a non-cost extension was approved on 17 April 2019 with intended completion date of 31 August 2019 which was subsequently extended through a second amendment until 31 December 2019 with a financial closure date of 30 June 2020. The total planned budget was USD 5,735,705 of which GEF contributed USD 883,242. The 2018 Progress Report was considered as the Mid-term Review and a revised workplan was submitted in March 2018.
25. The UNEP Ecosystems Division, GEF Biodiversity and Land Degradation Unit served as GEF Implementing Agency for this project. Bioersivity International, in coordination with the Ministry of Nature Protection of the Republic of Armenia and the Armenian National Agrarian University, served as the project executing agency. It was responsible for the overall coordination and execution of the project and the provision of appropriate scientific support and technical expertise as required by the Ministry of Nature Protection and project partners.
26. In line with the UNEP Evaluation Policy and Programme Manual, this Terminal Review was conducted even though four years had elapsed since the project completion in 2023 due to delays caused by COVID pandemic and the evolving situation in the country. The purpose of the Review was twofold: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned. The Review identified lessons of operational relevance for future project formulation and implementation.
27. The target audience includes project stakeholders, namely the participating ministries and agencies in the area of biodiversity, agriculture, land and forest management, local governments, academia and research institutes, the private sector, as well as NGOs and farmer communities in the project intervention sites. Key UN partner agencies including the Resident Coordination Office, FAO, and multilateral agencies working in the area of sustainable management of environment and natural resources will also be included in the dissemination list of this report.

⁴ GEF Certification is dated 08/05/2013 and GEF Focal Point signature 06/010/2013

II. REVIEW METHODS

28. The TR was conducted in accordance with the UNEP and GEF guidance, rules, and procedures. It was undertaken in-line with GEF principles, which are: independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility, and utility. A participatory approach based on information exchange and consultation with a selected range of stakeholders was used for the terminal review process. Where necessary the privacy of the interviewees was respected. The reviewer used quantitative and qualitative evaluation methods to verify and validate overall success and the concrete results achieved as well as to draw forward-looking recommendations within and beyond the framework of the project.
29. The Inception phase has started with a **desk review** of relevant background documentation, including the CEO endorsement as the main project document, an in-depth look at the logical framework results' chain, half-yearly and yearly progress reports as well as documentation related to similar projects of partner agencies. This resulted in an Inception report that was helped guide the country visit and next steps of the TR.
30. Based on **the Inception report preliminary findings and insights**, much of the verification and validation of the project's performance and achievement was carried out during the country visit mission. **Individual and/or group interviews** with main project stakeholders mentioned in the Stakeholder Analysis part of the Inception report was conducted during the mission. The review framework and the detailed questions contained in Annex 1 were partially used for **the interviewing and data collection process** during and after the mission.
31. Selected in-country stakeholders, in particular the national project Coordinator together with other project partners on the ground assisted the reviewer in reaching out to as many project implementers and beneficiaries as possible during the visit.
32. **Field visits** were conducted to get an **in-depth observation** of the selected project intervention site in the Ararat region. However, the sites in the Gegharkunik and Sunic areas could not be visited due to security precautions. The reviewer had to resort to interviewing a youth and environmental non-government agency's representatives as well as an organic lentil farmer in the safe area of Gegharkunik. Effort was also made to interview and/or carry out **a survey (questionnaire based)** with national and international players that influence mainstreaming into the wider non-environment sector and SDG platforms.
33. **Processing and Validation of Data.** Once the above steps of document review, data collection, stakeholder interviews and country visit were completed, all the materials were organized according to the criteria and review questions which has been not a straightforward exercise due to the limitations described below.
34. **Limitations encountered.** Due to the fact that the terminal review was taking place after a considerable time lapse, including the COVID pandemic, since finalisation of project activities, hard evidence, indicators and data that could attest to the key outcomes and achievements of the project were very limited. Except a handful of loyal researchers, academicians, as well as project site local administration and farmers representatives, most stakeholders and beneficiaries who had been involved in the project's delivery were either changed or had left the posts. However, the stakeholder interviews and field visits were highly useful with a view to making observations and obtaining substantial feedback regarding trends since project completion and the current situation in the area of biodiversity, conservation of traditional species, and farming practices. In the absence of hard evidence and data, the interviewer had to

arrange prolonged discussions and through probing questions to validate the findings with the National Coordinator. By necessity, an ongoing triangulation had to be done with additional informants who informally agreed to exchange their take on Armenian organic agriculture and related topics. The National Project Coordinator, who had also left the position before the end of the project, agreed to make time and resources available to arrange the reviewer’s country-related visits and meetings.

Table 2: Respondents' Sample

		# people involved (M/F)	# people contacted (M/F)	# respondent (M/F)	% respondent
Project team (those with management responsibilities e.g. PMU)	Implementing agency - UNEP	4 (2/2)	4 (2/2)	3 (2/1)	75%
	Executing agency/ies – Bioversity International, Ministry of Nature, Agrarian University	6 (3/3)	6 (3/3)	4 (2/2)	66%
	# entities involved	# entities contacted	# people contacted (M/F)	# respondent (M/F)	% respondent
Project (implementing/ executing) partners (receiving funds from the project)	14	6	25 (18/7)	16 (13/3)	64%
Project (collaborating/contributing ⁵) partners (not receiving funds from the project)	10	10	5 (2/3)	5 (2/3)	100%
Beneficiaries: <i>Examples:</i> Duty bearers Gate keepers Direct beneficiaries Indirect beneficiaries Civil society representatives	8	4	16 (11/5)	12 (8/4)	75%

⁵ Contributing partners may be providing resources as either cash or in-kind inputs (e.g. staff time, office space etc.).

III. THE PROJECT

A. Context

35. The Armenian Plateau is considered to be one of the places where agriculture first developed, and still supports many wild relatives of crop plants and domestic livestock, and a range of agro-ecosystems. According to a recent study conducted within the framework of the UNEP/GEF project on “In-situ conservation of crop wild relatives through enhanced information management and field application”, 2518 species of the flora of Armenia were evaluated as crop wild relatives, around 70% of all plant species native to the country. Due to this abundance of wild relatives of cultivated plants the country was defined by Vavilov as one of the centres of cultivated plant diversity. Over 200 wild plant resources are of direct economic and social value to communities through direct harvest, utilization and informal marketing. This diversity of wild progenitors of cultivated plants represents a rich gene pool for the creation of new crop varieties resistant to diseases, and other adaptive characteristics. Armenia’s richness of agricultural biodiversity is of national and global significance. Despite this diversity (most of which is poorly understood and researched) Armenia has witnessed serious problems of genetic erosion, and the loss of globally significant traits, as well as the undermining of traditional agricultural systems as a result of the spread of modern agriculture, globalization and other factors. Changes in climate are already impacting many poor smallholder farmers in the country.
36. There have been a few limited initiatives which have addressed some elements of the conservation and sustainable use of wild plant species for food and medicine in Armenia. A range of policies and strategies at the national level also have some relevance. In general, there has been little understanding of the value, need or role of conservation and sustainable use of wild plant species for food and medicine, little funding for research, limited enabling policy and regulatory environments, and poor technical capacity at either regional or national level and weak linkages among value chain actors. Therefore, a project that mainstreams an integrated approach for conservation of wild plant species has been a timely response.

B. Objectives and components

37. The **project objective** was to enhance conservation of the agricultural biodiversity in Armenia that supports adaptation to environmental and agricultural challenges in the country and provides a sustainable basis for enhanced utilization to improve rural livelihoods. The project sought to achieve this through the following inter-related interventions.
- Component 1: Improving the national capacity and institutional framework to strengthen national cooperation and coordination for sustainable management of agricultural biodiversity.
 - Outcome 1: Strengthened national coordination and cooperation for effective management of agricultural biodiversity through mainstreaming integrated approaches to agricultural biodiversity conservation and use into Armenia’s policy framework.



National level workshop on Agrobiodiversity and land-use

- Component 2: Mainstreaming of diversified agricultural biodiversity -friendly practices and products
 - Outcome 2: Increased area devoted to sustainably managed agricultural biodiversity through the mainstreaming of diversified practices and products.





Project pilot areas

- Component 3: Improved market opportunities for agro-biodiversity and derived products
 - Outcome 3: Increased availability of agricultural biodiversity friendly products in local and international markets that provide farmers with additional rewards and income.

Daucus carota L. (wild carrot)



Zizyphus jujube Mill.



Brassica rapa L.



Allium ampeloprasum L.

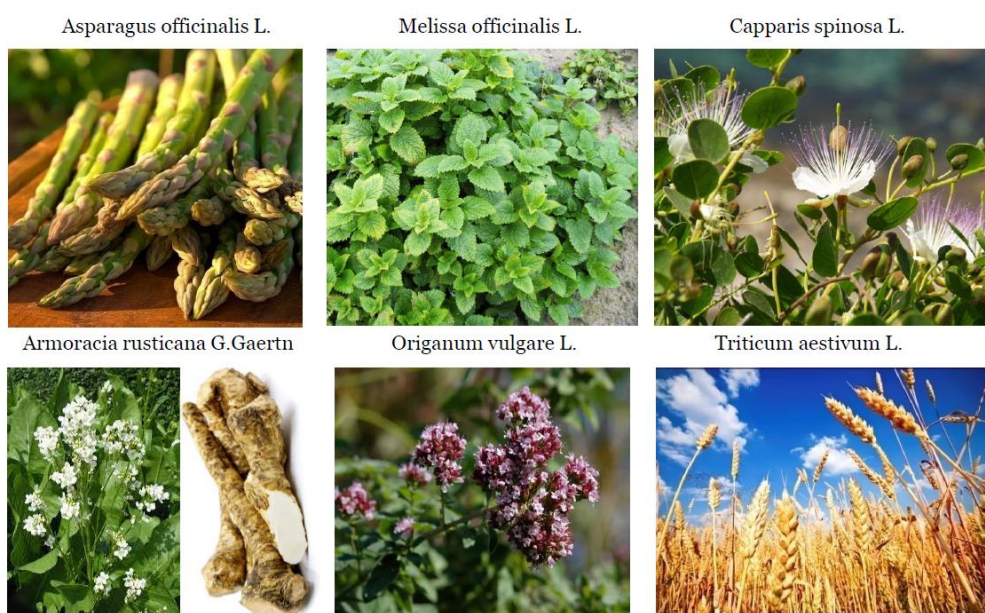


Mountain ash



Lepidium sativum Linn.





Identified agrobiodiversity priority species

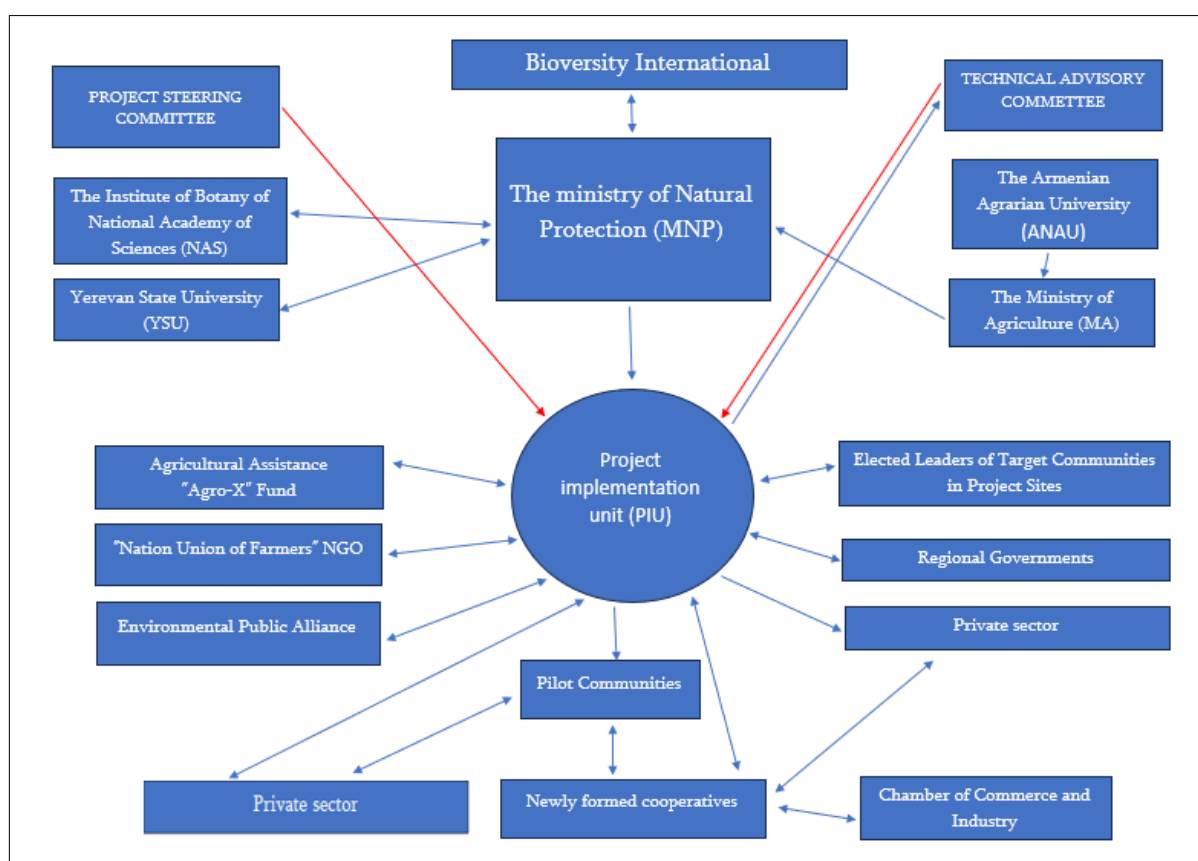
C. Stakeholders

38. The major stakeholders had both high motivation and influence for the project's interventions as they were in the position to substantively contribute but also benefit directly from the project results. Key stakeholders included : national level actors as ministries of nature protection, agriculture and economy whose contribution to the setting up of the national Coordination Committee and developing strategy and policy – level work was essential. Regional government and selected communities were the main target of the project. That is where agricultural biodiversity in the relevant land use sectors was introduced and related capacity building activities took place, and where a truly participatory approach of national, sub-national, academic, private sector stakeholders had the most impact. The Institute of Botany, Armenian National Agrarian University and Yerevan State University played pivotal role in providing scientific and technical inputs for the development of methods and approaches in conservation and management of wild species and cultivated local plants. Local community-based organizations, farmers' organizations and youth groups were involved in participatory appraisals to map biodiversity and sustainable practices. Extension service and private sector representatives contributed in identifying market opportunities and sales of agro produces from pilot sites. All stakeholders took part in respective training and capacity building events and contributed to the knowledge generation products that were also disseminated to the general public through mass media channels.
39. The project made good progress in involving women in the project activities. Around 25% of participants of training workshops, rounds table discussions, exchange visits on sharing good practices were women. One of the two Farmers' Cooperatives established by the project was chaired by a woman. Two Young Generation Agricultural Clubs were established in Nor Ughi Community in Ararat project site and in Kalavan Community in Gegharkunik project site. Women and men farmers were interviewed for producing of brochure on "Selection and use of plants in Armenia: preferable plants for men and women, gender preferences for plant growing and food crops."

D. Project implementation structure and partners

40. UNEP’s Ecosystems Division, GEF Biodiversity and Land Degradation Unit served as GEF Implementing Agency for this project. Bioersivity international, in coordination with the Ministry of Nature Protection of the Republic of Armenia and the Armenian National Agrarian University, served as the project executing agency. It was responsible for the overall coordination and execution of the project and provision of appropriate scientific support and technical expertise as required by the Ministry of Nature Protection and project partners.
41. The Project Implementation Unit (PIU) was established to provide overall administration of the project. National Project Coordinator and his assistants worked closely with all stakeholders and played a pivotal role in organising project activities and day-to-day management. The Project Steering Committee (PSC) and the Technical Advisory Committee (TAC) provided general oversight and policy and technical guidance to the project, interagency coordination and monitoring national-level activities. Representatives of 9 institutions were members of the PSC. The PSC held three meetings : 2 March 2016; 2-3 October 2017 and 4-5 December 2019. The TAC met more often 3-4 times per year. According to the PIRs these meetings were highly effective in overseeing and reviewing all key results and milestone events of the project.

Figure 1: Organigram of the Project with key project key stakeholders



E. Changes in design during implementation

42. Despite major changes in the external context, namely presidential and parliamentary elections as well as the government restructuring, no major changes in the project design was proposed during the mid-term review of 2018.
43. As the project team faced technical difficulties in completing policy-related activities of the project due to changes in the government structure, it was agreed with Bioversity International to request a non-cost extension of the project till 31 August 2019, then to 31 December 2019. The activities included publishing and submitting policy briefs on use of agrobiodiversity and Agrobiodiversity Conservation Strategy to government officials and other actions such as project closing reports and documentation.

F. Project Financing

Table 3. Co-financing by type and source

Co-financing (Type/Source)	UN Environment own Financing in USD		Bioversity International in USD		Government In USD		Private Sector & NGOs (national) In USD		Total In USD		Total Disbursed In USD
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
Grants			82 858	144,948	632540	784,500	930 000	1,064,000	1645398	1,993,448	1,993,448
Loans											
Credits											
Equity invest.											
In-kind support	100 000	100 000	153 095	150,655	903970	1,070,000	2 050 000	2,23010	3207065	3,453,665	3,453,665
Other											
Total	100 000	100 000	235 953	295,603	1536510	1,854,500	2980000	3,297,010	4852463	5,447,113	5,447,113

Table 4. Co-financing by contributing agencies

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of Nature Protection	In-kind	USD544,000
National Government	Ministry of Nature Protection	Cash	USD339,000
National Government	Armenian National Agrarian University	In-kind	USD359,000
National Government	Armenian National Agrarian University	Cash	USD258,500
CSO	Environmental Public Alliance	In-kind	USD791,000
CSO	Environmental Public Alliance	Cash	USD193,000
Private Sector	"Agro X" Fund	Cash	USD667,000
Private Sector	"Agro X" Fund	In-kind	USD1,188,000
Other Multilateral Agency	Bioversity International	In-kind	USD150,655
Other Multilateral Agency	Bioversity International	Grant	USD144,948

GEF Agency	UNEP	In-kind	0
Government	Institute of Botany	In-kind	USD167,000
Government	Institute of Botany	Cash	USD187,000
	Armenian Forests NGO	In-kind	USD254,010
	Armenian Forests NGO	Cash	USD204,000
Total Co-financing			USD5,447,113

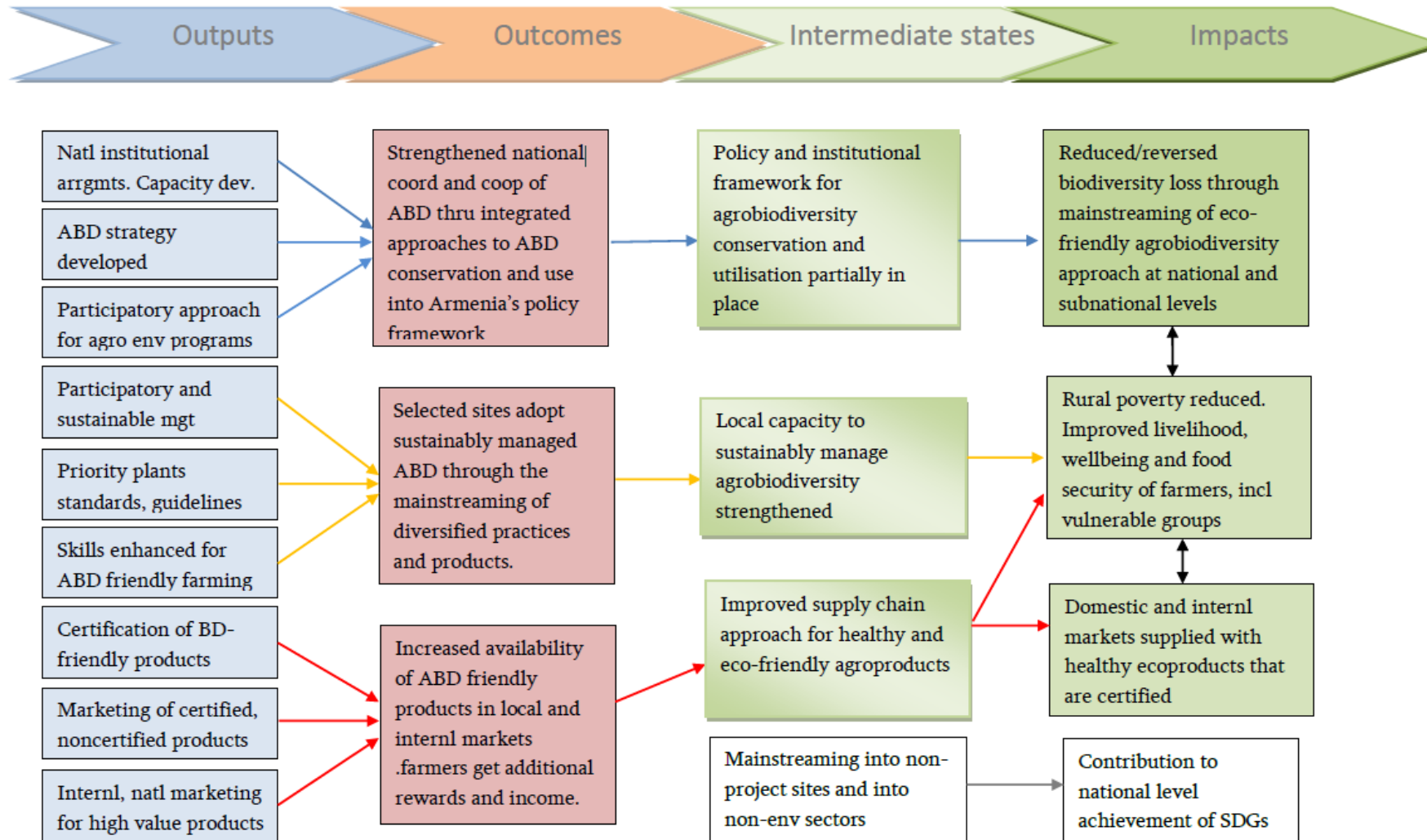
IV. THEORY OF CHANGE AT REVIEW

44. As this was a GEF5 project, a Theory of Change (ToC) exercise was not a requirement. From project documents made available to the reviewer a new ToC was constructed at the Inception phase with a view to determine key causal pathways that accumulatively contribute to the Intermediate States and Impacts. Following the same logic from Inception, the below paragraphs describe the ToC at this Review stage.
45. Three causal pathways could be extrapolated from the logical framework. Additionally, one further causal pathway is proposed for the Reconstructed ToC. It is about mainstreaming agrobiodiversity into non-environmental sectors and into longer-term national development agenda such as green economy. However as described below in section B. Quality of Project Design, this latter intervention deemed unrealistic for the scope of this project, and better suited for a follow-up second phase.
46. **The first causal pathway** concerns the Intermediate State of “ Functioning high level coordination mechanism for sustained mainstreaming (country ownership strengthened)” that leads to longer-term impact of “Agro-biodiversity approach mainstreamed at national and subnational levels” as well as the Impact of “strengthened national capacity to sustainably manage agrobiodiversity”. Outputs as mainstreaming agrobiodiversity in land use sectors (output 1.1.) based on a new national agrobiodiversity strategy (1.2.) that promotes crop varieties and encourages participatory approach (output 1.3.) indeed would have built a strong foundation for the outcome 1 of strengthened national coordination and cooperation that mainstreams an integrated ABD approach. However, as explained below in chapter V. Review Findings, this Outcome was underachieved, and could not lead to generating the desired impact.
47. To achieve these results political stability, willingness of different government ministries to collaborate with each other and with non-governmental organizations, universities and private sector was a necessary condition .Due to the major changes (see section C. Nature of External Context) in the government this assumption could not be fully met. The main driver of continued interest in a common platform for coordination and to address the disjointed policies concerning agrobiodiversity remained, be it in an ad-hoc way.
48. **The second causal pathway** is about building capacities to introduce the integrated ABD approach into practice at the sub-national and local level . Agrobiodiversity friendly farming for conservation and use of local fruits/nuts/vegetables species with unique traits lead to better harvests which in turn contribute to the longer-term impact of “Reduced rural poverty, improved livelihood and wellbeing”. The assumptions that underpin this achievement are: supportive subnational level agencies, awareness about benefits of traditional agricultural production systems, interest and commitment from farmers and other partners to ecofriendly farming of cultivated and wild plants. The main drivers for these results are : certain areas to sustainable management of crops is made available by the local government; existence of local priority species that are resistant to arid conditions and changing climate.
49. **The third causal pathway** is the improved supply chain, livelihood, well-being and food security impact pathway. A supply chain approach for certified and non-certified organic and high-value products for national and international markets increases availability of agrobiodiversity-derived produces for self-consumption and for sales . To maintain this result, conditions for a farmers, extension service agents and academic partnership that facilitates the uptake of conservation and sustainable management of species diversity, as well as private sector interest in marketing the produces have to hold. The main driver for this result : certification agencies; market demand for organic

produces. This result and impact was partially achieved as sustainability at sub-national level could be achieved whereas the supply chain implementation part was too ambitious to be fully realised within the scope of one project as described below in chapter V. Review Findings.

50. As for the proposed **new and added causal pathway about “mainstreaming”**, both to mainstream the project results to other non-project sites and into non-environment sectors as well as into higher level national development agenda and processes were not realistic for the scope of a single project.

Diagram 1. Reconstructed Theory of Change



V. REVIEW FINDINGS

A. Strategic Relevance

RQ: To what extent is the project in alignment with UNEP's MTS 2014-2017 / 2018-2021 and Programme of Work (POW)? To what extent are project's objectives and implementation strategies consistent with global, regional and national environmental priorities? To what extent is the project in alignment with the targets of SDGs?

Finding 1. The project is well aligned with relevant GEF, UNEP, UNDAF and SDG objectives. The main focus of the project on traditional local varieties of fruits and nuts is highly relevant given that more than half of the territory is arid and semi-arid. The local varieties are more resistant to drought risk and other climate change-induced variations.

Finding 2. In addition to its favorable environmental impact, an agrobiodiversity-friendly approach to farming is relevant for Armenia's food security goals and complies with SDG indicator 2.5.1 (Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities) .

51. The project contributes to the PoW 2018-19 Subprogramme 3 Healthy and Productive Ecosystems, EA (a) "The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels". Considerable number of training materials, guidelines/manuals for selection, cultivation, certification and marketing of high-value agricultural crops and their wild relatives were produced. Prodoc identified Aichi targets 2, 7 and 13 accompanied by SMART indicators.
52. The project contributes primarily to GEF Strategic Objective 2, "Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/Seascapes and Sectors" and Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation" by introducing participatory and sustainable management practices that support traditional crop varieties, crop wild relatives, medicinal species, pollinators and other beneficial insects, and thus facilitated the use marginal environments in the project site location.
53. A good number of national environment action plans, GEF, UNDP projects and reports were studied during the preparation period and highlighted in the Prodoc as complementary. However, no noticeable follow-up actions were taken during the implementation. UNDAF 2016-2020's "Outcome 7: By 2020 Sustainable development principles and good practices for environmental sustainability resilience building, climate change adaptation and mitigation, and green economy are introduced and applied" benefits from the project to a certain extent, though it is not clear if the project results were reported through the UNRC system.
54. The design clearly identified benefits to collaboration with GEF, UNEP, UNDAF and national strategies and programmes. However, this is not the case with other recent, ongoing or planned interventions of other organisations working in the project area or on the same problem/issue.

Rating for Strategic Relevance: **Satisfactory**

B. Quality of Project Design

RQ: Has the project design fully considered the 12 critical areas described in the Project Design Quality template ⁶?

Finding 3 . The project design as per PIF and Endorsement documents is close to book-perfect by identifying key barriers, root causes, and key interventions to address them. The project is fully aligned with UNEP/GEF/Donor and global/national priorities. All the steps necessary for preparing, planning and designing project documents and the many annexes as well as on-the-ground work with stakeholders were carried out in a timely and qualitatively satisfactory manner. Overall the results framework has a good flow of logic, the outputs and outcomes were well defined, with baselines and indicator information for most outputs.

Finding 4. For a 36 months project and given the limited financial resources, some of the goals as National level Coordination Committee solely devoted to agrobiodiversity and having a functioning supply chain approach were too ambitious. Additional outputs would have been necessary to add up to the stated ambitious goals for national level results. This discrepancy, that actually requires a second phase of the project, was reflected in the reconstructed Theory of Change by suggesting a new additional causal pathway. An absence of a clear exit strategy and underestimation of the political risk were also weaker aspects.

Finding 5 . The project design has been assessed along the 12 critical areas described in the PDQ template. These areas with their scores and weights are summarized in the below table, and the total weighted score shows that the overall quality of the project’s design is rated as 4.12.

Table 5. Summarised rating

	Section	Rating ⁷	Weighting	Total
A	Operating Context	4	0.4	1.6
B	Project Preparation	5	1.2	6.0
C	Strategic Relevance	6	0.8	4.8
D	Intended Results and Causality	4	1.6	6.4
E	Logical Framework and Monitoring	4	0.8	3.2
F	Governance and Supervision Arrangements	5	0.4	2.0
G	Partnerships	4	0.8	3.2
H	Learning, Communication and Outreach	5	0.4	2.0
I	Financial Planning / Budgeting	5	0.4	2.0
J	Efficiency	4	0.8	3.2
K	Risk identification and Social Safeguards	4	0.8	3.2
L	Sustainability / Replication and Catalytic Effects	3	1.2	3.6
Total Weighted Score		5.3	0.096	4.12

⁶ The PDQ completed template is annexed.

⁷ Rating scores: 6=highly satisfactory, 5=satisfactory, 4=moderately satisfactory, 3=moderately unsatisfactory, 2=unsatisfactory, 1=highly unsatisfactory, 0=not applicable

55. During the PPG phase, a detailed project management and implementation structure was discussed. These implementation and execution arrangements are designed for effective coordination of project activities at national, District/regional as well as at project site levels. Stakeholders were identified through consultation based on multi-institutional and multi-disciplinary approaches. Furthermore, oversight, monitoring, M&E plan, learning, communication and outreach as well as risk identification and social safeguards sections were completed.
56. At the PIF stage, gaps and key problems in Armenia's conservation and management of landraces, wild plant species and agrobiodiversity were analysed and the 3 main barriers to be addressed through the project were correctly identified.
- Barrier 1: Inadequate national coordination and cooperation for integrated policy and regulatory framework development and mainstreaming effective management of wild plant species and agricultural biodiversity in Armenia.
 - Barrier 2: Limited area devoted to sustainably managed wild plant species and agricultural biodiversity.
 - Barrier 3: Limited market share of wild plant species and agricultural biodiversity-friendly products in local and international markets that brings additional rewards and income to farmers and communities.
57. The first causal pathway was expected to most strongly to contribute to impact. The reasons for mainstreaming (the first causal pathway) the integrated approach into national-level institutions in the domain of biodiversity, agriculture and nature protection have been properly explored. In the pilot project sites, all project preparation such as selecting the areas to introduce agrobiodiversity-friendly farming as well as identifying all key stakeholders such as regional government, farmers communities and extension service agents was done thoroughly.
58. Weak points at the design stage were underestimation of political risk (see section C. below) and a lack of clear exit strategy. Longer-term sustainability measures were not identified such as ways to institutionalise roles and responsibilities of key stakeholders.
59. The bigger mainstreaming⁸ into non-project sites, and into non-environment sectors (suggested additional causal pathway) and the national development agenda has scarcely been addressed. For longer-term sustainability and upscaling, this "mainstreaming" is crucial. However, this was an ambitious goal that required bigger resources and a second phase of the project.
60. During the short country visit of the terminal review it became clear that despite the fact that all planned activities were delivered more or less as planned, the outcomes in particular the above two goals were not achieved, more concretely were not achievable even if there were no major political upheaval, as they were unrealistically high goals.

Rating for Project Design: Moderately Satisfactory

C. Nature of the External Context

RQ. Did the (political, environmental, social, institutional) context change during project implementation and how did the project adapt to this?

⁸ Prodoc text quote : "Policies need to be cross-sectoral in nature, demonstrating the broad role and value of wild plant species diversity, and ensuring that initiatives in one sector are supportive and complementary to those in other sectors.

RQ. Was adaptive management applied adequately? Were any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its secured budget and time?²⁹

Finding 6. The Velvet revolution of spring 2018 and ensuing presidential and parliamentary elections brought drastic changes leading to major government restructuring, which included the dissolution of the Ministry of Agriculture, a major project implementing partner with a primary focus on agrobiodiversity. This significant change could not be foreseen at the outset of the project.

Finding 7. The project team responded flexibly to these changes, and adapted the implementation of national level activities placing primary emphasis at the project sites support.

Finding 8. The government restructuring and turbulences, which included street protests and general strikes, lead to the postponing of several key project activities, especially the establishment of the intergovernmental coordination body for agrobiodiversity. They hampered the project's ability to achieve certain outputs, intermediate states and thereby generate impact for the rest of 2018 and 2019.

Finding 9. At the environmental level, Armenia has suffered significantly from climate-change effects, especially in the field of agriculture. Reportedly⁹, the country's climate has steadily worsened, due to an increase in average temperatures (by 1.23°C over the period 1929–2016) associated with a decrease in annual precipitation (by 9 per cent over the period 1961–1990).

61. The political risk was rated as low during the project formulation and design stage. Yet the disputed border situation in and around Nagorno-Karabakh is still unresolved and the potential for this tension to flare up into full-blown, armed conflict was and still is a known factor. The issue could have been flagged as a possible detractor for the implementation of the project. Likewise frequent government changes are not new in the Armenian political set-up, and this could also have been factored in as a likely scenario and corresponding risk-mitigation plans elaborated at the outset. These external circumstances collectively hampered the delivery and performance of the project to quite some extent.
62. However the project team has responded flexibly to the major changes in the nature of the external context, and shifted to working closely with farmers' communities and completing guidelines and manuals (see Annex "Project Products"). Thus training events supported by technical experts, such as the "Importance of Agrobiodiversity Conservation and Harvesting Technologies of the Plant Species", were successfully organized in the pilot sites during the summer and autumn of 2018. These events were attended by farmers and extension service agencies.
63. The Intergovernmental Coordination Committee on Agro-biodiversity was established and its Charter was approved by the Order of Ministry of Nature Protection #110 of 4 November 2017. Following the 2018 Presidential elections as well as Parliamentary changes, the process of reforms continued well into 2019. In 2019 the number of national ministries was reduced from 19 to 12 in the new government structure. The project team adapted to the new situation and organised the first roundtable meeting of the Intergovernmental Coordination Committee on Agro-biodiversity in April 2019 with a membership reflective of the new government structure. Thus Representatives

⁹ The second Environmental Performance Review of Armenia (UNECE-lead multi-team major review) to be published soon

of the following participated in the meeting: the Ministry of Environment, Ministry of Economy, Ministry of Education and Science, Ministry of Energy Infrastructures and Natural Resources, Ministry of Emergency Situations, Focal Points on CBD, UN Conventions on Climate Change, Desertification, International Trade, and Wetlands. Issues relating to inter-agency cooperation on agrobiodiversity conservation and land degradation, organization of ad-hoc consultation meetings during emergencies, as well as further close collaboration, were all collectively reviewed at this meeting.

64. The effects of the changing external context were still palpable during the recent country visit for the purpose of this terminal review. Added to the ongoing Nagorno-Karabakh tension was the current Russia-Ukraine conflict. For instance, visits to the Gegharkunik and Sunik sites were not possible due to security reasons. Instead a visit to a neighbouring area was organized as a means of informally assessing in situ the situation of farmers engaged in organic production.
65. Even as this terminal review reaches closure, changes again affecting the sector are under way with a recent announcement by the PM to the effect that five ministers will shortly be changed, including that of the Environment ministry. To be noted is that between the start of the project and this terminal review, already five different Ministers for Nature Protection were appointed. The changes do not stop at the highest level, as there is a cascading effect down through departments, frequently reaching junior staff posts in small units/sections. International development partners and national project teams will need to consider this reality, adopt project design features approaches that mitigate its negative effects and, to the extent possible, that target (and even strengthen) systemic links that can weather frequent changes of government.

Rating for Nature of the external context: Moderately Unfavourable

D. Effectiveness

Availability of Outputs

RQ. Could the project outputs in the areas of : a). mainstreaming agrobiodiversity in land use sector based on a revised national agrobiodiversity strategy for sustainable intensification b).introducing participatory approach that promotes traditional crop varieties c).marketing and supply chain for ABD-friendly produces lead to Outcomes and further longer-term impacts mentioned above in the ToC section ?

Finding 10. The project achieved most outputs as per its initial plan in terms of substance, but as of spring 2018 timelines had to be shifted, and a few of the outputs could not be closed and finalised. Progress reports, such as the 2018 report considered as the MTR has 30 Annexes¹⁰ attest satisfactory completion of most outputs.

Finding 11. Major and repeated government restructuring affected the duration as well as both the effectiveness and efficiency of the project that commenced in 2016, forcing it to be protracted into 2020 .

Finding 12. There is a difference in terms of continuity and thus sustainability of results, between national and sub-national levels. The national level outputs'

¹⁰ Most of them are in Armenian, and interpretation arrangement at this late review stage was not feasible. Thus the reviewer had to rely on answers given by the national project coordinator and the satisfactory ratings given in PIRs

sustainability could at best be inferred by other sources' proxy information, while sub-national ones could be determined during the review interviews.


66. As per the last progress report of 2020, an end-of-project survey¹¹ was conducted based on the baseline criteria and indicators of the results framework. As per progress reports most outputs met the criteria of satisfactory both in terms of quantity and quality and timeliness (see table below the 2018 MTR remarks). During the review visit, interviews and observations this could be confirmed by respondents barring certain caveats.
67. The project team did their utmost to deliver most outputs by focusing more on the deliverables that depended less on central government partners. However, the higher policy-level work as a fully functional national coordination committee on agrobiodiversity, a national law on wild fruit trees, and an agrobiodiversity strategy remained as drafts and did not see proper closure and completion. A detailed overview of the achievement of outputs with their implementation status in % is presented in Annex Table .
68. Stakeholder engagement and the communicating of key project messages were prepared, planned and delivered effectively by the project team. The MTR commended the project team for succeeding to engage even the reforming government agencies in the round-tables of the national Coordination Committee on Agrobiodiversity.
69. Mass media such as TV, radio channels, newspapers and public awareness events were part of all the key deliverables. Outreach to the general public was carried out very effectively and altogether 86 public awareness materials were produced during the project.
70. During the project development phase project stakeholders emphasised the need for close cooperation with women and youth groups. It was proposed that local community-based organizations, women's groups, farmer's organizations and youth groups be involved in participatory appraisals and community-based activities to map biodiversity and sustainable practices and to mobilize relevant biodiversity-based interventions (practices and materials). Gender has been taken into account in the forming of farmer cooperatives. "Garun V Gegharkunik", chaired by a female farmer, unites 8 large holder farmers and 24 smallholder farmers. 13 of 32 members are women. "Garun V Ararat" unites 15 large holder farmers and 35 smallholder farmers. 20 of 50 members are women. Around 30% of training events and outreach activities involved women.
71. Also another positive aspect of the project was reaching out to young farmers and rural non-farming young people through the establishment of two Agricultural Youth Clubs that have proven to be a good entry point for the youth to raise their awareness about local varieties of fruits and nuts sustainable farming methods as well as harvesting methods for wild plants. However, since no socio-economic analysis was used, it is difficult to draw lessons as to the extent women and youth continue to enjoy an improved status in terms of their income, access to agricultural resources or their voice in community and regional policies concerning farmers and/or agro produces' market supply.


¹¹ This survey is not available



Table 6 : Overview of achievement of outputs and validation by the reviewer

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
Outcome 1.		
<p>Output 1.1: National institutional arrangements in place and capacity developed to mainstream and promote agricultural biodiversity in relevant land use sectors.</p>	<p>Intergovernmental Coordination Committee on Agro-biodiversity established and its Charter was approved by the Order of Ministry of Nature Protection#110 of 4 November 2017. In 2019 number of national ministries was reduced from 19 to 12 in the new government structure which were reflected in the new structure of Intergovernmental Coordination Committee on Agro-biodiversity. the first roundtable meeting of the Coordination Committee was organized on 29 April 2019.¹². Issues on the need of inter-agency cooperation on agrobiodiversity conservation and land degradation matters, organization of ad-hoc consultation meetings during emergencies and further close collaboration were discussed at this meeting. Five policy briefs focused on agrarian policy, its burning issues, results of analysis of national policy framework on conservation and use of agrobiodiversity, importance of local biodiversity use and conservation were produced and disseminated.</p> 	<p>The fact “national institutional arrangements in place” to mainstream agrobiodiversity could not be confirmed during the mission. This is one of the outputs that could not be properly finalised. The main reason is the repeated, major government restructuring. the initial target of two annual roundtables could not be met. 18 months after the establishment of the Committee, the 1st roundtable could be arranged in April 2019. The 2nd one in June 2019 and overlapping with the closure of project activities. On a positive note the participants acknowledged the issue of inadequate partnerships among relevant institutions and organizations in Armenia. Even if it was for a short time the Committee enhanced collaboration and information exchange to some extent among entities engaged in agrobiodiversity .</p> <p>The 5 policy briefs were of practical use, and appreciated by stakeholders.</p>


¹² Representatives of Ministry of Environment, Ministry of Economy, Ministry of Education and Science, Ministry of Energy Infrastructures and Natural Resources, Ministry of Emergency Situations, Focal Points on CBD, UN Conventions on Climate Change, Desertification, International Trade, Wetlands participated in the meeting.

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
<p>Output 1.2: National agricultural biodiversity strategy developed that takes account of unique diversity, ecosystem function and opportunities for sustainable intensification</p>	<p>Based on results of analysis of national policy and legislation related to national security and economic development, agriculture development and nature protection the strategic document on “Guidelines on Agricultural Biodiversity Conservation and Use” was developed in consultation with Ministry of Agriculture, Ministry of Nature Protection, leaders of local communities. All national stakeholders provided their input in finalization of the document. After obtaining approval from all stakeholders the Guidelines were published in the reporting period. It was decided that national Institute of Botany would lead and coordinate the work on development of national law on “Conservation of Wild Fruit Trees in Specially Protected Areas of Armenia”. The Institute jointly with project experts developed draft version of the law, which was circulated among relevant stakeholders. The project also developed “Regulations on conservation of the genetic resources (seeds) of the fruit trees”. These regulations will be also submitted to relevant government agencies for their review and follow up actions with further approval.</p> 	<p>Unfortunately the Agrobiodiversity Strategy, a national law on Conservation of Wild Fruit Trees and the Regulations on Conservation of the genetic resources of fruit trees belong to the unfinished Output results . Due to the ongoing reforms (that seemed still be the case today) no hard evidence could be found that these drafts were approved, adopted and enforced after the closure of the project. On the positive note, policy and decision makers were engaged with representatives from farmers’ communities and research institutes and their capacities were enhanced at least during the project duration. Circumstantial evidence would suggest that at least some of them are using the knowledge and skills obtained in their current civil service functions.</p>
<p>Output 1.3: Agriculture and environment programmes adopt a participatory approach to include all relevant stakeholders for planning, implementation</p>	<p>Two Farmers’ Cooperatives established in the project sites: Farmers’ cooperative “Garun V Gegharkunik” in Gegharkunik project site and Farmers’ cooperative “Garun V Ararat” in Ararat project site. “Garun V Gegharkunik” unites 8 large holder farmers and 24 small holder farmers. This cooperative is chaired by female farmer Ms. Varsik Hovsepyan. 13 of 32 members of this cooperative are women. “Garun V Ararat” unites 15 large holder farmers and 35 smallholder farmers. 20 of 50 members of this cooperative are women. Charters were approved by State Registry Service of Ministry of Justice on 20 December 2017 and on 30 April 2018 respectively. The Charters consists of</p>	<p>The activities for this result could continue despite the spring velvet revolution and ensuing changes. The successful completion of this Output is an example that often at the local level project activities can continue demonstrating sub-national interventions’ resilience to national level changes and disruptions.</p>

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
<p>and management</p>	<p>sections on General Conditions, Purposes, Legal Framework, Method of Acceptance of New Members in the Cooperative, Use of Common Goods, Rights of Farmers, Scope of Work, Obligations. Events on launching “GARUN V-Ararat” and “GARUN V-Gegharkunik” were organized on 4 July 2018 Ararat project site and on 6 July 2018 in Gegharkunik project site.</p> 	<p>The Charters for the Cooperatives were approved by State Registry Service of Ministry of Justice which contributed to the sustainability of this result.</p>
<p>Outcome 2.</p>		
<p>Output 2.1: Participatory and sustainable management practices identified that support traditional crop varieties, crop wild relatives, medicinal species, pollinators and other beneficial insects, and developed to improve local diversity for marginal environments in the project site location.</p>	<p>Baseline report on “Priority species, current best management and harvesting practices for cultivated and wild plants and their products” was produced based on the survey conducted in 2016. Prioritization of the species was made by the following criteria:</p> <ul style="list-style-type: none"> • Origin: Primary (Wild relatives), Secondary (Wild relatives not belonging to the same species), Species, Ecotype species; • Economic: Demand for agricultural market, Demand for the food processing market; • Natural, Artificial; • Highly threatened, less threatened; • Frost resistant (Hardiness), Drought resistant, Salinity resistant; • Adapted to land conditions; • Usage as forage. • Best management practices and identification area <p>the “Guidelines for selection and cultivation of high-value agricultural crops and their wild relatives in</p>	<p>For outputs 2.1. and 2.2., the target of at least 20 good practices for sustainable management of agro-biodiversity have been identified or developed through engagement with local stakeholders. In some cases those targets were surpassed (see Annex “Project products”)</p>

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
	 <p>Armenia” was produced. consultations with local communities resulted in identifying two crops in each project site as priority species for participatory research: apricot (<i>Armeniaca vulgaris</i> L.) and grape (<i>Vitis vinifera</i> L.) in Ararat project site, sea buckthorn (<i>Hippophaë rhamnoides</i> L.) and lentil (<i>Lens culinaris</i>) in Gegharkunik project site.</p> <p>in total 41 training manuals and guidelines were</p>  <p>produced in Armenian language by national project team in close consultation and cooperation with national partner institutions. From the date of the start of the project in total 100 farmers in three project sites benefited from exchange visits on sharing good practices and knowledge on conservation and use of agrobiodiversity. Four trainings were organized for 69 extension workers.</p>	
<p>Output 2.2: Guidelines and standards for sustainably managing and harvesting priority plants and products are established and implemented in the project site locations.</p>	<p>In total 41 manuals on sustainable management of priority plant species for use of farmers, local communities and extension service are produced by the project. The project established and maintains the database, which contains description of best practices documented in Ararat and Gegharqunik project sites. These practices include organic agriculture of priority crops in Gegharqunik project site; adaptation and mitigation measures to climate change effects in Gegharqunik project site; water-saving irrigation technologies applied in Ararat project site. Three demonstration plots were established in two project sites. In Ararat project site Demonstration orchard in area of 8.5 ha was</p>	<p>During the mission visit the local administration, especially the agronomist confirmed the benefit of the demonstration orchards, as well as the manuals.</p>

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
	 <p>established in June 2017 in land under the community property in Nor Ughi Community. Currently three local varieties of apricot: Yerevan (Shalakh), Spitak and Sateni (Aghjanabad); three local peach varieties: Ararati, Armaviri and Narnji; and two apple varieties: Simerenko and Demrchyan are cultivated in this demonstration plot.</p> <p>Demonstration site in a greenhouse with radish and carrot vegetables was established in June 2017 in the Taperakan Community in Ararat Province in collaboration with commercial company "Spayka LLC".</p> <p>In Gegharqunik project site Demonstration plot with berry crops was established in June 2017 on public land of Kalavan Community. Two raspberry varieties as Goliap and Novo-Kitayevska, two varieties of blueberry (Vacciniummyrtillus), three varieties of grape as Muscati, Hadis and Sevani and three local species of currant (Ribes vulgaris, Ribes nigrum and Ribesrubrum) are maintained in this demonstration plot. Vegetable crops as garden asparagus(Asparagus officinalis), cabbage(Brassica oleracea var capitata) and lettuce (Lactuca sativa) are also planted in the plot to demonstrate opportunities for cultivation of vegetables crops to local communities in order to diversify their income sources and reduce pressure on natural habitat of these species in wild. These demonstration plots are used to train farmers on best practices in management of local agrobiodiversity, organic farming and marketing products of local agrobiodiversity.</p>	

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
		
<p>Output 2.3: Farmers and local communities in the project pilot sites have enhanced skills and capacity to undertake agricultural biodiversity friendly farming and other relevant practices, and community-based approaches for sustainable agricultural biodiversity conservation and utilization strategies are developed.</p>	<p>86 public awareness materials in total are produced by the project team within the project to run the awareness campaign. Produced PA materials were disseminated during field visits and meetings as well as through the project’s web-site http://agroecoarm.com. In total 399 farmers and local community members benefited from 14 training workshops and rounds table discussions organized by the project on agro-biodiversity-friendly production and harvesting methods. Young Generation Agricultural Clubs were established in Nor Ughi Community in Ararat Province and Kalavan Community in Gegharcunik Province. In close consultation with community members and administrative bodies Charters of these clubs were developed. Events on launching the Agricultural Clubs were organized on 5 March 2019 in Nor Ughi Community with participation of 25 young farmers and on 11 March 2019 in Kalavan Community with participation of 30 young farmers. Bringing young farmers together through the clubs will ensure sustainability of involvement of local communities and raising their voice in decision making process.</p>	<p>The campaign materials have effectively tackled the obstacle of insufficient awareness among the general population, policy makers, decision-makers, farmers, producers, and consumers regarding the significance of wild plant species and agrobiodiversity.</p>
<p>Outcome 3.</p>		
<p>Output 3.1 Guidelines developed for certification of biodiversity-friendly food products.</p>	<p>Conducted study on “Exploring the potential of agricultural biodiversity-friendly certification strategy”. Requirements for certification of wild leafy vegetables, fruits and berries to understand major bottle necks and opportunities for certification of agrobiodiversity products incl products prioritized by the project: apricot (<i>Armeniaca vulgaris</i> L.) and grape (<i>Vitis vinifera</i> L.) in Ararat project site, sea buckthorn (<i>Hippophaë rhamnoides</i> L.) and lentil (<i>Lens culinaris</i>). Surenevan local community in Ararat project site now collaborates in producing organic dried apricots with two local companies“AGROLOG</p>	<p>During the mission visit, empirical evidence suggested that local markets and supermarkets sold a great quantity of local apricots, sea buckthorn, grapes and lentils. So for domestic markets, one could assume that there is some sustainability and impact of the project interventions.</p>

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
	<p>CJSC” and “SUN GOODS LLC”, which are certified as producers of organic food. The cooperative “Garun” in Varser community in Gegharkunik project site produces organic lentil products. Based on results of the study and consultation with stakeholders “Guidelines on certification for organic food products” was developed.</p>	
<p>Output 3.2</p> <p>Marketing programs for certified and non-certified (including organic and geographically identifiable agriculture products) agricultural biodiversity friendly products are in place and implemented through a supply chain approach.</p>	<p>List of experts which includes 25 national experts in plants breeding, climate change, agro-ecology, botany, agricultural sciences, market chain and certification was compiled by the project to establish panel of experts to identify and promote priority products. Survey to assess current availability of agro-biodiversity products in Armenia was conducted using Rapid Market Appraisal (RMA) tool. In the project sites national workshops on value chain development for agricultural biodiversity with participation of local communities, local processing and trading companies were organised. As the result of these efforts the project team jointly with local communities in the project sites launched sea-buckthorn beverage as an agro-biodiversity product of the project. The project also developed packaging of wild sea buckthorn alcoholic beverage. “Guidelines on marketing of sea-buckthorn products” in collaboration with local commercial companies, NGOs and cooperatives was published.</p>	<p>The cooperatives confirmed that they continue working with intermediary companies that help realise their organic produces.</p> <p>However, the respondents could not provide hard data in terms of volumes and percentages of sales if there was an increase or decrease compared to four years ago.</p> <p>No progress can be reported for a functional supply chain, because from the outset this was an unrealistic goal to be achieved within only cycle of a project.</p>
<p>Output 3.3</p> <p>International and national marketing and promotional opportunities identified for key high value Armenian agricultural products and wild medicinal and food plant products.</p>	<p>. Questionnaire was developed by International Consultant on Marketing for assessment of organic sector in Armenia to generate better understanding of market niches for organic vegetables, medicinal plants, spices and fruits. RMA covered the groups of organic shops, retailers, wholesalers, processors and traders. Exercises on Market Intelligence Fact Sheet (Format for Rapid Market Appraisal) were completed together with local communities in Ararat and Gegharkunik project sites. As result of the exercises it was identified that there are opportunities for organic products of priority species as sea buckthorn (<i>Hippophaë hamnoides</i> L.), lentil (<i>Lens culinaris</i>), apricot (<i>Armeniaca vulgaris</i> L.) and grape (<i>Vitis vinifera</i> L.). Database with contact details of 10 journalists, 5 newspapers, 5 TV and radio channels was developed to launch an advertisement campaign for alcoholic sea buckthorn beverage - a new local agro-biodiversity product offered by the project through radio, newspaper, TV channels. The project has also promoted domestication and cultivation of asparagus, which has been harvested in wild for centuries in Armenia and is one of the important</p>	<p>This intervention helped to address the barrier of limited market share of wild plant species and agricultural biodiversity friendly products in local and international markets .</p> <p>For export market, especially for Russia, the local administration and farmers confirmed that the truck loads of apricots were unfortunately wasted as they were blocked from entering. Yet last year apricots were sold at very good prices on Russian markets. So, the volatility of export market in combination with political circumstances have a direct influence on the livelihood of smallholder farmers.</p>

Planned outputs	Reported outputs as per Project Final Report	Comments based on review mission, survey and follow-up data collection
	sources of income of local people in Surenavan Community in Ararat project site. Farmers' cooperative in Ararat project site sells every year 3,000 kg of cultivated asparagus to local commercial trade company "Spayka" . This approach helps to conserve wild populations of asparagus in Armenia.	

Achievement of Project Outcomes

RQ. Did the project achieve outcomes along the causal pathways as per TOC? Namely, improvement of livelihood, food security, and rural development. In particular,

- (a) *Functioning national coordination mechanism that promotes ABD mainstreaming*
- (b) *Increasing areas devoted to sustainable farming in regions*
- (c) *Introducing supply and value chain approach in marketing organic products for domestic and international markets*

Finding 13. Despite major challenges in the external context, i.e. elections and protracted changes in the government, the intended outcomes were achieved more than partially, including a considerable number of the initially set targets, which in themselves are commendable developments. The main drivers and assumptions, such as continued commitment and active support by decision-makers, institutional mandates, mechanisms for approval of laws and policies were disrupted.

Finding 14. Partially for Outcome 1 due to social unrest and government restructuring; an intergovernmental body for agrobiodiversity, strategy, law and regulations of national policy nature were not completed and cumulatively did not lead to fruition namely of "Strengthened national coordination and coop of ABD through integrated approaches to ABD conservation and use into Armenia's policy". (please see conclusion 4 on page 5)

Finding 15 . Partial results for the Outcome 3 component on supply chain mechanism thus progress for achieving an intermediate state of " Improved supply chain approach for healthy and eco-friendly agroproducts" could not be attained. The assumption of private sector interest in marketing could no longer hold due to lack of concrete strategy and plans to institutionalise this aspect through project interventions. The driver of existence of certification bodies and market demand for organic products was partially addressed due to the limited scope and means of the project.

Finding 16. The Outcome on the sub-national level achieved its results fully, namely "Selected sites adopt sustainably managed ABD through the mainstreaming of diversified practices and products." The assumption of supportive sub-national actors and the driver of marginal lands being made available by the local government could hold and contribute to the longer-term impact of "Reduced rural poverty, improved livelihood and wellbeing".

72. Putting in place, on the one hand, a fully-functioning national level inter-ministerial Coordination Committee on Agrobiodiversity and on the other, adoption of several policy documents were a key goal that was intended to address the barrier of

inadequate coordination among government institutions and poor existing legislation and regulatory framework for the conservation and utilization of wild plant species. The Committee was established in November 2017 and held only 2 meetings in the last three months preceding the project's closure date of August 2019 as agreed by the non-cost extension .

73. However, 4 years after the closure of the project and 5 different environment ministers (each of whom administered a cascade of staff changes, even sometimes to the level of a junior civil servant in a small unit), it is hard to discern impact generated. It is an even harder call to judge if this intervention was the right one from the outset given the volatility to frequent changes in government entities and instability of civil servants. Nonetheless, the reviewer is of the opinion, even if the specific agrobiodiversity national committee was short-lived, its work has influenced the next similar Coordination Councils that have had as mandate to improve the overall integrated natural resource management that in turn should positively impact on agrobiodiversity.
74. Another key intervention was about introducing in selected pilot areas agricultural biodiversity friendly farming and apply other relevant agricultural biodiversity friendly practices among farmers and local communities. This goal was well implemented during the project time period despite the national level government changes proving that once effective methods of agro-production at the grassroots level provided, their sustainability is more resistant than at the central level. A barrier was the fact that only limited areas were devoted to sustainably managed wild plant species and agricultural biodiversity. Interviews with key stakeholders revealed that strengthened community biodiversity management and community co-management of wild plant species for food and medicine have in fact subsequently contributed to increased areas that are now planted with local resistant varieties.
75. The third key intervention focused on exploring domestic and international markets for organic products from these selected areas. Interviews and observational evidence showed that this intervention was successful during the project implementation. However, the sustainability aspect of this intervention is not clear. As for external market the Armenian agroproducts including organic ones are still affected by the volatile nature of external markets. For instance, truck-loads of apricots were blocked at the border with Russia last year ,meaning complete loss for all the supply chain actors. The project's scope was not deep and wide enough to have an impact on a more systemic change in the whole value and supply chain.
76. Armenia joined the Euroasian Economic Union in January of 2015 and agro produces destined to this block of countries have to follow standards set by the EAEU. It is not clear to what extent Armenian representatives in the EAEU is aware of this and similar projects and thus promote communities producing eco-friendly products. Linking up with this kind of specialised entity could bring mutual benefits.

Achievement of Likelihood of Impact

RQ. Could the various project interventions lead through the causal pathways to desired Impacts mentioned in the ToC review section above?

Finding 18. Through a flurry of activities and outputs, a certain level of impact in reversing biodiversity loss through the mainstreaming of eco-friendly agrobiodiversity approach at the subnational level was generated, even if hard evidence could not be provided by the communities 4 years after the project lapsed.

Finding 19. The same as above can be stated for Improved livelihood, wellbeing and the food security of farmers, including vulnerable groups.

Finding 20. Partial impact was achieved for “Domestic and international markets supplied with healthy ecoproducts”. Some of key products launched by the project such as sea buckthorn, apricots, lentils and asparagus and their availability of these products in today's markets could to a certain extent be attributed as impact generated by the project.

Finding 21. However, the likelihood to generate impact for a solid policy and institutional framework for agrobiodiversity conservation and its utilisation at inter-governmental level fell through due to political upheaval and restructuring that in turn were followed by staff changes at almost all levels.

77. The reviewer considers that the first causal pathway and longer-term impact of “Agrobiodiversity approach mainstreamed at national and subnational levels” as well as the Impact of “National capacity to sustainably manage agrobiodiversity strengthened” were not achieved due to external force-majeure circumstances that hampered the interventions that should have cumulatively contributed to favorable final results.
78. Also at the project design stage, some of the goals for national level outcomes and impacts were set somewhat too high to be attained within this project.
79. The second causal pathway, namely agrobiodiversity friendly practices for conservation and use of local crop varieties with unique traits lead to better harvests which in turn contributed to the longer-term impact of “Reduced rural poverty, improved livelihood and wellbeing”.
80. The third causal pathway is that of an improved supply chain, livelihood, well-being and food security impact pathway. This result was partially achieved as introduction of a supply chain approach was an unrealistic goal for the project.
81. As per the Impact Flowchart template¹³, the overall impact of the project is rated between “Moderately Unlikely” and “Moderately Likely”.

Rating for Effectiveness: Moderately Satisfactory

E. Financial Management

Adherence to UNEP’s Financial Policies and Procedures

82. Letter of Agreements (LOA) for each year were signed between Bioversity International and Ministry of Nature Protection of the Republic of Armenia and included a detailed workplan. The LoA determined schedule of payments and reports submission. Financial reports were provided to Bioversity and UNEP at quarterly basis. Annually from 2016 through 2020, Armenia’s pledged grant amount (883) was included in the Exhibit 2 in the independent “Audited financial statements” report of Bioversity International by PWC.
83. The Project Steering Committee provided general oversight of the project’s budget and co-financing status. As there was two kinds of financial support (GEF contribution and co-financing), different financial reporting regulations were adhered to. The overall financial responsibility remained with the Ministry of Nature Protection as the

¹³ The completed Impact Flowchart template is annexed.

GEF Focal Point in Armenia. All expenditure was reported to and cleared by MNP. In addition, the Project Executing Agency provided financial oversight over the GEF contribution. The National Project Coordinator reporting line to UNEP was through the Project Executing Agency.

Completeness of Financial Information

84. As per interview with the national project coordinator, except a few delays in receiving the funds, all of the following were done in a timely and satisfactory manner:

- Approval and disbursement of cash advances to partners
- Regular analysis of actual expenditure against budget and workplan
- Timely submission of regular expenditure reports (six-monthly and annual)
- Expenditure was within the approved annual budget. There were 2 budget revisions submitted and approved without affecting the total budgeted amounts.
- High level project budget for secured and unsecured funds.
- High level project budget by funding sources for secured and unsecured funds.
- Disbursement (Funds Transfer) document from funding source(s) to UNEP.
- Project expenditure sheets were provided on a quarterly basis.
- Detailed project budget for secured funds.
- Proof/report of delivery of in-kind contributions.
- Partner legal agreements and documentation for all amendments exist.

Table 7 : Original budget and revised budget figures

	Original budget (CEO Endorsement 2015)	Revised budget BR 1 in 2016	Revised budget BR 4 in 2023	Difference 2016 and 2023 (%)
Personnel	520,442	520,442	520,442	
Sub-contracts	126,800	126,800	126,615	-0,14
Training	113,000	113,000	113,662	+0,58
Equipment and premises	19,000	19,000	16,054	-15,5
Miscellaneous	104,000	104,000	106,469	+0,45
Total	883,242	883,242	883,242	

Communication Between Finance and Project Management Staff

85. Based on yearly budget approved by the National Coordinating Committee, all expenditure before the start of each quarter was agreed with Bioversity International. Project staff prepared payment requests to be signed by the national project coordinator and national executing agency and further to be submitted to Bioversity International. After receiving approval of Bioversity International, financial requests

were sent to UNEP. Based on the quarterly expenses mentioned in the financial request UNEP then sent Financial Authorization to UN Armenia Office to make funds available for disbursement. Reportedly, every dollar spent was verified, monitored and reported between the PMU and the EA Bioversity staff on an ongoing basis.

Rating for Financial Management: Satisfactory

F. Efficiency

86. As the project team faced technical difficulties in completing policy-related activities of the project due to changes in the government structure, it was agreed with Bioversity International to request a non-cost extension of the project till 31 August 2019, then to 31 December 2019.
87. On the national level, cash receipts were channelled through the in-country UN House financial transfer mechanism that was highly valued by the project team as the best channel. All local procurements were done VAT free which saved budget which was directed to implement work plan activities with better quality and quantity.

Rating for Efficiency: Satisfactory

G. Monitoring and Reporting

Monitoring Design and Budgeting

88. The project M&E plan was consistent with GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A of the project document includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Annex G of the project document were used for assessing project implementation progress and achievement of project results. The means of verification and the costs associated with obtaining the information to track the indicators were also summarized in Annex H of the project document, the Costed M&E Plan. Other M&E related costs were fully integrated in the overall project budget. Detailed disaggregation by stakeholders, gender and other groups was not carried out.

Monitoring of Project Implementation

89. During the First meeting of Project Steering Committee on 2 March 2016 framework for project monitoring and evaluation was discussed and approved by national partners. Also a Workplan was duly completed at the outset of the project. Project's progress has been assessed against indicators in project's logical framework on a half-yearly basis, and the available PIRs show satisfactory detailed data by indicator. Community leaders in project sites participated in meetings on monitoring and evaluation of project.
90. Annex O. of the project document provides a complete project supervision plan for 4 years, and as per the national team the plan was followed thoroughly. The Midterm review of the project was conducted through the PIR (2018) process and final evaluation was scheduled for 2020, postponed to 2023.
91. The GEF biodiversity tracking tool was duly completed at the outset of the project. However, the tracking done at mid-term and closure is missing. No documentation was available at the time of this review.

Project Reporting

92. The Project Steering Committee received periodic reports on progress and made recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures has been the responsibility of the Task Manager in UNEP-GEF. The Task Manager also reviewed the quality of draft project outputs, provided feedback to the project partners. The weak aspect of the overall reporting is absence of disaggregated data by vulnerable/marginalised groups, including gender for many of the outputs.

Rating for Monitoring and Reporting: Satisfactory

H. Sustainability

Socio-political Sustainability

RQ. Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts ?

Finding 22. Yes. The velvet revolution of spring 2018 and ensuing unrest, strikes and continued changes in government staff as well as the tension over the Nagorno-Karabakh border had a negative effect on the sustainability of project results and progress towards impacts.

93. As mentioned above under C. Nature of external context and D. Effectiveness, the political change and social unrest were the main cause for several outputs never being able to be brought to completion, and thus reduced the generation of impact along the three causal pathways. The least affected results were thanks to the interventions at the sub-national level, with regional authorities and farmers' communities. Also the work with the Institute of Botany, with academic institutes as well as extension service agencies were much less subject to disruptions and could be completed in a timely manner and at a fully satisfactory level.

Financial Sustainability

RQ. To what extent are the continuation of project results and the eventual impact of the project dependent on (continued) financial resources? To what extent are the project outcomes financially sustainable at pilot sites, communities, and national levels?

Finding 23. At the local level, both the administration and farmers themselves continue investing in agrobiodiversity friendly agricultural practices to the extent possible. At the national level, budgets for specific fields as agrobiodiversity is almost negligible. Financial sustainability for the projects of this kind, is almost exclusively dependent on external donors continued funding. Upscaling and mainstreaming of project activities and results require additional funding altogether.

94. During the country visit, it was clear that most activities did not get any further funding after the closure of the project. Only those stakeholders for whom agrobiodiversity friendly farming practices are of importance have continued under their own inertia using methodologies, knowledge and tools acquired from the project. And they are the farmers, and researchers at Botany Institute's gene bank.

95. The mentality of expectation that specific development and environment objectives' funding comes from foreign sources still prevails.

Institutional Sustainability

RQ. To what extent is the sustainability of project outcomes (esp. policies and laws) dependent on issues related to institutional frameworks and governance? To what extent are the institutional capacity development efforts likely to be sustained? Do all interested stakeholders have now enough scientific evidence and practical knowledge to better manage agrobiodiversity?

Finding 24. Due to undertaking the terminal review almost 4 years from the completion of project activities, the sustainability of results and longer-term impacts was not easy to determine, let alone pinpoint. However, through country visit observation and discussions, there are some signs to show the agrobiodiversity approach has benefitted and penetrated among the target villages and their neighbours, and there is increased availability of agrobiodiversity friendly products for domestic markets and consumption as well as for exports.

Finding 25. The Institute of Botany, and the academic and scientific community has been the most steadfast beneficiary and continued supporter for expanding agrobiodiversity approach further into development field, but they lack both the strategies and the means to substantially influence relevant economic sectors.

Finding 26. Overall, there is lack of mechanisms to support and sustain the institutionalisation of project achievements.

96. The project has not foreseen any concrete intervention re how to link up and do joint activities with other ongoing projects to institutionalise key achievements. The coordination was more on the level of exchanges of information through ad hoc meetings and workshops. But to have an impact there needs to be a far more eager approach and thoroughly planned activities.
97. Longer term sustainability measures were not incorporated in the project interventions neither with national authorities nor with international agencies. So this ended up as a successful silo project with many of the interventions unfortunately withering with time.
98. The empirical evidence suggests that farmers in project sites and in some neighbouring villages continue cultivation based on diversity of local traditional varieties. The officials interviewed at the local administration informed that the area is slightly increased although hard statistical data is close to impossible to find.
99. In the capital city of Yerevan, the markets and supermarkets are full of sea buckthorn products, apricots, lentils and asparagus. The case of organic asparagus is an unexpected development as currently it is the most abundant vegetable nationwide. Some attribution for this could be given to the project as these are produces that were launched by the project. During the project many public awareness activities were conducted targeting consumers, supermarkets, and of course the intermediary companies.
100. As for the certification of produces, the farmers communities continue collaborating with selected certification companies. The companies visit the fields where local species are cultivated and conduct inspection for chemical inputs, genetic modification, soil quality and other aspects.

Rating for Sustainability: Moderately Unlikely

I Factors Affecting Performance and Cross-Cutting Issues

Preparation and Readiness

RQ. What changes were made to the project design after the project approval? To what extent the documents promised in the design were developed: e.g. communication and stakeholder engagement plan? Measures taken to address weaknesses to respond to changes.

Finding 27 . The project preparation and readiness was carried out fully satisfactorily. Minor improvements were made after the approval such as further baseline information gathering. However, detailed plans to follow up coordination with other similar projects and initiatives, and measuring the impact on women and youth were not elaborated.

101. Considerable work went into preparation throughout 2015 and the first LoA was signed in December 2015. The actual implementation of project activities started as of January 2016 at full speed with creation of a national project team, a successful Inception workshop, and subsequent establishment of a Steering Committee, a Technical Advisory Committee and all the plans required.

During the Project preparation, all the major stakeholders were consulted on a bilateral basis in a regular manner. Reportedly, at least three workshops were held with all stakeholders – to consult, to generate and analyze the information and to validate the approach for the proposed project intervention. In addition, consultation with representatives of local communities in the agro-ecoregions targeted by the project were undertaken.

Quality of Project Management and Supervision

RQ. Was the project management adequate, effective and efficient? (skills, leadership, coordination, adaptive capacity)? How effective, transparent and democratic was decision making in the project? Did project management respond to direction and guidance provided by the Project Steering Committee? What were the strengths in guidance and backstopping from UN Environment and what were the limiting factors?

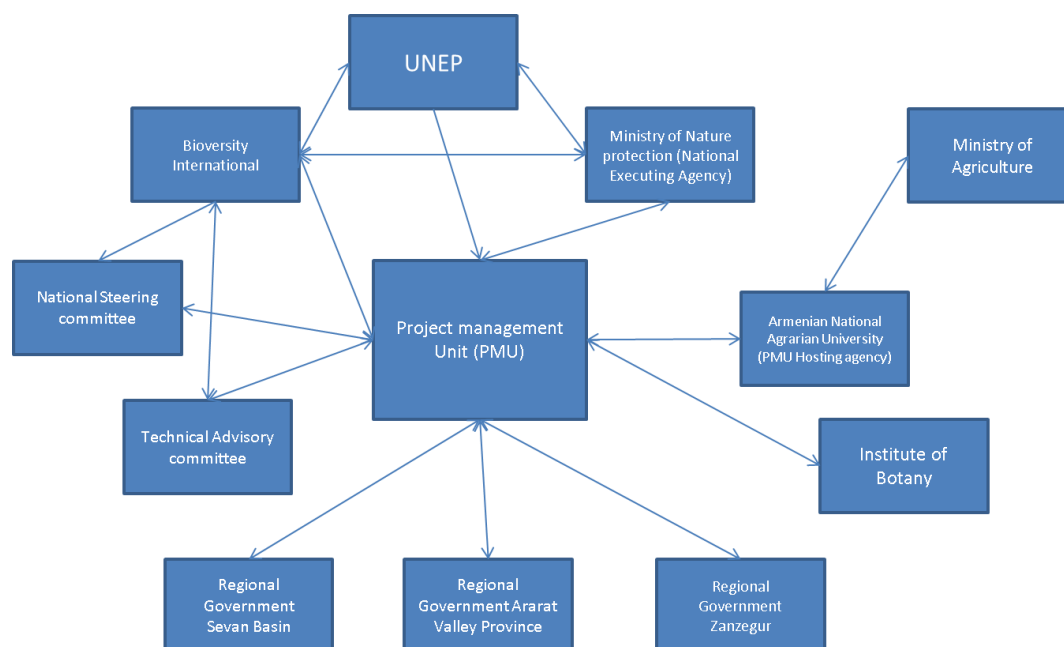
Finding 28. The project was professionally managed by the executing agency Bioversity International and a dedicated national project team following agreed upon work plans. The working relations were highly collegial and based on a good team spirit.

Finding 29. The project supervision was provided by the PSC and TAC. The TAC committee met regularly and fulfilled its role. The meeting of the PSC became ad-hoc as of 2018 due to the changes of government representatives in the committee. Local administration and farmer communities also met regularly to discuss and familiarise themselves with activities planned and report on results.

Finding 30. Both Bioversity International and UNEP backstopping was sought when needed and was appreciated by project team and national partners. The support and missions completed by the task manager was much welcome.

102. The executive agency Bioersivity and the national project team worked very closely. All plans and actions were agreed with Bioersivity International on a weekly (sometimes daily) basis before their implementation. Work plans were also reviewed and agreed by national partners and Project Steering Committee.
103. Twice a year, the selected project site community leaders met with project partner institutions, PIU staff to discuss details of project work plan. The meeting schedule was as follows: one meeting at the beginning of each year to clarify work plan activities and the other meeting in December of each year to monitor implemented activities.
104. UNEP carried out the overall project supervision to ensure consistency with GEF and UNEP policies and procedures and provided guidance on linkages with related UNEP and GEF-funded activities. UNEP monitored implementation of the activities undertaken during the execution of the project and ensured that the project is in line with the UNEP Medium-Term Strategy and its Programme of Work (PoW), as approved by the UNEP Governing Council.

The project management structure is presented in the following diagram:



Stakeholders Participation and Cooperation

RQ. What was the extent and quality of engagement of the project team with all the relevant stakeholder groups (how well those groups were identified). How was the participatory approach implemented (farmers, policy makers, researchers, businesses, consumers)? What was the degree and effectiveness of stakeholders cooperation during the implementation ?

Finding 31. The project team identified all key project partners and clearly identified their contribution and expected roles for the delivery of various outputs and activities. From documentation it is clear that the project team very closely engaged and fully involved project partner agencies in planning, implementation of activities and sharing of results.

Finding 32. Stakeholders from different levels interacted and worked together effectively be it for delivering Output on “Participatory and sustainable management

practices that support traditional crop varieties” or training and capacity building events to develop guidelines or draft national law.

105. The project team has proactively engaged with all stakeholders and interacted and supported them in delivering service and products as agreed. During the project duration there was high level of cooperation between the various stakeholders. Public awareness campaigns reached out to the general public quite successfully. However, a plan to engage with institutions beyond the immediate project partners was absent and thus keeping a sustained interest/support from a wider partnership (esp. for upscaling) could not be realised.

Responsiveness to Human Rights and Gender Equality

RQ: To what extent has project implementation and monitoring taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially those related to gender) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation?

Finding 33. Some attention was devoted to both gender and youth aspects during the project design and implementation stage. However, there is no data available to determine to what extent their status has improved thanks to the project interventions.

106. A few selected activities and outputs focused on disadvantaged groups, including women and young people. Activities ensured that the specific needs of women and men¹⁴ are addressed when selecting priority species, best practices and products. It produced for example a brochure on "Selection and use of plants in Armenia: preferable plants for men and women, gender preferences for plant growing and food crops."

107. Around 25% of participants of training workshops, rounds table discussions, exchange visits on sharing good practices and knowledge in agrobiodiversity management were women. One of the two Farmers' Cooperatives established by the project was chaired by a woman. Two Young Generation Agricultural Clubs were established in Nor Ughi Community in Ararat project site and in Kalavan Community in Gegharkunik project site.

108. In Armenia, the second largest labour sector is agriculture, with women's engagement at 37% and men's engagement at 31% (2017). Despite the large numbers of women working in agriculture formally and informally, only 16% of women in Armenia own land compared to 35% of men (2015-2016), which is down from 39% of women in 2010. Among women who own land, 32% do so in rural areas compared to 5% in urban areas¹⁵.

109. There is a general assumption that women are given equal opportunities, especially in villages women stay in charge because their men leave as the sowing season starts to work abroad, e.g. in Russia, Turkey or Kazakhstan and return in November / December when the harvest is over.

Environmental and Social Safeguards

¹⁴ The project was designed and approved before the UNEP Gender Policy was implemented.

¹⁵ Armenia Country Gender Equality Brief

RQ: To what extent did the project address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage? To what extent did the project assess and manage risks (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project activities? How the identified risks were addressed?

Finding 34 . UNEP/GEF Environmental and Social Safeguards Checklist was completed at the outset of the project implementation, and no particular risk was identified. And no management plan was developed to address the checklist during the implementation and review stages.

110. By its very nature the project targeted species that can grow in degraded, arid land, and using little or no chemical inputs for cultivating the fruit and nut trees, as well as vegetables as organic asparagus, indeed the project had no or minimal negative environmental footprint and/or social impact.

Country Ownership and Driven-ness

RQ. How committed are the stakeholders (incl. gov. representatives across different ministries) to implement various activities within the framework of the project and sustain the results ?

Finding 35. The objective of the project is well aligned with the country's goals in the area of sustainable management of environmental resources and climate change commitments. The active engagement of national partners and stakeholders in the implementation of all the project activities is a clear sign of their commitment to the project and by extension of country ownership.

Finding 36. In some aspects, the planning, decision making and implementation seem to have been steered more by Bioversity International, their experts and foreign consultants rather than national stakeholders. This the terminal review, conducted 4 years from completion of the project could not identify clear evidence of critical government entities' continued interest and commitment to sustaining the results.

111. Despite quite extensive involvement of key stakeholders in all the stages , starting from project preparation to delivering activities/services, and high-level commitment and support, the reviewer is of the opinion that country ownership and driven-ness has still a way to go and would benefit from further analysis. The latest EPR for Armenia describes this situation as one of the key impediments to the effective conservation of biological and landscape diversity: " Armenia seems to be still highly dependent on external financial assistance and technical support provided by international organizations for the development and actual implementation of its biodiversity conservation laws, strategies and action plans " .

Communication and Public Awareness

RQ. What was the effectiveness of communication of learning and experience sharing between project partners and interested groups arising from the project during its life? What were the challenges and effectiveness of the knowledge management approach (knowledge gaps identification, knowledge generation, transfer, application), including: knowledge and learning deliverables (e.g. website/platform development); knowledge products/events; communication strategy; lessons learned and good practice; adaptive management actions? What is the sustainability of the communication channels established under the project?

Finding 37. The communication and learning between the project partners and beneficiaries was one of the most positive results achieved through many training events, exchange visits, and through participatory field work.

Finding 38. Targeted knowledge and communication products were widely disseminated among relevant stakeholders and the general public.

112. Dissemination of project outputs and materials, including PA materials were done during project visits and meetings as well as through Aarhus Center of Armenia located in the Ministry of Nature Protection that has 12 sub offices in Provinces as well as by Agro Information Center of the Agrarian University that has sub-offices in each province of Armenia.

113. As described under Outputs Achievements section communication and public awareness were highly successful aspects during the project duration. As for sustainability, the web-portal dedicated to the project is still operational and allows access to all the knowledge products developed during the project.

Rating for Factors Affecting Performance and Cross-Cutting Issues: Satisfactory

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

114. The reviewer rates the overall project performance as “Moderately Satisfactory” based on scores. The reviewer is of the opinion that external circumstances that was out of the control of the project execution led to the underachieving of the major objective to “mainstream and strengthen agricultural biodiversity conservation and utilization to enhancing livelihoods in rural communities of Armenia”. A design error also contributed to this, namely to place overly ambitious mainstreaming and supply chain goals on a project designed for a mere 36 months and constrained by a tight financial ceiling.
115. With regard to sustainability the project is rated as “Moderately Likely” , with the problems mentioned also applicable here. However, it is to be noted that finding hard evidence and facts for sustainability 4 years after the project’s completion is challenging, to say the least.
116. Based on the findings of the project, the following specific Conclusions are drawn for further Lessons Learned and Recommendations:
- **Conclusion 1.** The project is well aligned with relevant GEF, UNEP and UNDAF and SDG objectives. The main focus on cultivating traditional local varieties of fruits and nuts is highly relevant given more than half of the territory is arid and semi-arid. The local varieties are more resistant to drought risk and other climate change induced variations than the modern crops ,hybrid and imported varieties for intensive agriculture, that tend to have a higher environmental footprint.
 - **Conclusion 2.** In addition to its favourable environmental impact, an agrobiodiversity-friendly approach to farming is relevant for Armenia’s food security goals and complies with SDG indicator 2.5.1 (Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities) .
 - **Conclusion 3.** Tin project made excellent progress in 2016 and 2017; however, since April 2018, the pace of delivery of outputs has been hampered by the velvet revolution and elections at the presidential and parliamentary levels. Thus, the overall effectiveness and impact generation were affected, with the result that some outputs could not achieve targets set out at the design stage. The disruptions that happened from the spring of 2018 till the end of the project affected national level delivery more negatively than the work in the regions with farmers and research and technical experts. This leads to the conclusion that local level project interventions were more resistant and much less affected by central government restructuring.
 - **Conclusion 4.** Under the first component and during the first two years the project made good progress (upto 40-50% completion rate) on setting up of the national level coordination committee, as well as preparation for the national law and regulations in the area of conservation of wild fruit trees. Unfortunately, the political upheaval affected the full completion of these deliveries. At the pilot sites, farmers cooperatives were set up, the training and collaboration with scientists as well as with extension service entities progressed throughout the project’s duration.
 - **Conclusion 5.** The second component progressed almost according to the plan throughout the entire project duration despite the major changes in the external environment as mentioned above. The deliverables contributed to better understanding of the role of agrobiodiversity that support traditional crop varieties, crop wild relatives, medicinal species, pollinators and other beneficial

insects, and to the adoption of farming practices that apply local diversity for marginal environments in the project site locations.

- **Conclusion 6.** The third component achieved targets to highlight the importance and possibilities of organic agriculture in Armenia and in identification and evaluation of organic market opportunities for priority crops. However, the supply chain approach to help farmer communities to realise certified and non-certified organic agro produces on domestic and international markets did not yield a lasting impact partly due to the changing external context and partly due to overly ambitious goals set at the design stage .
- **Conclusion 7.** After a first two-years of rather rigorous implementation, as of April 2018 the delivery of outputs slowed down due to the frequent changes and delays on the part of key government stakeholders. Thanks to the Project Implementation Team's adaptive approach, delivery at regional/local level could continue with minor disruptions compared to policy-level work and intergovernmental coordination committee functioning. By using the UN funds transfer mechanism, procurements could be transacted in a cost-effective way without VAT.
- **Conclusion 8.** The fact that Bioversity International and external consultants were in charge of some of the key results may have influenced the local ownership and institutionalisation. The country ownership would require more than capacity building and training events to be sustained over the long-term .
- **Conclusion 9.** Project disbursements happened almost as per plan and the ratio between grant and co-financing was a balanced one at 4:1ratio. Actual co-financing amounts were slightly higher than the amounts pledged at the formulation stage.
- **Conclusion 10.** The TAC and PSC functioned very effectively and was a key pillar for mobilising national partners and stakeholders in the implementation of the project more actively.
- **Conclusion 11.** The project was very effective in communicating and promoting its key messages and results. Mass media and other channels, including project's own website spread the messages very effectively.
- **Conclusion 12.** The implementation was effectively monitored on a half-yearly basis following a set of mostly SMART indicators that measured the performance of the project at the outcome level and output level.
- **Conclusion 13.** Gender and youth issues were addressed as the project went along, mainly in terms of their involvement in project interventions and in number of participants. No targeted socio-economic analysis, including gender issues, was planned at the outset. Therefore, it is not clear if the project had different impact on women and men, their access to resources, income and decision making.

B. Summary of project findings and ratings

117. The table below provides a summary of the ratings and finding discussed in Chapter V. Overall, the project attained a rating of **Moderately successful**.

UNEP Evaluation Office Validation of Performance Ratings:

The UNEP Evaluation Office formally quality assesses (see Annex X) management led Terminal Review reports and validates the performance ratings therein by ensuring that the performance judgments made are consistent with evidence presented in the Review report and in-line with the performance standards set out for independent evaluations.

The Evaluation Office assesses a Terminal Review report in the same way as it assesses the initial draft of a Terminal Evaluation report. It applies the following assumptions in its validation process:

- That what is being assessed is the contents of the report and the extent to which it makes a consistent and justifiable case for the performance ratings it records.
- That the consultant has, within the report, presented all the evidence that was made available to them.
- That the Review has been based on a robust Theory of Change, reconstructed where necessary, which reflects UNEP's definitions at all levels of results.
- That the project team and key stakeholders have already reviewed a draft version of the report and provided substantive comments and made factual corrections to the Review Consultant, who has responded to them. The Evaluation Office assumes, therefore, that it has received the Final (revised) version of the report.

In this instance the Evaluation Office validates the overall project performance rating at the **Moderately Satisfactory** level.

Table 8: Summary of project findings and ratings

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Strategic Relevance		S	The overall criterion rating is lowered based on the comments below.	MS
1. Alignment to UNEP MTS, POW and strategic priorities	Well-aligned to UNEP MTS, POW and strategic priorities (see pg.27)	S	Rating validated	S
2. Alignment to Donor/Partner strategic priorities	Well-aligned to Donor/Partner strategic priorities (see pg.27)	S	Rating validated	S
3. Relevance to global, regional, sub-regional and national environmental priorities	Well-aligned to global, regional, sub-regional and national environmental priorities (see pg.27)	S	The report shows alignment with SDG 2 but does not show alignment with regional, sub-regional environmental priorities. It states that some national environmental action plans were identified as complementary but there was no follow up during implementation (paragraph 53).	MS
4. Complementarity with relevant existing interventions/coherence	Acknowledges existence of previous/ongoing/planned relevant interventions, projects, programmes (see pg.27)	MS	The report does not present evidence to support the complementarity/ coherence assertions. Paragraph 54 states that the project did not identify benefits to collaborate with "other recent, ongoing or planned interventions of other organisations working in the project area or on the same problem/issue."	MU
Quality of Project Design	The project design as per PIF and Endorsement documents along with the logframe is close to book-perfect by identifying very well key barriers, root causes, and following a good logic between result chains as outputs and outcomes, but some goals were set too high. Social impact and sustainability strategies were absent. (see pg. 28-29)	MS	Rating validated	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
Nature of External Context	The external risk was underestimated. The government restructuring and social unrest hindered achievement of impact. (see pg.30)	MU	Rating validated	MU
Effectiveness	The overall effectiveness is moderately satisfactory due to major changes in the external context. Also some assumptions and drivers could not hold and/or were partially addressed. (pg.31-39)	MS	Rating validated	MS
1. Availability of outputs	The project achieved most outputs as per initial plan in terms of substance, but as of spring 2018 timelines had to be shifted, and a few of the outputs could not be closed and finalised. Progress reports, such as 2018 report considered as the MTR has 30 Annexes attest satisfactory completion of most outputs.	S	The outputs are presented with no reference to targets or a clarification that there were no targets. It is therefore difficult to make a value judgement on whether outputs objectively met expectations. In addition, only 67 percent of the outputs were made fully available (6 out of 9), as such, this falls under 'moderately satisfactory' based on the criteria ratings matrix.	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
2. Achievement of project outcomes	<p>Sub-national level outcomes were achieved fully satisfactorily. National level outcomes were partially achieved due to major challenges in the external context. The main drivers and assumptions, such as continued commitment and active support by decision-makers, institutional mandates, mechanisms for approval of laws and policies were disrupted.</p> <p>The assumption of private sector interest in marketing could no longer hold due to lack of concrete strategy and plans to institutionalise this aspect through project interventions. The driver of existence of certification bodies and market demand for organic products was partially addressed due to the limited scope and means of the project.</p> <p>The assumption of supportive sub-national actors and the driver of marginal lands being made available by the local government could hold and contribute to the longer-term impact of "Reduced rural poverty, improved livelihood and wellbeing".</p>	MS	Rating validated	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
3. Likelihood of impact	Through the flurry of activities and outputs, a certain impact in reversing biodiversity loss through mainstreaming of eco-friendly agrobiodiversity approach at the subnational level was generated, even if hard evidence could not be provided by the communities after 4 years of lapse. (see pg.41)	MU-ML	Given the articulation of impact in the reconstructed TOC and the evidence presented in Findings 18-21, a rating of MU is validated.	MU
Financial Management		S	Rating validated	S
1. Adherence to UNEP's financial policies and procedures	The EA and oversight bodies (PSC and TAC) and project management unit adhered to UNEP's financial policies and procedures.	S	Rating validated	S
2. Completeness of project financial information	As per PIR, and as per interview with the national project coordinator completeness of financial information is reported.	S	Rating validated	S
3. Communication between finance and project management staff	As per PIR, and as per interview with the national project coordinator, there was constant communication between finance and project management staff.	S	Rating validated	S
Efficiency		S	The report does not provide evidence of cost effectiveness approaches that go beyond standard procedures. In addition, the project had two no cost extensions.	MS
Monitoring and Reporting		S	The overall criterion rating is lowered based on the comments below.	MS
1. Monitoring design and budgeting	As per PIR, , and as per interview with the national project coordinator, monitoring design and budgeting was done in a timely manner and as per requirements.	S	The monitoring plan did not include disaggregation by stakeholder groups, per paragraph 88. This alters the rating, per the review rating matrix.	MS
2. Monitoring of project implementation	As per PIR, , and as per interview with the national project coordinator, monitoring of project implementation was done in a timely manner and as per requirements.	S	During implementation no amendments were made to include disaggregation by stakeholder groups, per paragraph 88.	MS

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
3. Project reporting	As per PIRs, , and as per interview with the national project coordinator, project reporting were submitted in a timely and satisfactory manner to the EA and to UNEP.	S	The data collected was not disaggregated, per paragraph 92.	MS
Sustainability		MU	The overall criterion rating is lowered based on the comments below.	U
1. Socio-political sustainability	The velvet revolution of spring 2018 and ensuing unrest, strikes and continued changes in government staff as well as the tension over Nagorno-Karabakh border had a negative effect on the sustenance of project results and progress towards impacts.	ML	Rating validated	ML
2. Financial sustainability	Financial sustainability for the projects of this kind, is almost exclusively dependent on external donors continued funding. Upscaling and mainstreaming of project activities and results require funding altogether.	MU	The project did not have an exit strategy, per paragraph 58. In addition, the bulk of the financial burden is on the farmers and researchers, as the government has not committed any financial support (per paragraph 94).	U
3. Institutional sustainability	There is some evidence for institutions at a regional/local level. However, there is very little evidence for sustainability for national level institutions.	MU	Rating validated	MU
Factors Affecting Performance		S	Rating validated	S
1. Preparation and readiness	During PPG and PIF, all necessary preparations for project design and stakeholder consultation was conducted in a satisfactory manner.	S	Rating validated	S
2. Quality of project management and supervision		S	Rating validated	S
2.1 UNEP/Implementing Agency:	As per PIR, the supervision was done in a timely and satisfactory manner, including a MTR.	S	Rating validated	S

Criterion	Summary assessment	Rating	Justification for any ratings' changes due to validation (to be completed by the UNEP Evaluation Office – EOU)	EOU Validated Rating
<i>2.2 Partners/Executing Agency:</i>	As per project team, there was a very close cooperation with the EA, and project management and supervision was done smoothly and effectively.	S	Rating validated	S
3. Stakeholders' participation and cooperation	As per project team, stakeholders actively participated in the delivery of all outputs.	S	Rating validated	S
4. Responsiveness to human rights and gender equality	Specific outputs targeted women and youth in pilot project areas. But the socio-economic impact could not be determined due to lack of concrete plan in this area.	MS	Rating validated	MS
5. Environmental and social safeguards	The project had some positive impact in reversing land degradation (expansion of desert and arid areas).	MS	Rating validated	MS
6. Country ownership and driven-ness	All national partners were committed to the project objective and showed a high degree of cooperation. However, most of the decision-making process was dependant on EA's advice and foreign experts.	MS	This criterion is primarily an assessment of the quality and degree of engagement of government/public sector agencies in the project. Finding 36 stated that the review "could not identify clear evidence of critical government entities' continued interest and commitment to sustaining the results".	MU
7. Communication and public awareness	Communication and public awareness activities were delivered in a fully satisfactory manner. Outreach to both mass media and general public was very effective.	S	Rating validated	S
Overall Project Performance Rating	The overall project performance was rated at moderately satisfactory as a few key outcomes could not be achieved due to the major change in the external environment. Furthermore, due to lack of an exit strategy at the outset of the project, sustainability of results could not be verified and monitored.	MS	Rating validated	MS

C. Lessons learned

Lesson Learned #1:	Too ambitious goals set during the project preparation and design stage
Context/comment:	Mainstreaming into other sectors, upscaling into other locations than the project sites, or having a functional supply chain approach for agrobiodiversity friendly eco-produces is a gradual and iterative medium-to-long-term process that was unrealistic for a 36 month project with rather a limited scope and financial envelope.
Lesson Learned #2:	Underestimation of political risk and external context
Context/comment:	The velvet revolution and ensuing government restructuring that protracted over the years could not be foreseen at the project preparation and design stage. However, better risk assessment with experts in the field and scenarios for frequent staff changes in governmental entities could have mitigated to some extent this risk which was rated as low in the prodoc.
Lesson Learned #3:	Sustainability of results beyond the project lacked concrete strategy and plans
Context/comment:	<p>If there had been concrete measures and agreed plans as to handover some of the results may have been sustained. Both the project staff and national partners did not foresee very concrete strategies, methodologies and also resources to institutionalize the results of the project.</p> <p>The phenomenon that with the end of a project the results achieved disappear and wither away with time was starkly evident with this project as the terminal review was happening after 4 years of the completion of activities. In the case of Armenia this effect was compounded by the fact that towards the end of the project some key interventions could not see their proper closure e.g. a proper uptake of Agrobiodiversity Strategy, national law on wild fruit species, or integration of the national inter-agency committee into another entity such as SDG platform could not be realized.</p>
Lesson Learned #4:	Sub-national/local level interventions and with research and academia are more resilient in contexts like Armenia where changes at ministerial level and in government staff is rather frequent
Context/comment:	Thus investing in them pays off. There has been 5 different ministers of environment between the start of the project and the terminal review. And the 6 th one is about to be nominated. Ministry of Agriculture, a key national level partner for agrobiodiversity, was dissolved in 2019 and subsumed as several departments in the Ministry of Economy. With the high level changes, counter partners in government entities can leave their posts from one day to the next.

	<p>Despite the government major restructuring the outputs at the sub-national level were delivered The project team worked more closely with technical experts, academic and research institution representatives with the farmers communities and regional administrations and delivered key trainings and monitored the agro-biodiversity friendly practice implementation at the selected project intervention sites.</p>
<p>Lesson Learned #5:</p>	<p>Documenting, data collecting and monitoring are still weak aspects that require concerted attention by all</p>
<p>Context/comment:</p>	<p>The project team dissolves and stops this work with closure of the project. Many national partners see this as a side task, do not pay much attention, or put aside resources to go on documenting and monitoring the progress of the results after the completion of the project. With the legacy of a “revolving door” ministerial and other levels of staff change, key partner agencies people do not necessarily acknowledge achievements of the previous government. Thus there has been very little statistical data, hard evidence left to attest to the sustainability of the results during the terminal review.</p>

D. Recommendations

<p>Recommendation #1:</p>	<p>Upscaling and mainstreaming of this project’s results is still crucial if Armenia were to combat the expansion of arid zones, land degradation and climate change adverse effects. In fact, a second phase of this project as designed with these mainstreaming and upscaling goals would be a right response. Integrating into similar new projects would also be another solution.</p>
<p>Challenge/problem to be addressed by the recommendation:</p>	<ul style="list-style-type: none"> - to distinguish between aspects that are technical deliverables versus systemic and root cause-related aspects by clearly targeted interventions and strategies - be aware that the more systemic and root-cause related the more inter-agency thorough preparations would be required to design more realistic projects. - and elaborate a proper strategy to work with other actors than environment, especially devote the necessary time and resources to dialogue and reach an agreement with UN RC Office. - accept the fact that UNEP and its direct partners in the government are not fully equipped to deal with political issues or for that matter working with non-environment sector actors, governance and systemic issues despite their complete knowledge of them. Many project documents perfectly identify and articulate them. But putting them in practice cannot and should not be done in a silo-sector mode. - mainstreaming and upscaling alone requires huge multi-year and multistakeholder effort as seen from projects like the Poverty Environment Initiative as well as PAGE. - supply chain issues (component 3 of the project) are much more in the domain of UN ITC, UNCTAD, and governance issues especially the relationship between national and sub-national authorities have been

	topics that RC Coordination Offices deal with through the CCA and UNSDCF processes, and UNDP's huge governance teams.
Priority Level:	High
Type of Recommendation	For future project
Responsibility:	UNEP divisions responsible for cooperation with UN RC Office, Europe regional office, country based RC Office, TM for the project, national partner agencies
Proposed implementation time-frame:	2024 – 2028

Recommendation #2:	Elaborate risk mitigation, sustainability, environmental and social impact strategies and concrete measures during the formulation and design stage of the project, and adjust/refine them during implementation as needed.
Challenge/problem to be addressed by the recommendation:	<p>Armenia is volatile to multiple risks, such as political due to the notorious border tension around Nagorno-Karabakh, social unrest, government change and thus reform agenda, export market hindrances due to border closure with neighbouring countries , complicated and in some instances unpredictable customs formality procedures .</p> <p>Have in place project exit strategy to identify actions needed to secure sustainability of project achievements and create entry points for upscaling of results from demonstration areas.</p> <p>To mainstream into non-environment sectors, preparatory studies, as making the case for economic analysis would be required. For instance, now that the Ministry of Agriculture is subsumed under the Ministry of Economy, elaborate studies that demonstrate the economic case of negative impact of pests and diseases, degradation of water and land resources, as well as climate change and benefits/cost-saving through agro-biodiversity friendly farming.</p> <p>Conduct in-depth socio-economic analysis to show qualitative difference in the status of disadvantaged groups. For instance, most country offices have UN women representatives that could help in jointly designing a targeted gender and socio-economic assessment.</p>
Priority Level:	Medium
Type of Recommendation	For future project formulation and design
Responsibility:	TM, project team, UN RC Office, other relevant partner international and national agencies
Proposed implementation time-frame:	As of 2024

Recommendation #3:	<p>Plan and incorporate concrete strategies and detailed actions of collaboration with the initiatives, programmes, projects that were identified as complimentary in the prodoc.</p> <p>Plan for a lessons learnt South - South activity with Uzbekistan where and in-situ and ex-situ programmes for CWR, traditional varieties of fruit and nut species are more advanced, and with whom they share a common past.</p>
Challenge/problem to be addressed by the recommendation	<p>Despite the numerous previous, current or in-the-pipeline projects and initiatives funded by the international donor community in addressing biodiversity land degradation issues, there is limited cooperation among all these initiatives.</p> <p>Exchanges of information, joint meetings and launching a few events here and there is not sufficient to make the best of the complementarity and improve impact.</p> <p>The coherence and partnership between various projects that is acknowledged in project documents need to be converted into implementation of joint outputs/outcomes using the UNSDCF platform and joint programming.</p> <p>Better outreach by UNEP Nairobi and European Regional Office to the UNRC Office in the country</p>
Priority Level:	Medium
Type of Recommendation	Strengthening partnership
Responsibility:	<p>UNEP EO as initiator to implement TR recommendations.</p> <p>The Division of Policy and Programme; the Strategic Planning Unit; Europe Regional Office of UNEP, TM, country UN RC Office</p>
Proposed implementation time-frame:	As of 2024.

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Table 9: Response to stakeholder comments received but not (fully) accepted by the reviewers, where appropriate

Page Ref	Stakeholder comment	Reviewer Response
Finding 14.	We want for a reader to be clear that as for project stuff part all was done but because of structural changes some actions become complicated to be implemented. Just at the end of "Findings 14" add the following sentence: Please see conclusion 4 on page 50.	Accepted and suggestion included.
Paragraph 83	LOA signed between Bioversity International and Ministry of Nature Protection included workplan. Please add 'workplan'.	Accepted and suggestion included.
Paragraph 87	Can we add the fact cash budget that national project received?	Accepted and suggestion included.
Lessons learned and Recommendations part.	As representatives of national stakeholders, we acknowledge the lessons learned. We agree with and fully support the recommendations of the terminal review. We plan to integrate the recommendations in the new UNEP/GEF project document for which the PPG is due to start soon.	Accepted and acknowledged.

ANNEX II. PEOPLE CONSULTED DURING THE REVIEW

Table 10: People consulted during the Review and Observations

26.06.2023		Gender of the respondent
Institute of Botany of the National Academy of Sciences, Yerevan		
Arsen Gasparyan	Director of the Institute of Botany after A. Taktajyan NAS RA	M
Ivan Gabrielyan	Head of the Paleo-botany Department, Institute of Botany named after A. Taktajyan NAS RA	M
Elen Hakobyan	Researcher Paleo-botany Department, Institute of Botany after A. Taktajyan NAS RA	F
Narine Hayrapetyan	Researcher Paleobotany Department, Institute of Botany after A. Taktajyan NAS RA	F
Anush Nersesyan	Head of Armenian Flora Genetic Resources Conservation Department	F
Alexander Rudov Senior	Researcher at the Armenian Flora Genetic Resources Conservation Department	M
Marieta Asatryan	Researcher at the Department of plants Taxonomy and Geography	F
Hamlet Martirosyan	Professor of Armenian Agrarian University	M
<p>Observations: Held extensive dialogue with the above representatives as the main stakeholder group for ensuring that agrobiodiversity approach for conservation and utilization of local resistant varieties of fruit and nut trees is still applied since the completion of the project. This fact was confirmed. The technical and scientific capabilities were quite impressive. However, this kind of academic institutes lack both the strategies and the means to substantially influence relevant economic sectors. Overall, they acknowledged lack of mechanisms to support and sustain the institutionalisation of project achievements due to fragmentation among responsible authorities. Visited their greenhouse establishments, and the seed banks that are kept up-to-date.</p> <p>.....</p> <p style="text-align: center;">27.06.2023 Meeting in Yerevan</p>		
Niels David Scott	UN Resident Coordinator Armenia	M
Vahan Amirkhanyan	Food and Agriculture Organization of the United Nations, Team leader/ National Agriculture socialist	M
Siranush Galstyan	GIZ, Advisor on Forests and Biodiversity	F
Dennis Besedic	UN Deputy Resident Coordinator	M
<p>Observations: the above representatives of the international community in Armenia confirmed the difficult situation, both in terms of structural changes in the government and the security concerns due to the Nagorno-Karabakh tensions. They acknowledged that upscaling/mainstreaming of pilot projects is not an easy task for many other projects. The RC called on UNEP to take a lead role in pursuing a programmatic approach for all the environment-related project that are being implemented in the country, especially within the framework of the UNFCSO Armenia. The FAO colleague agreed with the finding of the latest Environmental Performance Review for Armenia describes one of the key impediments to the</p>		

<p>effective conservation of biological and landscape diversity: “ Armenia seems to be still highly dependent on external financial assistance and technical support provided by international organizations for the development and actual implementation of its biodiversity conservation laws, strategies and action plans “. The GIZ representative highlighted the importance of sustainability of skills and capacities of government officials, and to collaborate with development partners in this area.</p> <p>.....</p> <p style="text-align: center;">28.06.2023</p> <p style="text-align: center;">Meetings in Ararat Region: Vedi Joint Community, Armavir Joint Community of Armenia</p>		
Argishti Mekhakyanyan	Community Armavir, head of Khoy community	M
Tatul Stepanyan	Region Vedi, Development Specialist	M
Rafael Hakobyan	Region Vedi, first deputy head of Vedi Municipality	M
Bagrat Shaninyan	Region Vedi, deputy head of Vedi Municipality	M
Hrachya Stepanyan	Region Vedi, chief of staff of Vedi Municipality	M
Shamo Baqoyan	Region Vedi, Head of Department of Agriculture and Nature Protection of Vedi Municipality	M
Qristine Nahapetyan	Region Vedi, Department of Development Programs, Tourism, Trade, Service and Advertising of Vedi Municipality	F
<p>Observations: The above local government and farmers’ community stakeholder representatives confirmed that farmers in project sites and in some neighbouring villages benefitted from the project interventions and continue cultivation based on diversity of local traditional varieties . The officials interviewed at the local administration informed that the area is slightly increased although hard statistical data was not available. The farmers communities continue collaborating with selected certification companies. The companies visit the fields where local species are cultivated and conduct inspection for chemical inputs, genetic modification, soil quality and other aspects. The agronomist who has been there since the beginning of the project seems to have played a key role in the sustainability aspect. The interviewed smallholder families were highly satisfied and confirmed that their income and thus livelihood has improved since the project.</p> <p>.....</p> <p style="text-align: center;">29.06.2023</p> <p style="text-align: center;">Meeting in Gegharkunik region</p>		
Gohar Mnacakanyan	President of Sevan Youth Club NGO. Director of BOHEM Studio Teahouse Sevan	F
Vahram Gevorgyan	Farmer lentil producer in Gegharkunik Province	M
Company for organic produces	Enterprise owners	2M, 1F
<p>Observations: Due to the security concerns, travel to the actual project sites was not possible. Thus, representatives from a nearby area in the Gegharkunik agreed to exchange their views. The youth NGO representative talked about the increased awareness of younger generations for</p>		

<p>environmental issues that needs to be tapped into. The farmer and enterprise owners explained the difficulties most organic production businesses face in obtaining support from the state such as access to credits, subsidies, fertilisers and marketing and selling their produces. They are unsure of how the domestic and external markets will behave. Especially the volatility of external market to neighbours as Russia, Georgia hugely affect the income from sales.</p> <p>.....</p> <p style="text-align: center;">30.06.2023 Committee of Forest of Ministry of Environment</p>		
Vladimir Kirakosyan	President of Forest Committee	M
Sergo Atanesyan	First deputy President of Forest Committee	M
Mariam Movsesyan	Head of the Department of Foreign Relations	F
Lusine Hakobyan	Assistant to the President of Forest Committee	F
Armen Danielyan	Former National Coordinator of the Project (in ongoing discussion since the country visit	M
	<p>Observations: the president and other officials confirmed the contribution and importance of agrobiodiversity for agriculture, sustainable forest management and climate change. The Committee has plans to expand in terms of mandate, staff and budget, and expressed interest in collaborating in future projects.</p>	

ANNEX III. REVIEW FRAMEWORK/MATRIX

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
A. Strategic relevance		
1 To what extent is the project in alignment with UNEP’s MTS 2014-2017 / 2018-2021 and Programme of Work (POW)? 2 To what extent are project’s objectives and implementation strategies consistent with global, regional and national environmental priorities? 3 To what extent is the project in alignment with the targets of SDGs? 4 To what extent has the project explored and built complementarity with other existing initiatives? (Assessment of coherence/Level of alignment with initiatives by national and local government agencies and donor funded projects)	Level of alignment with (contribution of results to) sub-regional environmental issues, UNEP mandate, SDGS and the GEF FA objectives	Project documents, UNEP MTS – 2014-2017 / 2018-2021, and Programme of Work, SDGs UNEP staff, PSC members, representatives of donor agencies
B. Quality of Project Design		
See Annex 3 of this report		Project document; Progress reports Project team
C. Nature of External Context		
5 How did the political, environmental, social, institutional context change, if at all, and how did it affect project implementation? 6 What were, if any, the adaptive management measures planned and implemented in response?	Reported adaptive management measures in response to changes in context	Project documents, project team, interviews with key stakeholders
D. Effectiveness		
Availability of Outputs		
1. Could the project achieve the outputs leading to longer-term impact of “Agro-biodiversity approach mainstreamed at national and subnational levels” as well as the impact of “National capacity to sustainably manage agrobiodiversity strengthened”. “In particular: in mainstreaming agrobiodiversity in land use sector based on a revised national agrobiodiversity strategy for sustainable intensification in introducing participatory approach that promotes traditional crop varieties	Output level indicators of Results Framework (RF) Availability and quality of	Project documents, project team, interviews with key stakeholders, case studies, survey data Filed observations

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<p>2. Did the assumption and driver hold along the above causal pathway, namely strong commitment of decision makers from highest level to the grassroots level of farming communities to sustainable farming versus intensive agriculture.</p> <p>3. Did the project deliver outputs on capacity building at regional and local level as well as introducing agrobiodiversity friendly practices, namely crop varieties with special functional traits?</p> <p>4. Have the challenges to supply domestic and international markets with high value organic products been solved through outputs 3.1. – 3.3. ?</p> <p>5. How satisfactory was the quality of generated knowledge products content-wise (incl. guidelines, standards, training and other information materials, etc.) in terms of communicating clearly key findings / concepts, relevant issues?</p>	<p>knowledge products created</p> <p>Current situation of research institutes and universities concerned</p>	
Achievement of Project Outcomes		
<p>6. Did the project achieve outcomes along the causal pathways as per TOC? Namely, improvement of livelihood, food security, and rural development. In particular, Functioning natl coordination mechanism that promotes ABD mainstreaming Increasing areas devoted to sustainable farming in regions Introducing supply and value chain approach in marketing organic products for domestic and international markets</p> <p>7. Did the condition, namely the commitment of policy makers, experts, and other partners, especially at the ministerial level, such as the Ministry of Agriculture and Nature Protection hold ?</p> <p>8. Did the project achieve the outcome of an additional causal pathway related to mainstreaming. Especially mainstreaming into other non-project sites that are equally affected by degradation and water scarcity?</p> <p>9. What is the situation with assumptions for reliable funding and migration to towns of rural people, especially of young people ?</p>	<p>Outcome level indicators of Results Framework (RF)</p>	<p>Project documents, project team, interviews with key stakeholders, survey data</p> <p>Field observations</p>
Likelihood of impact		
<p>10. Related to the above mainstreaming, as well as related to all the outputs and outcomes, how were the barriers, the three barriers mentioned in the initial project document addressed?</p>	<p>Degree of integration of project results, new practices.</p>	<p>Project documents, project team, interviews with key stakeholders, survey data</p>

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<p>11. What has been the effort for mainstreaming into non-environment sectors and into other higher level national development agenda and processes such as green economy?</p> <p>12. Is there enough evidence now (catalogues, manuals, guidelines as well as practices and tools etc) document and explain fruit trees' diversity Characteristics (as genetic resources) ?</p> <p>13. At the bigger scale of things, what is the percentage of traditional local varieties versus modern genetically uniform high yielding varieties of fruit trees?</p>	<p>mainstreaming actions and effort taken</p> <p>Degree of participatory processes</p> <p>Availability of catalogues, guidelines, training materials etc. and their continued use</p>	<p>Conversation and survey with partner development agencies</p>
E. Financial Management		
<p>14. To what extent did the financial management of the project adhere to UNEP's financial policies and procedures?</p> <p>15. How complete was the financial information of the project?</p> <p>16. How sound was the budget planning and execution? (Did expenditures match the approved budget / work-plan? What were the reasons for under/overspent budget, if any?)</p> <p>17. What levels of co-financing did the project obtain (Percent of planned)?</p>	<p>Completeness of financial inputs, analysis and final sheets</p>	<p>Annexes to project document</p> <p>FMO inputs</p> <p>Progress reports</p> <p>Financial reports</p>
F. Efficiency		
<p>18. To what extent was the implementation of project activities compliant with the original plan, both with regards to time and financial budgets? If not, were there any impacts on planned outputs and outcomes?</p> <p>19. To what extent was the project cost-effective?</p> <p>20. To what extent did the project utilize/build on the existing data sources, structures, information and communication channels, networks, similar initiatives? If yes, how did they influence the delivery of project results?</p> <p>21. To what extent the partnerships/synergies were established with similar initiatives?</p>	<p>Level of compliance with work plan, financial plan, M&E plan</p> <p>Inclusion of lessons learnt and collaboration with former or current similar initiatives</p>	<p>Project documents, project team</p> <p>Progress reports</p> <p>Partner agencies reports, interviews.</p>
G. Monitoring and Reporting		
Monitoring design and budgeting		

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<p>22. How adequate was the project's M&E plan in terms of completeness of indicators, indicator definitions (SMART), frequency of data collection, and resource allocation (both human and financial).</p> <p>23. To what extent were the project's indicators and methods for data collection relevant and appropriate for tracking progress?</p>	<p>Level of compliance with work plan, financial plan, M&E plan</p>	<p>Project documents, project team, interviews with key stakeholders</p>
Monitoring of project implementation		
<p>24. To what extent was the monitoring system operational - indicators measured timely, with indicated frequency and methods of data collection - throughout the project's implementation?</p> <p>25. To what extent is the gathered baseline data relevant, accurate and appropriately documented?</p> <p>26. To what extent was the monitoring the representation and participation of disaggregated groups (incl. women, marginalized, vulnerable groups) in project activities conducted?</p> <p>27. What was the quality of the information generated by the monitoring system and how it was used to adapt and improve project execution, achievement of outcomes and for ensuring sustainability?</p> <p>28. What was the performance at the project's completion against Core Indicator Targets?</p> <p>29. To what degree did the project implement MTR recommendations?</p>	<p>Level of implementation of M&E plan (execution of activities)</p> <p>Changes in project implementation as result of midterm review, and external circumstances</p>	<p>Project documents, project team, interviews with key stakeholders</p>
Project reporting		
<p>30. To what extent were the reporting requirements fulfilled - vis a vis the taken obligations (PIR, progress reports, financial reports, etc.) and with respect to the effects of the project on disaggregated groups?</p>	<p>Timely delivery of all reports</p>	<p>Progress reports, project team, interviews with key stakeholders</p>
H. Sustainability		
Socio-political sustainability		
<p>31. To what extent do social and political factors support the continuation and further development of project outcomes?</p> <p>32. To what extent the individual and/or institutional built capacities, if any, are sustained or have a potential to be sustained, considering the socio-political stability, staff turnover, and other factors.</p> <p>33. To what extent do the trained national and local government representatives remain</p>	<p>Extent of which drivers and assumptions were holding</p>	<p>Progress reports, project team, interviews with key stakeholders and partner agencies</p> <p>Field observation</p>

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
in the system? 34. What is the level of readiness of national government stakeholders to continue work on the project's initiated policy and legal changes, and on strengthening the institutional arrangements.		
Financial sustainability		
35. To what extent are the project outcomes financially sustainable at pilot sites', communities, and national levels?		Project documents, project team, interviews with key stakeholders, case studies
Institutional Sustainability		
36. To what extent the sustainability of project outcomes (esp. policies and laws) dependent on issues related to institutional frameworks and governance? 37. To what extent are the institutional capacity development efforts likely to be sustained? 38. What change in the management and governance of tree diversity was possible thanks to the results of the project interventions? 39. Do all interested stakeholders have now enough scientific evidence and practical knowledge to better manage agrobiodiversity?	Degree of achievement of intermediate states and impacts	MoUs Formal agreements Progress reports, project team, interviews with key stakeholders Field observation
I. Factors affecting project performance and cross cutting issues		
Preparation and readiness		
40. What changes were made to the project design after the project approval? 41. To what extent the documents promised in the design were developed: e.g. communication and stakeholder engagement plan? 42. What was the extent and quality of engagement of the project team with all the relevant stakeholder groups (how well those groups were identified)?	Time between project approval, 1st disbursement and actual implementation Measures taken to address weaknesses to respond to changes.	PIF, PPG documents, project team, interviews with key stakeholders
Quality of project management and supervision		
43. How effective was the project management in terms of:	Feedback of	Project documents, project

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<ul style="list-style-type: none"> - Planning and implementing activities for delivering the stated results, supervising the project performance? - Ensuring the participation of all the relevant stakeholders in project activities? - Ensuring coordination, knowledge sharing among the involved parties / similar initiatives - Responding to and overcoming challenges, managing risks? 	satisfaction or dissatisfaction among partners and project staff	team, interviews with key stakeholders
Stakeholder participation and cooperation		
44. To what extent the stakeholder engagement plan was implemented? 45. How was the participatory approach implemented (farmers, policy makers, researchers, businesses, consumers)? 46. How effective were the mechanisms for stakeholder participation and cooperation – e.g. PSC, knowledge portal, etc. 47. To what extent the following stakeholders were affected and or influenced by the project results? a). Stakeholders with direct responsibility for the project, e.g. executing partners b). Stakeholders with authority to make decisions. c). Stakeholders at local level who benefit directly or indirectly from the interventions. d). Secondary stakeholders, only indirectly or temporarily affected e). other interest groups that were not directly affected, but who can exert influence or help upscale, leverage the results of the project, e.g. development agencies working in the same domain, civil society organizations f). How have outputs and outcomes affect, positive or negative, the most vulnerable groups. For instance, women, elderly and the youth 48. How did social relations around seed exchange to maintain the genetic diversity and agrobiodiversity evolve ? 49. To what extent was the engagement of different - gendered, marginalized groups, etc. – was ensured?	Level of participation of various groups of stakeholders and beneficiaries	Project documents, project team, interviews with key stakeholders
Responsiveness to human rights and gender equity		
50. To what extent has the project applied the UN Common Understanding in the human-rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People 51. To what extent does the intervention adhere to UNEP’s Policy and Strategy for	Any positive or negative changes in interactions as well as in power	Project documents, project team, interviews with key stakeholders.

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<p>Gender Equality and the Environment?</p> <p>52. To what extent has project implementation and monitoring taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially those related to gender) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation?</p> <p>53. What were the completed gender-responsive measures and, if applicable, actual gender result areas?</p> <p>54. Who owns property rights, patent rights over the varieties, over the new varieties of seedlings? And how does this affect different groups of stakeholders? Farmers, breeders, private sector, planting material suppliers and of course the institutions, research institutions and the gene bank storage facilities.</p>	<p>relations between stakeholders.</p> <p>Gender transformative actions taken.</p>	
Environmental and social safeguards		
<p>55. To what extent did the project address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage?</p> <p>56. To what extent did the project assess and manage risks (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project activities? How the identified risks were addressed?</p> <p>57. To what extent UNEP requirements¹⁶ were met to: review risk ratings on a regular basis; monitor project implementation for possible safeguard issues; respond (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and report on the implementation of safeguard management measures taken?</p> <p>58. To what extent were the pilot projects screened for any safeguarding issues and environmental and social risk assessments conducted?</p>	<p>Level of compliance with ESG plans</p>	<p>Project documents, progress reports, project team, interviews with key stakeholders</p>

¹⁶For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

REVIEW QUESTIONS	INDICATORS	MEANS OF VERIFICATION
<p>59. To what extent did the project management management of the project minimize the project’s environmental footprint?</p> <p>60. What was the progress made in the implementation of the management measures against the Safeguards Plan submitted at CEO Approval?</p>		
Country ownership and driven-ness		
<p>61. To what extent was the momentum built among the project’s stakeholders for them to take the results from outcomes to intermediate states and impacts.</p> <p>62. How committed are the stakeholders (incl. gov. representatives across different ministries) to implement the developed plans and adopt the suggested changes to the legal framework (e.g. the adoption of the Law on Windbreaks ,etc.)?</p>	<p>Endorsement of project documents.</p> <p>Commitment expressed.</p>	<p>Project documents, project team, interviews with key stakeholders</p>
Communication and public awareness		
<p>63. What was the effectiveness of communication of learning and experience sharing between project partners and interested groups arising from the project during its life?</p> <p>64. What were the challenges and effectiveness of the knowledge management approach (knowledge gaps identification, knowledge generation, transfer, application), including: knowledge and learning deliverables (e.g. website/platform development); knowledge products/events; communication strategy; lessons learned and good practice; adaptive management actions?</p> <p>65. What is the sustainability of the communication channels established under the project?</p>	<p>Available media and communication materials and their sustained use</p>	<p>Project documents, project team, interviews with key stakeholders</p>

ANNEX IV. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- Terms of Reference for the Terminal Review
- CEO endorsement document and its Annexes, PIF, and GEF secretariat review
- UNEP Evaluation Tools/Guidelines
- UNEP MTS 2014-2017 / 2018-2021
- Project PIRs and half-year implementation reports from 2016 -2019
- Package of financial documentations from 2016 -2019

Project outputs packages

Guidelines:

Guidelines on Agricultural Biodiversity Conservation and Use,
Guidelines for certification of biodiversity-friendly food products,
Guidelines for selection and cultivation of high-value agricultural crops and their wild relatives in Armenia,
Guidelines on best practices on apricot, grape, lentil, sea buckthorn cultivation,
Guidelines on pear, apple, plum varieties and their cultivation,
Guidelines on best management practices and marketing of apricot, grape, sea buckthorn and lentil,
Guidelines on marketing of sea-buckthorn products,
Guidelines on marketing of priority crops: sea-buckthorn (*Hippophaë rhamnoides* L.) and lentil (*Lens culinaris*) in Gegharkunik project site and apricot (*Armeniaca vulgaris* L.) and grape (*Vitis vinifera* L.),
Guidelines for selection and cultivation of high-value agricultural crops and their wild relatives in Armenia”,
Guidelines on organic certification,
Guidelines on certification for organic food products,
Guidelines on genetic resource utilization and ABS issues,
Study on Exploring the potential of agricultural biodiversity-friendly certification strategy.

Manuals:

Agriculture products and export opportunities,
Indicators of forest ecosystem recovery,
Best international experience and technologies on land restoration,
Crop varieties for conservation and use,
Manual on crop cultivation,
Reference book on conservation and cultivation of CWR in Armenia,
Results of study on wild edible plants and their use in Armenia,
Results of study on wild edible plants and their use in Armenia,
Organic fertilizers,
Modern Irrigation methods,
Garden (growing trees in gardens),
Selection of soils for growing fruit trees,
Greenhouses and growing local pants,
Main Agrobiodiversity Species of Armenia,

Organic Methods of Plant Species Cultivation,

Trainings:

Rapid Market Appraisal Survey,

Training Seminar on Selection of Priority Species,

Training/Seminar in Ararat Province: Care and Growing Opportunities and Needs of Project Priority Species,

Training in Gegharkunik Province: Care and Growing Opportunities and Needs of Project Priority Species,

Training in Syunik Province: Care and Growing Opportunities and Needs of Project Priority Species,
Two Training Seminar: Value Chain Development for Agricultural Biodiversity with a participation of International Expert,

Workshop on “Identification of Agrarian and Environmental Policy gaps”

Training Workshop: “Improvement of Soil Fertility in Syunik Province” was organized for regional and local governments in Syunik

Training: “Opportunities for women and young generation community members to be engaged in farming activities”

Training: “Agrobiodiversity conservation and use as food safety guarantee”

Training: “Use of new technologies in gardening”

Training/Workshop: “Enhancing Export of Selected Priority Species in Gegharkunik Region”

Training/Workshop: “Collection of Wild Plants and export opportunities in Ararat Region”

Training: “Land-use and importance of Agrobiodiversity and Inter-sector Collaboration”

Training: “Importance of Agrobiodiversity Conservation and Harvesting Technologies of the Plant Species in Ararat Region”

Training: “Importance of Agrobiodiversity Conservation and Harvesting Technologies of the Plant Species in Gegharkunik Region”

Training: “Importance of Agrobiodiversity Conservation and Harvesting Technologies of the Plant Species in Syunik Region”

Training: Best Agricultural Practices, Land Preparation, Irrigation Systems and Crop Rotation and Mitigation of Unfavourable Environmental Effects”

Training: “Use of new technologies in orchard management”

Training: “Viticulture: grape varieties and their traditional use, cultivation practices and management”

Training: “Oregano and opportunities for its cultivation on farms”

Reference documents

- The 2nd Environmental Performance Review for Armenia Draft (to be published soon)
- Agricultural_Value-Chains_Assessment_Report_April_2020 Austrian dev agency
- United Nations Sustainable Development Cooperation Framework 2021-2025
- ARM Food security and vulnerability assessment report WFP_8.12.2021
- ARM UNDP 2019-GEF-PIR-PIMS4416-GEFID5353
- Armenia Country Gender Equality Brief, UN Woman, 2019
- Review and Gap Analysis of Armenian Legislation related to Environmental Protection

ANNEX V. PROJECT BUDGET AND EXPENDITURES

Table 6: Project Funding Sources Table is in the report.

Please refer to section F. Project Finance , Table 3 and Table 4 on page 21 that contain the necessary detailed information.

Table 7: Expenditure by Outcome/Output is in the report.

Please refer to table 4 and table 5, pages 21 and 22 in the report.

ANNEX VI. FINANCIAL MANAGEMENT

Table 11: Financial Management Table (IF NOT ALREADY WITHIN THE REPORT)

Financial management components:		Rating	Evidence/ Comments
1. Adherence to UNEP's policies and procedures:		S	
Any evidence that indicates shortcomings in the project's adherence ¹⁷ to UNEP or donor policies, procedures or rules		No	Quarterly expenditure reports, cash advancement and disbursement statements, yearly budget reviews. Inclusion in the independent audit report of the EA's global financial statements.
2. Completeness of project financial information¹⁸:			
Provision of key documents to the reviewer (based on the responses to A-H below)		S	
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	ProDoc's Annex E1 -GFL-5060-2712-4E75 provided by budget lines, components, activities. Annex E2 -GFL-5060-2712-4E75 provided details of co-financing by agencies, types and sources.
B.	Revisions to the budget	Yes	Done by National Project Steering Committee at its annual meetings based on review of project progress by project activities and outputs, and further submitted to UNEP through EA Bioversity.
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	PCA 2015/015 Armenia signed LI
D.	Proof of fund transfers	Yes	Bank Transfer forms from UNEP and UN Authorization Forms on disbursement of funds to national project executing agency, financial reports of national executing agency
E.	Proof of co-financing (cash and in-kind)	Yes	Signed letters proving co-financing from project partners have been submitted annually
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes	Submitted to UNEP quarterly
G.	Copies of any completed audits and management responses (<i>where applicable</i>)	Yes	IPGRI's annual report
H.	Any other financial information that was required for this project (list):	N/A	

¹⁷ If the review raises concerns over adherence with policies or standard procedures, a recommendation maybe given to cover the topic in an upcoming audit, or similar financial oversight exercise.

¹⁸ See also document 'Criterion Rating Description' for reference

3. Communication between finance and project management staff	S	
Project Manager and/or Task Manager's level of awareness of the project's financial status.	HS	Project Regional Coordinator and Task Manager were in continuous communication on project's expenses and needed budget revisions to meet successfully the project's objectives
Fund Management Officer's knowledge of project progress/status when disbursements are done.	S	Request for funds were submitted based on annual workplan and budget approved by National Project Steering Committee
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.	S	No issue was highlighted in bi-annual reports
Contact/communication between by Fund Management Officer, Project Manager/Task Manager during the preparation of financial and progress reports.	S	No problem was highlighted in bi-annual reports
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the review process	S	No problem was highlighted in bi-annual reports
Overall rating	S	

ANNEX VII. BRIEF CV OF THE REVIEWER

Name: Nara Luvsan

Profession	Independent international consultant in sustainable development Euroasia Senior Coordinator for GASP (Global alliance for a sustainable planet)
Nationality	Mongolia
Country experience	<ul style="list-style-type: none"> • Europe: Switzerland, Germany, East and South-East Europe, Russia • Transcaucasus; Central Asia • Africa: Kenya • Americas: USA • Asia: Mongolia, China
Education	<ul style="list-style-type: none"> • Masters in international public policy

Short biography

Ms. Nara Luvsan is an independent international consultant in sustainable development and green economy. She brings on board over 27 years of development aid experience within the UN and the World Bank in key positions in country, regional and headquarters. Her considerable experience in Mongolia, Central Asia, the Trans-Caucasus, Russia, China and former Soviet sphere as well as in Western Europe has provided her with an in-depth understanding of the associated economic conditions, legal structures, governmental operations and social needs and realities of the region. She has extensive experience in evaluation preparation, process and methodologies.

Nara has successfully lead/contributed to country evaluations, regional and global multi-agency programme mid-term and final reviews. The sectors covered include i.a. reviewing the new strategy and Regional Action Plan for Environment for Central Asia, UNDAFs, nexus of environment and poverty reduction, aspects of BRI as well as green economy policy.

Throughout her career, in her capacity as Senior Programme Policy Officer and Regional Adviser with specialised UN agencies Nara was instrumental in designing, managing, leading and closing complex country and regional programmes that required deep understanding of political sensitivities, governance issues and implementation hurdles faced by international, national and local counterparts.

ANNEX VIII. REVIEW TORS (WITHOUT ANNEXES)

TERMS OF REFERENCE

Terminal Review of the UNEP/GEF project "Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization"

GEF ID Number – 5483

Section 1: PROJECT BACKGROUND AND OVERVIEW

Project General Information

Table 1. Project summary

UNEP Sub-programme:	Subprogram 3 – Healthy & Productive Ecosystems	UNEP Division/Branch:	Ecosystems Division, GEF Biodiversity and Land Degradation Unit
Expected Accomplishment(s):	The health and productivity of marine, freshwater, and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels	Programme of Work Output(s):	POW 2018-19 Subprogramme 3 Healthy and Productive Ecosystems
SDG(s) and indicator(s)	UNDAF 2016-20, PA 4: Environmental sustainability and resilience-building Outcome 7: By 2020 Sustainable development principles and good practices for environmental sustainability resilience building, climate change adaptation and mitigation, and green economy are introduced and applied SDG2 (2.4.1, 2.5.1); SDG 4 (4.7.1); SDG5 (5.5.2)		
GEF Core Indicator Targets (identify these for projects approved prior to GEF-7¹⁹)			
Dates of previous project phases:	N/a	Status of future project phases:	N/a

FROM THE PROJECT'S PIR REPORT (use latest version) :

Project Title:	Enhancing livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization
Executing Agency:	Biodiversity International (IPGRI)
Project partners:	Ministry of Nature Protection of the Republic of Armenia Institute of Botany of Academy of Sciences Armenian Forest NGO Env Public Alliance NGO Agro X Fund NGO Armenian Agrarian University
Geographical Scope:	National, Europe
Participating Countries:	Armenia

¹⁹ This does not apply to Enabling Activities

GEF project ID:	5483	IMIS number*²⁰:	P1-33GFL-000817
Focal Area(s):	Biodiversity	GEF OP #:	BD 2 Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/Seascapes and Sectors
GEF Strategic Priority/Objective:	BD-2	GEF approval date*:	08 July 2015
UNEP approval date:		Date of first disbursement*:	16 March 2016
Actual start date²¹:	18 November 2015	Planned duration:	36 months
Intended completion date*:	31 October 2019	Actual or Expected completion date:	31 December 2019
Project Type:	MSP	GEF Allocation*:	883,242 USD
PPG GEF cost*:	30,000 USD	PPG co-financing*:	
Expected MSP/FSP Co-financing*:	4,852,463 USD	Total Cost*:	5,735,705 USD
Mid-term Review/eval. (planned date):	N/a	Terminal Evaluation (planned date):	June 2020
Mid-term Review/eval.	PIR for 2018 used as MTR	No. of revisions*:	N/a
Date of last Steering Committee meeting:	4-5 December 2019	Date of last Revision*:	N/a
Disbursement as of 30 June 2020*:	337,386 US\$ (Bioiversity) US\$ 450,593 (Armenia)	Date of planned financial closure*:	30 June 2020
Date of planned completion²²*:	31 October 2019	Actual expenditures reported as of 30 June 2020²³:	US\$ 332,534 (Bioiversity) US\$ 431,593 (Armenia)
Total co-financing realized as of 31 December [year]:		Actual expenditures entered in IMIS as of 31 December [year]*:	
Leveraged financing:²⁴			

Project Rationale²⁵

The project's long-term objective is to improve the livelihood of poor rural community, including women, men and youth, through the sustainable management and commercialization of local biodiversity. This is based on an

²⁰ Fields with an * sign (in yellow) should be filled by the Fund Management Officer

²¹ Only if different from first disbursement date, e.g., in cases were a long time elapsed between first disbursement and recruitment of project manager.

²² If there was a "Completion Revision" please use the date of the revision.

²³ Information to be provided by Executing Agency/Task Manager

²⁴ See above note on co-financing

²⁵ Grey =Info to be added

assessment of local agricultural biodiversity and wild-harvested plants for their potential to be produced, processed and sold in the local and national market. Through the increasing international tourist activity in Armenia, in particular, around Lake Sevan, the potential of such priority products for the tourist, and thus international market, are also be assessed. Specifically, the project targets young farmers and rural non-farming young people through the establishment of Youth Clubs, which provide an entry point into targeted awareness raising of sustainable production and harvesting methods for wild plants. The project puts a specific gender lens onto rural development and focusses on disadvantaged groups, including women and young people. Activities will ensure that the specific needs of women and men are addressed when selecting priority species, best practices and products. Long-term benefits will accrue through the commercialization of wild plants and subsequent income that community members might raise. Additional benefits will be gained through increased awareness among broad sections of urban and rural society, such as the health benefits from the consumption of wild fruits, herbs and other crops that are currently outside of the agricultural mainstream.

Project Results Framework

The **project objective** is to enhance conservation of the agricultural biodiversity in Armenia that supports adaptation to environmental and agricultural challenges in the country and provides a sustainable basis for enhanced utilization to improve rural livelihoods. The project will achieve this through the following three components and corresponding outcoples and outputs.

Component 1: Improving the national capacity and institutional framework to strengthen national cooperation and coordination for sustainable management of agricultural biodiversity.

Outcome 1: Strengthened national coordination and cooperation for effective management of agricultural biodiversity through mainstreaming integrated approaches to agricultural biodiversity conservation and use into Armenia's policy framework.

- Output 1.1. National institutional arrangements in place and capacity developed to mainstream and promote agricultural biodiversity in relevant land use sectors.
- Output 1.2. National agricultural biodiversity strategy developed that takes account of unique diversity, ecosystem function and opportunities for sustainable intensification.
- Output 1.3. Agriculture and environment programmes adopt a participatory approach to include all relevant stakeholders for planning, implementation and management.

Component 2: Mainstreaming of diversified agricultural biodiversity -friendly practices and products

Outcome 2: Increased area devoted to sustainably managed agricultural biodiversity through the mainstreaming of diversified practices and products.

- Output 2.1 Participatory and sustainable management practices identified that support traditional crop varieties, crop wild relatives, medicinal species, pollinators and other beneficial insects, and developed to improve local diversity for marginal environments in the project site location.
- Output 2.2. Guidelines and standards for sustainably managing and harvesting priority plants and products are established and implemented in the project site locations.
- Output 2.3. Farmers and local communities in the project pilot sites have enhanced skills and capacity to undertake agricultural biodiversity friendly farming and other relevant agricultural biodiversity friendly practices, and community-based approaches for sustainable agricultural biodiversity conservation and utilization strategies are developed.

Component 3: Improved market opportunities for agro-biodiversity and derived products

Outcome 3: Increased availability of agricultural biodiversity friendly products in local and international markets that provide farmers with additional rewards and income.

- Output 3.1. Guidelines developed for certification of biodiversity-friendly food products.
- Output 3.2. Marketing programmes for certified and non-certified (including organic and geographically identifiable agriculture products) agricultural biodiversity friendly products are in place and implemented through a supply chain approach.
- Output 3.3. International and national marketing and promotional opportunities identified for key high value Armenian agricultural products and wild medicinal and food plant products.

Component 4: Project monitoring and evaluation and knowledge management.

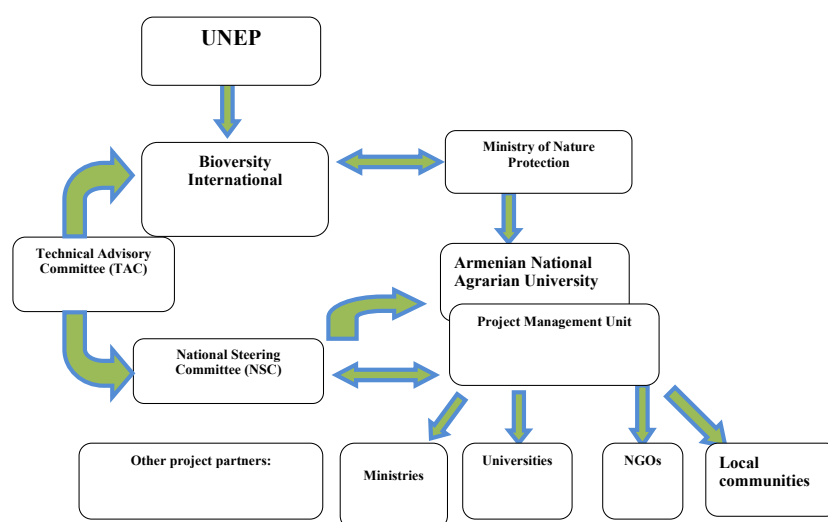
Outcome 4: Project implementation based on results-based management and application of project lessons learned in future operations facilitated.

- Output 4.1. Project monitoring system operating providing systematic information on progress in meeting project outcome and output targets. Materials prepared and information disseminated.
- Output 4.2. Midterm and final evaluation conducted.

- Output 4.3. Project-related “best-practices” and “lessons-learned” published.
- Output 4.4. Website to share the experience and information dissemination.

E. Executing Arrangements

UNEP’s Ecosystems Division, GEF Biodiversity and Land Degradation Unit served as GEF Implementing Agency for this project. **Bioversity international**, in coordination with the Ministry of Nature Protection of the Republic of Armenia and the Armenian National Agrarian University, served as the project executing agency. It was responsible for the overall coordination and execution of the project and provision of appropriate scientific support and technical expertise as required by the Ministry of Nature Protection and project partners. Project’s executing arrangements are further illustrated in the Diagram below.



Project Implementation Unit (PIU) was established to provide overall administration of the project. National Project Coordinator and his assistants are hired. Project Steering Committee (PSC) was established to provide general oversight and guidance to the project, facilitate interagency coordination and monitor national-level activities. Representatives of 9 institutions are members of PSC. The first meeting of PSC was held on 2 March 2016 in Yerevan, Armenia. The second Project Steering Committee (NSC) meeting was held on 2-3 October 2017 in Yerevan, Armenia. Third PSC meeting was organized on 4-5 December 2019 and reviewed its progress. Budgeting and accounting system is fully implemented and continuously refined. Letter of Agreements (LOA) for each year are signed between Bioversity and Ministry of Nature Protection of the Republic of Armenia. LoA determines schedule of payments and reports submission. Financial reports are provided to Bioversity and UNEP at quarterly basis.

F. Project Cost and Financing

1. Project budget at design, broken down per component and funding source (GEF grant and co-financing) are presented in the Tables below.

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co-financing(\$)
BD-2	Outcome 2.1 Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	An increase of land under agro-biodiversity-friendly management practices of 20%	GEF TF	354,862	1,982,016
	Outcome 2.2 Measures to conserve and sustainably use biodiversity incorporated	National agricultural biodiversity strategy developed that takes account of unique	GEF TF	528,380	2,870,447

	into policy and regulatory framework practices.	diversity, ecosystem function and opportunities for sustainable intensification. Agriculture and environment programmes adopt a participatory approach to include all relevant stakeholders for planning, implementation and management, and good practices are scaled-up to other locations.			
Total project costs				883,242	4,852,463

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of Nature Protection	In-kind	450,000
National Government	Ministry of Nature Protection	Cash	310,000
National Government	Armenian National Agrarian University	In-kind	453,970
National Government	Armenian National Agrarian University	Cash	322,540
CSO	Environmental Public Alliance	In-kind	736,540
CSO	Environmental Public Alliance	In-kind	157,460
Private Sector	"Agro X" Fund	Grant	772,540
Private Sector	"Agro X" Fund	In-kind	1,313,460
Other Multilateral Agency	Bioversity International	In-kind	153,095
Other Multilateral Agency	Bioversity International	Grant	82,858
GEF Agency	UNEP	In-kind	100,000
Total Co-financing			4,852,463

G. Implementation Issues

2. Final annual Project Implementation Review report assessed project implementation as satisfactory (S) considering that it produced all outputs and deliverables planned for the reporting period, despite of challenges faced by the project in connection with continuous process of reforms in government and a volatile political situation in Armenia in 2018-2019.

3. Communication chart is developed and agreed with all national partners at the project onset. Communication with national project partners and institutions has been maintained by PIU through phone calls, emails and face to face meetings. National project coordinator regularly visited national partner institutions and meet them to discuss any challenge in project implementation. Bioversity and PIU are communicating through email, skype and phone. Ministry of Nature Protection, a national executing agency, at the meetings of its Ministry Board with representation of all stakeholders groups is keeping a loop at the project implementation; during each

Board meeting, the Minister asks participants about their suggestions that can be applied in the project implementation.

4. Request for Non-cost extension and revised work-plan until 31 August was submitted to UNEP to complete the outstanding activities of the project postponed due to changes in government structure in Armenia. The NCE request was approved on 17 April 2019.

Section 2. OBJECTIVE AND SCOPE OF THE REVIEW

H. Objective of the Review

5. In line with the UNEP Evaluation Policy²⁶ and the UNEP Programme Manual²⁷, the Terminal Review (TR) is undertaken at operational completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP, Bioversity and Ministry of Nature Protection of the Republic of Armenia. Therefore, the Review will identify lessons of operational relevance for future project formulation and implementation.

I. Key Review principles

6. Review findings and judgements will be based on **sound evidence and analysis**, clearly documented in the Review Report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

7. **The “Why?” Question.** As this is a Terminal Review and a similar interventions are envisaged for the future, particular attention will be given to learning from the experience. Therefore, the “why?” question should be at the front of the consultant(s)’ minds all through the review exercise and is supported by the use of a theory of change approach. This means that the consultant(s) need to go beyond the assessment of “what” the project performance was and make a serious effort to provide a deeper understanding of “why” the performance was as it was (i.e. what contributed to the achievement of the project’s results). This should provide the basis for the lessons that can be drawn from the project.

Attribution, Contribution and Credible Association: In order to *attribute* any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the project (i.e. take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for reviews. Establishing the *contribution* made by a project in a complex change process relies heavily on prior intentionality (e.g. approved project design documentation, logical framework) and the articulation of causality (e.g. narrative and/or illustration of the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A *credible association* between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes.

8. **Communicating Review Results.** A key aim of the Review is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the review process and in the communication of review findings and key lessons. Clear and concise writing is required on all review deliverables. Draft and final versions of the main Review Report will be shared with key stakeholders by the Task Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultant will plan with the Task Manager which audiences to target and the easiest and clearest way to communicate the key review findings and lessons to them. This may include some, or all, of the following; a webinar, conference calls with relevant stakeholders, the preparation of a review brief or interactive presentation.

²⁶ <https://www.unenvironment.org/about-un-environment/evaluation-office/policies-and-strategies>

²⁷ <https://wecollaborate.unep.org>

J. Key Strategic Questions

9. In addition to the review criteria outlined in Section 10 below, the Review will address the **strategic questions**²⁸ listed below (no more than 3 questions are recommended). These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution. Also included are five questions that are required when reporting in the GEF Portal and these must be addressed in the TR:

10. Q1: To what extent has Project-assisted conservation of agricultural biodiversity in Armenia supported adaptation of the local communities to environmental challenges and helped improve rural livelihoods?

Q2: Has the Project managed to ensure, and to what extent, that national agricultural production and conservation planning fully embeds and reflects the importance of maintenance and use of wild plant species for food and medicine and associated agricultural biodiversity

11. Q3: What impact has been achieved by actors engaged in the project moving on and deploying their knowledge in novel areas?

12. Q4: What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance?

13. Address the questions required for the GEF Portal in the appropriate parts of the report and provide a **summary of the findings in the Conclusions section of the report**:

14.

a) Under Monitoring and Reporting/Monitoring of Project Implementation:

15. What was the performance at the project's-completion against Core Indicator Targets? (For projects approved prior to GEF-7, these indicators will be identified retrospectively and comments on performance provided²⁹).

b) Under Factors Affecting Performance/Stakeholder Participation and Cooperation:

16. What were the progress, challenges and outcomes regarding engagement of stakeholders in the project/program as evolved from the time of the MTR? (This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval)

c) Under Factors Affecting Performance/Responsiveness to Human Rights and Gender Equality:

What were the completed gender-responsive measures and, if applicable, actual gender result areas? (This should be based on the documentation at CEO Endorsement/Approval, including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent)

d) Under Factors Affecting Performance/Environmental and Social Safeguards:

What was the progress made in the implementation of the management measures against the Safeguards Plan submitted at CEO Approval? The risk classifications reported in the latest PIR report should be verified and the findings of the effectiveness of any measures or lessons learned taken to address identified risks assessed. (Any supporting documents gathered by the Consultant during this Review should be shared with the Task Manager for uploading in the GEF Portal)

e) Under Factors Affecting Performance/Communication and Public Awareness:

What were the challenges and outcomes regarding the project's completed Knowledge Management Approach, including: Knowledge and Learning Deliverables (e.g. website/platform development); Knowledge Products/Events; Communication Strategy; Lessons Learned and Good Practice; Adaptive Management Actions? (This should be based on the documentation approved at CEO Endorsement/Approval)

K. Review Criteria

17. All review criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the review criteria. The set of review criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the availability of

²⁸ The strategic questions should not duplicate questions that will be addressed under the standard review criteria described in section 10.

²⁹ This does not apply to Enabling Activities

outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance.

18. Annex 1 of these Terms of Reference provides a table with a list of various tools, templates and guidelines that can help Review Consultant(s) to follow a thorough review process that meets all of UNEP's needs.

A. Strategic Relevance

The Review will assess the extent to which the activity is suited to the priorities and policies of the donors, implementing regions/countries and the target beneficiaries. The Review will include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

i. Alignment to the UNEP's Medium-Term Strategy³⁰ (MTS), Programme of Work (POW) and Strategic Priorities

The Review should assess the project's alignment with the MTS and POW under which the project was approved and include, in its narrative, reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW. UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building³¹ (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries.

ii. Alignment to Donor/GEF/Partner Strategic Priorities

Donor strategic priorities will vary across interventions. The Review will assess the extent to which the project is suited to, or responding to, donor priorities. In some cases, alignment with donor priorities may be a fundamental part of project design and grant approval processes while in others, for example, instances of 'softly-earmarked' funding, such alignment may be more of an assumption that should be assessed.

iii. Relevance to Global, Regional, Sub-regional and National Environmental Priorities

The Review will assess the alignment of the project with global priorities such as the SDGs and Agenda 2030. The extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented will also be considered. Examples may include: UN Development Assistance Frameworks (UNDAF) or, national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc. Within this section consideration will be given to whether the needs of all beneficiary groups are being met and reflects the current policy priority to leave no-one behind.

iv. Complementarity with Relevant Existing Interventions/Coherence³²

An assessment will be made of how well the project, either at design stage or during the project inception or mobilization³³, took account of ongoing and planned initiatives (under the same sub-programme, other UNEP sub-programmes, or being implemented by other agencies within the same country, sector or institution) that address similar needs of the same target groups. The Review will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include work within UNDAFs or One UN programming. Linkages with other interventions should be described and instances where UNEP's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include:

³⁰ UNEP's Medium Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes. <https://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/un-environment-documents>

³¹ <http://www.unep.fr/ozonaction/about/bsp.htm>

³² This sub-category is consistent with the new criterion of 'Coherence' introduced by the OECD-DAC in 2019.

³³ A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness

B. Quality of Project Design

19. The quality of project design is assessed using an agreed template during the review inception phase. Ratings are attributed to identified criteria and an overall Project Design Quality rating is established. The complete Project Design Quality template should be annexed in the Review Inception Report. Later, the overall Project Design Quality rating³⁴ should be entered in the final review ratings table (as item B) in the Main Review Report and a summary of the project's strengths and weaknesses at design stage should be included within the body of the Main Review Report.

Factors affecting this criterion may include (at the design stage):

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity

C. Nature of External Context

20. At review inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval³⁵). This rating is entered in the final review ratings table as item C. Where a project has been rated as facing either an *Unfavourable* or *Highly Unfavourable* external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Review Consultant and Task Manager together. A justification for such an increase must be given.

D. Effectiveness

i. Availability of Outputs³⁶

21. The Review will assess the project's success in producing the programmed outputs and making them available to the intended beneficiaries as well as its success in achieving milestones as per the project design document (ProDoc). Any formal modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations may be necessary in the reconstruction of the Theory of Change (TOC). In such cases a table should be provided showing the original and the reformulation of the outputs for transparency. The availability of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision. It is noted that emphasis is placed on the performance of those outputs that are most important to achieve outcomes. The Review will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs available and meeting expected quality standards.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision³⁷

³⁴ In some instances, based on data collected during the review process, the assessment of the project's design quality may change from Inception Report to Main Review Report.

³⁵ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team. From March 2020 this should include the effects of COVID-19.

³⁶ Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions (UNEP, 2019).

³⁷ For GEF funded projects 'project management and supervision' will refer to the project management performance of the Executing Agency and the technical backstopping provided by UNEP, as Implementing Agency.

ii. Achievement of Project Outcomes³⁸

22. The achievement of project outcomes is assessed as performance against the outcomes as defined in the reconstructed³⁹ Theory of Change. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project's resource envelope. Emphasis is placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table can be used to show where substantive amendments to the formulation of project outcomes is necessary to allow for an assessment of performance. The Review should report evidence of attribution between UNEP's intervention and the project outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UNEP's 'substantive contribution' should be included and/or 'credible association' established between project efforts and the project outcomes realised.

Factors affecting this criterion may include:

- Quality of project management and supervision
- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Communication and public awareness

iii. Likelihood of Impact

23. Based on the articulation of long-lasting effects in the reconstructed TOC (*i.e. from project outcomes, via intermediate states, to impact*), the Review will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long-lasting impacts. The Evaluation Office's approach to the use of TOC in project reviews is outlined in a guidance note and is supported by an excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree'. Essentially the approach follows a 'likelihood tree' from project outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

24. The Review will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects (e.g. will vulnerable groups such as those living with disabilities and/or women and children, be disproportionately affected by the project?). Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental and Social Safeguards.

25. The Review will consider the extent to which the project has played a catalytic role⁴⁰ or has promoted scaling up and/or replication as part of its Theory of Change (either explicitly as in a project with a demonstration component or implicitly as expressed in the drivers required to move to outcome levels) and as factors that are likely to contribute to greater or long lasting impact.

26. Ultimately UNEP and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-lasting or broad-based changes. However, the Review will assess the likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partner(s).

³⁸ Outcomes are the use (*i.e. uptake, adoption, application*) of an output by intended beneficiaries, observed as changes in institutions or behavior, attitude or condition (UNEP, 2019)

³⁹ UNEP staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during a review will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the review.

⁴⁰ The terms catalytic effect, scaling up and replication are inter-related and generally refer to extending the coverage or magnitude of the effects of a project. Catalytic effect is associated with triggering additional actions that are not directly funded by the project – these effects can be both concrete or less tangible, can be intentionally caused by the project or implied in the design and reflected in the TOC drivers, or can be unintentional and can rely on funding from another source or have no financial requirements. Scaling up and Replication require more intentionality for projects, or individual components and approaches, to be reproduced in other similar contexts. Scaling up suggests a substantive increase in the number of new beneficiaries reached/involved and may require adapted delivery mechanisms while Replication suggests the repetition of an approach or component at a similar scale but among different beneficiaries. Even with highly technical work, where scaling up or replication involves working with a new community, some consideration of the new context should take place and adjustments made as necessary.

Factors affecting this criterion may include:

- Quality of Project Management and Supervision (including adaptive management)
- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness
- Communication and public awareness

E. Financial Management

Financial management will be assessed under three themes: *adherence* to UNEP's financial policies and procedures, *completeness* of financial information and *communication* between financial and project management staff. The Review will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output/component level and will be compared with the approved budget. The Review will verify the application of proper financial management standards and adherence to UNEP's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The Review will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The Review will assess the level of communication between the Project Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision

F. Efficiency

27. Under the efficiency criterion the Review will assess the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution.

28. Focusing on the translation of inputs into outputs, *cost-effectiveness* is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. *Timeliness* refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The Review will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The Review will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

29. The Review will give special attention to efforts made by the project teams during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities⁴¹ with other initiatives, programmes and projects etc. to increase project efficiency.

30. The factors underpinning the need for any project extensions will also be explored and discussed. Consultants should note that as management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to UNEP and Executing Agencies.

Factors affecting this criterion may include:

- Preparation and readiness (e.g. timeliness)
- Quality of project management and supervision
- Stakeholders participation and cooperation

G. Monitoring and Reporting

31. The Review will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

⁴¹ Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

i. Monitoring Design and Budgeting

32. Each project should be supported by a sound monitoring plan that is designed to track progress against SMART⁴² results towards the achievement of the project's outputs and outcomes, including at a level disaggregated by gender, marginalisation or vulnerability, including those living with disabilities. In particular, the Review will assess the relevance and appropriateness of the project indicators as well as the methods used for tracking progress against them as part of conscious results-based management. The Review will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for Mid-Term and Terminal Evaluation/Review should be discussed, where applicable.

ii. Monitoring of Project Implementation

33. The Review will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards project objectives throughout the project implementation period. This assessment will include consideration of whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups, including gendered, marginalised or vulnerable groups, such as those living with disabilities, in project activities. It will also consider the quality of the information generated by the monitoring system during project implementation and how it was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The Review should confirm that funds allocated for monitoring were used to support this activity.

The performance at project completion against Core Indicator Targets should be reviewed. For projects approved prior to GEF-7, these indicators will be identified retrospectively and comments on performance provided.

iii. Project Reporting

34. UNEP has a centralised project information management system (Anubis) in which project managers upload six-monthly progress reports against agreed project milestones. This information will be provided to the Review Consultant(s) by the Task Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team (e.g. the Project Implementation Reviews and Tracking Tool for GEF-funded projects). The Review will assess the extent to which both UNEP and GEF reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

Factors affecting this criterion may include:

- Quality of project management and supervision
- Responsiveness to human rights and gender equity (e.g. disaggregated indicators and data)

H. Sustainability

35. Sustainability⁴³ is understood as the probability of the benefits derived from the achievement of project outcomes being maintained and developed after the close of the intervention. The Review will identify and assess the key conditions or factors that are likely to undermine or contribute to the endurance of achieved project outcomes (i.e. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included.

i. Socio-political Sustainability

36. The Review will assess the extent to which social or political factors support the continuation and further development of the benefits derived from project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the Review will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

⁴² SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.

⁴³ As used here, 'sustainability' means the long-term maintenance of outcomes and consequent impacts, whether environmental or not. This is distinct from the concept of sustainability in the terms 'environmental sustainability' or 'sustainable development', which imply 'not living beyond our means' or 'not diminishing global environmental benefits' (GEF STAP Paper, 2019, Achieving More Enduring Outcomes from GEF Investment)

37. Some project outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other project outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new natural resource management approach. The Review will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the project outcomes have been extended into a future project phase. Even where future funding has been secured, the question still remains as to whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

38. The Review will assess the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. In particular, the Review will consider whether institutional capacity development efforts are likely to be sustained.

Factors affecting this criterion may include:

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined)
- Communication and public awareness
- Country ownership and driven-ness

I. Factors Affecting Project Performance and Cross-Cutting Issues

(These factors are rated in the ratings table but are discussed within the Main Review Report as cross-cutting themes as appropriate under the other review criteria, above. If these issues have not been addressed under the Review Criteria above, then independent summaries of their status within the reviewed project should be given in this section)

i. Preparation and Readiness

39. This criterion focuses on the inception or mobilisation stage of the project (i.e. the time between project approval and first disbursement). The Review will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular the Review will consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements. *(Project preparation is included in the template for the assessment of Project Design Quality).*

ii. Quality of Project Management and Supervision

40. For GEF funded projects 'project management and supervision' may refer to the project management performance of the Executing Agency and the technical backstopping and supervision provided by UNEP as Implementing Agency. The performance of parties playing different roles should be discussed and a rating provided for both types of supervision (UNEP/Implementing Agency; Partner/Executing Agency) and the overall rating for this sub-category established as a simple average of the two.

41. The Review will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); maintaining project relevance within changing external and strategic contexts; communication and collaboration with UNEP colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive management should be highlighted.

iii. Stakeholder Participation and Cooperation

42. Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs, target users of project outputs and any other collaborating agents external to UNEP and the executing partner(s). The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups should be considered.

43. The progress, challenges and outcomes regarding engagement of stakeholders in the project/program occurring since the MTR should be reviewed. This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval.

iv. Responsiveness to Human Rights and Gender Equality

44. The Review will ascertain to what extent the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the Review will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment⁴⁴.

45. The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equality and Human Rights are adequately taken into account. In particular the Review will consider to what extent project implementation and monitoring have taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children and those living with disabilities) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially women, youth and children and those living with disabilities) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

46. The completed gender-responsive measures and, if applicable, actual gender result areas should be reviewed. This should be based on the documentation at CEO Endorsement/Approval, including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent.

v. Environmental and Social Safeguards

UNEP projects address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage, risk assessment and management (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project and programme activities. The Review will confirm whether UNEP requirements⁴⁵ were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and *report* on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues; for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned are reviewed above under Quality of Project Design).

The Review will also consider the extent to which the management of the project minimised UNEP's environmental footprint.

Implementation of the management measures against the Safeguards Plan submitted at CEO Approval should be reviewed, the risk classifications verified and the findings of the effectiveness of any measures or lessons learned taken to address identified risks assessed. Any supporting documents gathered by the Consultant should be shared with the Task Manager.

vi. Country Ownership and Driven-ness

47. The Review will assess the quality and degree of engagement of government / public sector agencies in the project. While there is some overlap between Country Ownership and Institutional Sustainability, this criterion focuses primarily on the forward momentum of the intended projects results, i.e. either: a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The Review will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g. representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the

⁴⁴The Evaluation Office notes that Gender Equality was first introduced in the UNEP Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

⁴⁵ For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

project over outputs and outcomes and that is necessary for long term impact to be realised. Ownership should extend to all gender and marginalised groups.

vii. Communication and Public Awareness

48. The Review will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The Review should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the Review will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate

The project's completed Knowledge Management Approach, including: Knowledge and Learning Deliverables (e.g. website/platform development); Knowledge Products/Events; Communication Strategy; Lessons Learned and Good Practice; Adaptive Management Actions should be reviewed. This should be based on the documentation approved at CEO Endorsement/Approval.

Section 3. REVIEW APPROACH, METHODS AND DELIVERABLES

49. The Terminal Review will be an in-depth review using a participatory approach whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative review methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the review implementation phase in order to increase their (and other stakeholder) ownership of the review findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

50. The findings of the Review will be based on the following:

(a) **A desk review** of:

Relevant background documentation, inter alia biodiversity and natural resource management strategies, other substantive documents prepared by the projects and others;

Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;

Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews and Tracking Tool and others;

Project deliverables (e.g. publications, reports, assessments, surveys);

Mid-Term Review or Mid-Term Evaluation of the project;

Evaluations/Reviews of similar projects.

(b) **Interviews** (individual or in group) with:

UNEP Task Manager (TM);

Project Manager (PM);

Project management team;

UNEP Fund Management Officer (FMO);

Portfolio Manager and Sub-Programme Coordinator, where appropriate;

Project partners based on stakeholder analyses;

Relevant resource persons;

Representatives from civil society and specialist groups (such as women's, farmers and trade associations etc).

(c) **Surveys;**

(d) **Field visits;**

(e) **Other data collection tools**, all as appropriate for the terminal review and elaborated in the inception report.

L. Review Deliverables and Review Procedures

51. The Review Consultant will prepare:

- **Inception Report:** (see Annex 1 for a list of all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, review framework and a tentative review schedule.
- **Preliminary Findings Note:** typically in the form of a PowerPoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings.
- **Draft and Final Review Report:** containing an executive summary that can act as a stand-alone document; detailed analysis of the review findings organised by review criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.

52. A **Review Brief** (a 2-page overview of the evaluation and review findings) for wider dissemination through the UNEP website may be required. This will be discussed with the Task Manager no later than during the finalization of the Inception Report.

53. **Review of the Draft Review Report.** The Review Consultant will submit a draft report to the Task Manager and revise the draft in response to their comments and suggestions. The Task Manager will then forward the revised draft report to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Task Manager for consolidation. The Task Manager will provide all comments to the Review Consultant for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

54. The final version of the Terminal Review report will be assessed for its quality by the UNEP Evaluation Office using a standard template and this assessment will be annexed to the final Terminal Review report.

55. At the end of the review process, the Task Manager will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals, and circulate the **Lessons Learned**.

M. The Review Consultant

56. The Review Consultant will work under the overall responsibility of the Task Manager in consultation with the Fund Management Officer, the Head of Unit/Branch, the Portfolio Manager and the Sub-programme Coordinators of the relevant UNEP Sub-programmes as appropriate.

57. The Review Consultant will liaise with the Task Manager on any procedural and methodological matters related to the Review. It is, however, the consultant's individual responsibility (where applicable) to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UNEP Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the Review as efficiently and independently as possible.

The Review Consultant will be hired for 40 workdays over a period of 4 months (1 September 2022 to 31 December 2022) and should have the following: a university degree in environmental sciences, international development or other relevant political or social sciences area is required and an advanced degree in the same areas is desirable; a minimum of 7 years of technical / evaluation experience is required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach. A good/broad understanding of biodiversity and land management issues is desired. For this consultancy, fluency in oral and written English is required, the knowledge of Russian is an asset. The work will be home-based with possible field visits.

58. The Review Consultant will be responsible, in close consultation with the Task Manager, for overall quality of the review and timely delivery of its outputs, described above in Section 11 Review Deliverables, above. The Review Consultant will ensure that all review criteria and questions are adequately covered.

N. Schedule of the Review

59. The table below presents the tentative schedule for the Review over 4 months since start of the assignment.

Table 3. Tentative schedule for the Review

Milestone	Tentative Dates
Inception Report	3 weeks from starting date
Review Mission	6 weeks from starting date
E-based data collection through interviews, surveys and other approaches.	8 weeks from starting date
PowerPoint/presentation on preliminary findings and recommendations	8 weeks from starting date
Draft Review Report to Task Manager (and Project Manager)	12 weeks from starting date
Draft Review Report shared with wider group of stakeholders	13 weeks from starting date
Final Review Report	16 weeks from starting date
Final Review Report shared with all respondents	16 weeks from starting date

O. Contractual Arrangements

60. The Review Consultant(s) will be selected and recruited by the Task Manager under an individual Special Service Agreement (SSA) on a "fees only" basis (see below). By signing the service contract with UNEP/UNON, the consultant certifies that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

61. Fees will be paid on an instalment basis, paid on acceptance and approval by the Task Manager of expected key deliverables. The schedule of payment is as follows:

62. Schedule of Payment:

Deliverable	Percentage Payment
Approved Inception Report (as per Annex I document #9)	30%
Approved Draft Main Review Report (as per Annex I document #10)	30%
Approved Final Main Review Report	40%

63. Fees only contracts: Where applicable, air tickets will be purchased by UNEP and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Task Manager and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

64. The consultant may be provided with access to UNEP's information management systems (e.g. PIMS, Anubis, SharePoint, etc.) and, if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the Review Report.

65. In case the consultant is not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by UNEP, payment may be withheld at the discretion of the Head of Branch or Portfolio Manager until the consultants have improved the deliverables to meet UNEP's quality standards.

66. If the consultant fails to submit a satisfactory final product to the Project Manager in a timely manner, i.e. before the end date of their contract, UNEP reserves the right to employ additional human resources to finalize the report, and to reduce the consultant's fees by an amount equal to the additional costs borne by the project team to bring the report up to standard or completion.

ANNEX IX: PORTAL INPUTS (for GEF funded projects)

Table II: GEF portal inputs

<p>Question: What was the performance at the project's completion against Core Indicator Targets? (For projects approved prior to GEF-7⁴⁶, these indicators will be identified retrospectively and comments on performance provided⁴⁷).</p>
<p>Response: This was a GEF-5 project. Nonetheless, the following GEF 7 indicators could be</p> <p><i>Indicator 3.1. Area of degraded agricultural land restored; 4.1. Area of landscapes under improved management to benefit biodiversity; 4.3. 4.3. Area of landscapes under sustainable land management in production systems.</i></p> <p>At the CEO Endorsement stage, this GEF -5 project directly covered 25000ha in the project sites of Ararat and Gegharkunik regions. Landscape area indirectly covered by the project was 1318400 ha.</p> <p>Introduced sustainable management and harvesting practices of existing biodiversity in agricultural and non-agricultural land. Existing certifications are: organic certification according to EC Reg's 834/2007, 889/2008, 1235/2008, Swiss Organic Agriculture Ordinance, USDA NOP, Canada Organic regulations, RA Law of Organic Agriculture. Scopes: plant production, animal production, beekeeping, processing, trade.</p> <p>At the end of the project, increased areas could not be verified by hard data, although during the review mission the Ararat regional authority representatives mentioned that the area for organic agro-produces has been increased.</p>
<p>Question: What were the progress, challenges and outcomes regarding engagement of stakeholders in the project/program as evolved from the time of the MTR? (This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval)</p>
<p>Response:</p> <p>Overall the engagement of stakeholders in the project has been well organised and following outreach strategies. The MTR made the following comment: "Armenia faced some frequent changes in government in 2018. However, political situation is stable. The established robust platform for consultation and dialogue with all groups of stakeholders helps project team to implement the project's activities in successful way."</p>
<p>Question: What were the completed gender-responsive measures and, if applicable, actual gender result areas? (This should be based on the documentation at CEO Endorsement/Approval, including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent)</p>
<p>Response:</p> <p>At the CEO Endorsement it was planned that "Women and Youth in project regions will be participating in project activities thus there are positive impacts expected on these disadvantaged or vulnerable groups."</p> <p>Some attention was devoted to both gender and youth aspects during the project design and implementation stage. However, there is no data available to determine to what extent their status has improved thanks to the project interventions. A few selected activities and outputs focused on disadvantaged groups, including women and young people. Activities ensured that the specific needs of women and men⁴⁸ are addressed when selecting priority species, best practices and products. It produced for example a brochure on "Selection and</p>

⁴⁶ The GEF is currently operating under the seventh replenishment period of the GEF Trust Fund covering the period July 1, 2018 to June 30, 2022. The GEF Portal Reporting Guide for FY20 Reporting Process indicates that GEF-6 projects that have yet to map existing indicators to GEF-7 Core Indicators need to do so at MTR stage or (if already there) at the time of the TE. (i.e. not GEF projects approved before GEF-6)

⁴⁷ This is not applicable for Enabling Activities

⁴⁸ The project was designed and approved before the UNEP Gender Policy was implemented.

use of plants in Armenia: preferable plants for men and women, gender preferences for plant growing and food crops.”

Around 25% of participants of training workshops, rounds table discussions, exchange visits on sharing good practices and knowledge in agrobiodiversity management were women. One of the two Farmers' Cooperatives established by the project was chaired by a woman. Two Young Generation Agricultural Clubs were established in Nor Ughi Community in Ararat project site and in Kalavan Community in Gegharkunik project site.

Question: What was the progress made in the implementation of the management measures against the Safeguards Plan submitted at CEO Approval? The risk classifications reported in the latest PIR report should be verified and the findings of the effectiveness of any measures or lessons learned taken to address identified risks assessed. *(Any supporting documents gathered by the Consultant during this review should be shared with the Task Manager for uploading in the GEF Portal)*

Response:

UNEP/GEF Environmental and Social Safeguards Checklist was completed at the outset of the project implementation, and no particular risk was identified. And no management plan was developed to address the checklist during the implementation and review stages.

By its very nature the project targeted species that can grow in degraded, arid land, and using little or no chemical inputs for cultivating the fruit and nut trees, as well as vegetables as organic asparagus, indeed the project had no or minimal negative environmental footprint and/or social impact.

The risks were rated as “Low” in PIRs.

Question: What were the challenges and outcomes regarding the project's completed Knowledge Management Approach, including: Knowledge and Learning Deliverables (e.g. website/platform development); Knowledge Products/Events; Communication Strategy; Lessons Learned and Good Practice; Adaptive Management Actions? *(This should be based on the documentation approved at CEO Endorsement/Approval)*

Response:

The communication and learning between the project partners and beneficiaries was one of the most positive results achieved through many training events, exchange visits, and through participatory field work.

Targeted knowledge and communication products were widely disseminated among relevant stakeholders and the general public.

Dissemination of project outputs and materials, including PA materials were done during project visits and meetings as well as through Aarhus Center of Armenia located in the Ministry of Nature Protection that has 12 sub-offices in Provinces as well as by Agro Information Center of the Agrarian University that has sub-offices in each province of Armenia.

As described under Outputs Achievements section communication and public awareness were highly successful aspects during the project duration. As for sustainability, the web-portal dedicated to the project is still operational and allows access to all the knowledge products developed during the project.

Question: What are the main findings of the evaluation?

Response:

The main focus of the project on traditional, more resistant local varieties of fruits, nuts and vegetables, is highly relevant given that more than half of Armenia's territory is arid and semi-arid and subjected to erosion as well as climate change impacts. The project design as per PIF and Endorsement documents was very well formulated, almost close to book-perfect, by identifying key barriers, root causes, capturing pertinent outputs and outcomes result chains and with complete list of annexes. Work and budget plans for key deliverables, monitoring and oversight, implementation arrangements with strong multi-stakeholder participation were all well planned, consulted with relevant partners and thus preparatory phase was executed to a satisfactory level. However, weaker aspects concerned inadequate assumptions of risks, and no clear exit strategy, insufficient attention to coordination with other initiatives and projects during

implementation as well as the absence of a concrete tool to qualitatively assess the social and environmental aspect.

Despite the hard work of the project team and the overall sound implementation of the activities and outputs, the overall impact of the project was below the satisfactory level. The main detracting factors were the unforeseen major change in the external context and the effects of having set national level outcomes too high at the outset. For one cycle of a 36 months project with a moderate financial resources, to have a functional National-level Coordination Committee solely devoted to agrobiodiversity and implementing a supply chain approach was overly ambitious. Political upheaval, combined with major and protracted government restructuring halted key actions and considerably limited the achieving of these overambitious goals , especially in respect of national-level outcomes. Outputs at the regional and local levels met the criteria of satisfactory in terms of quantity, quality, and timeliness.

ANNEX X. QUALITY ASSESSMENT OF THE REVIEW REPORT (PROVIDED BY THE UNEP EVALUATION OFFICE)

Review Title: Terminal Review: Enhancing rural livelihoods in rural communities of Armenia through mainstreaming and strengthening agricultural biodiversity conservation and utilization.

Consultant: Nara Luvsan

All UNEP Reviews are subject to a quality assessment by the UNEP Evaluation Office. This is an assessment of the quality of the review product (i.e., Main Review Report).

	UNEP Evaluation Office Comments	Final Review Report Rating
Substantive Report Quality Criteria		
<p>Quality of the Executive Summary:</p> <p>The Summary should be able to stand alone as an accurate summary of the main review product. It should include a concise overview of the review object; clear summary of the review objectives and scope; overall project performance rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the review ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic review questions), lessons learned and recommendations.</p>	<p>Final report:</p> <p>The section succinctly summarizes the key points of the review. The section does not direct the reader to the full ratings table in the Conclusions section. The findings should have been presented more completely in the Exec Summary and covering all relevant review criteria.</p>	4
<p>I. Introduction</p> <p>A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the review; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been reviewed/evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)</p> <p>Consider the extent to which the introduction includes a concise statement of the purpose of the review and the key intended audience for the findings?</p>	<p>Final report:</p> <p>The section provides a good summary of the general project information, implementation context, and key actors.</p>	5
<p>II. Review Methods</p> <p>A data collection section should include: a description of review methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.). Efforts to include the voices of different groups, e.g. vulnerable, gender, marginalised etc) should be described.</p> <p>Methods to ensure that potentially excluded groups (excluded by gender, vulnerability or marginalisation)</p>	<p>Final report:</p> <p>The section is missing some key "review methods" elements and some elements are not explained in sufficient detail. For example, there is mention of the use of quantitative methods in Paragraph 28 but there is no evidence of such methods in subsequent paragraphs/ sections. There are also no clear criteria for sampling or targeting of different stakeholder groups or for site visits selection.</p> <p>In Table 2 the Evaluation Office brings to the attention of the reader that the counts in adjacent columns in the final</p>	4

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>are reached and their experiences captured effectively, should be made explicit in this section.</p> <p>The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>It should also address review limitations such as: low or imbalanced response rates across different groups; gaps in documentation; extent to which findings can be either generalised to wider review questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views. E.g. <i>'Throughout the review process and in the compilation of the Final Review Report efforts have been made to represent the views of both mainstream and more marginalised groups. All efforts to provide respondents with anonymity have been made'</i></p>	<p>three rows refer to, first, entities and second, people representing those entities.</p> <p>Paragraph 28 mentions that <i>"where necessary the privacy of the interviewees was respected."</i> The statement casts doubt as to whether necessary safeguards were put in place to ensure ethical conduct of the study. Also missing are any efforts to include the voices/experiences of different and potentially excluded groups.</p> <p>However, the section describes well triangulation methods given low response rates and "absence of hard evidence and data" (Paragraph 34).</p>	
<p>III. The Project</p> <p>This section should include:</p> <ul style="list-style-type: none"> • <i>Context:</i> Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses). • <i>Results Framework:</i> Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • <i>Stakeholders:</i> Description of groups of targeted stakeholders organised according to relevant common characteristics • <i>Project implementation structure and partners:</i> A description of the implementation structure with diagram and a list of key project partners • <i>Changes in design during implementation:</i> Any key events that affected the project's scope or parameters should be described in brief in chronological order • <i>Project financing:</i> Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing 	<p>Final report:</p> <p>The context, stakeholders, and project implementation structure are well articulated in the report. However, the results framework is incomplete, as it does not include any outputs.</p>	4
<p>IV. Theory of Change</p> <p>The reconstructed TOC at Review should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.</p> <p>This section should include a description of how the <i>TOC at Review</i>⁴⁹ was designed (who was involved etc.)</p>	<p>Final report:</p> <p>The section states that the TOC was constructed during the inception phase but does not elaborate on how this was done and who was involved. It is also missing the TOC reconstruction table that shows how, if at all, the results statements were re-formulated to align with UNEP's definitions. The first causal pathway is described well in the</p>	4

⁴⁹ During the Inception Phase of the review process a *TOC at Design* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions). During the review process this TOC is revised based on changes made during project intervention and becomes the *TOC at Review*.

	UNEP Evaluation Office Comments	Final Review Report Rating
<p>and applied to the context of the project? Where different groups (e.g. vulnerable, gender, marginalised etc) are included in, or affected by the project in different ways, this should be reflected in the TOC.</p> <p>Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do not follow UNEP's definitions of different results levels, project results may need to be re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/ revised Prodoc logframe/TOC and b) as formulated in the TOC at Review. <i>The two results hierarchies should be presented as a two column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.</i> This table may have initially been presented in the Inception Report and should appear somewhere in the Main Review report.</p>	<p>narrative, but the second and third are not as clear. In addition, the TOC diagram is missing the assumptions and drivers.</p>	
<p>V. Key Findings</p> <p>A. Strategic relevance:</p> <p>This section should include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. An assessment of the complementarity of the project at design (or during inception/mobilisation⁵⁰) with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed:</p> <ul style="list-style-type: none"> v. Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities vi. Alignment to Donor/Partner Strategic Priorities vii. Relevance to Regional, Sub-regional and National Environmental Priorities viii. Complementarity with Existing Interventions 	<p>Final report:</p> <p>This section provides a clear assessment of the project's alignment with UNEP and GEF priorities. It provides a less specific reference to Armenia's food security goals and its arid/semi-arid characteristics. The report points out that the project did not explicitly work with other initiatives despite several other projects being mentioned in the project document.</p>	3
<p>B. Quality of Project Design</p> <p>To what extent are the strength and weaknesses of the project design effectively <u>summarized</u>?</p>	<p>Final report:</p> <p>The report strikes a good balance between the strengths and weaknesses in project design. However, the three 'findings' presented in this section do not meet UNEP's most recent descriptions of findings statements (below) and should be read as standard paragraphs within the report.</p> <p><u>Findings Statements (where applicable):</u> The frame of reference for a finding should be an individual evaluation criterion or a strategic question from the TOR. A finding should go beyond description and uses analysis to provide insights that aid</p>	4

⁵⁰ A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

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	<p>learning specific to the evaluand. In some cases, a findings statement may articulate a key element that has determined the performance rating of a criterion. Findings will frequently provide insight into 'how' and/or 'why' questions.</p>	
<p>C. Nature of the External Context For projects where this is appropriate, key external features of the project's implementing context that may have been reasonably expected to limit the project's performance (e.g. conflict, natural disaster, political upheaval⁵¹) and how they have affected performance, should be described.</p>	<p>Final report: The review questions (RQ) do not reflect UNEP's description of the nature of this criterion. In addition, the findings statements are purely descriptive and should be read in a similar way to other paragraphs in this section.</p> <p>However, the section presents a good analysis of the unexpected political and security events that affected project implementation and the team's response to such disruptions.</p>	4
<p>D. Effectiveness (i) Outputs and Project Outcomes: How well does the report present a well-reasoned, complete and evidence-based assessment of the a) availability of outputs, and b) achievement of project outcomes? How convincing is the discussion of attribution and contribution, as well as the constraints to attributing effects to the intervention.</p> <p>The effects of the intervention on differentiated groups, including those with specific needs due to gender, vulnerability or marginalisation, should be discussed explicitly.</p>	<p>Final report: The section presents a good account of delivery of project outputs, including on the timeliness and utility of the outputs to intended beneficiaries. There is also a good presentation on the project's engagement and effects on women and youth. It is however missing a complete assessment of output indicators and targets.</p> <p>It is noted that in para 75 the report mixes the achievement of outcomes at project end, with issues of sustainability, which look at the durability of outcome level benefits.</p> <p>The section presents a good account of outcome achievement or lack thereof, including an assessment of assumptions and drivers that held and did not hold. However, Finding 13 is undermined by the absence of the targets that are mentioned, but not presented within the report. In addition, there is no discussion of outcome effects on disadvantaged groups.</p> <p>Para 76 offers an insight about European/international markets that could have been reflected as a lesson.</p>	4

⁵¹ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

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<p>(ii) Likelihood of Impact: How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact?</p> <p>How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed?</p> <p>Any unintended negative effects of the project should be discussed under Effectiveness, especially negative effects on disadvantaged groups.</p>	<p>Final report:</p> <p>The section explores the likelihood of impact using the casual pathways and draws reasonable conclusions. But does not discuss the full range of assumptions and drivers between intermediate states and impacts. It refers to an Impact Flowchart in an annex but this is not in the report.</p>	4
<p>E. Financial Management</p> <p>This section should contain an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table. Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • <i>adherence</i> to UNEP's financial policies and procedures • <i>completeness</i> of financial information, including the actual project costs (total and per activity) and actual co-financing used • <i>communication</i> between financial and project management staff 	<p>Final report:</p> <p>This section lacks reference to Annex VI, which describes elements of financial management relevant to this section.</p> <p>Overall, the section presents an acceptable account of financial management processes and procedures during project implementation.</p>	4
<p>F. Efficiency</p> <p>To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p> <ul style="list-style-type: none"> • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of making use during project implementation of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • The extent to which the management of the project minimised UNEP's environmental footprint. 	<p>Final report:</p> <p>The section provides a brief discussion of some dimensions of efficiency, namely, cost and time, during project implementation. But it does not provide sufficient details on how the cost-saving measures and the two no-cost extensions affected the project.</p>	4
<p>G. Monitoring and Reporting</p> <p>How well does the report assess:</p> <ul style="list-style-type: none"> • Monitoring design and budgeting (<i>including SMART results with measurable indicators, resources for MTE/R etc.</i>) • Monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>) • Project reporting (<i>e.g. PIMS and donor reports</i>) 	<p>Final report:</p> <p>The section states that the M&E plan exists and is compliant with UNEP and GEF requirements, but there is not much evidence of it. It states that SMART indicators are presented in an annex that is not in the report. It also does not provide any details on the budget allocation for M&E activities (and appropriateness of expenditures), except for stating that this information is in another annex, that is also not in the report. The appropriateness of collection and reporting of implementation data is also not explicitly discussed.</p>	3
<p>H. Sustainability</p> <p>How well does the review identify and assess the key conditions or factors that are likely to undermine or</p>	<p>Final report:</p> <p>The section presents a good analysis of the risks to sustainability. It does not mention that there was no exit strategy,</p>	5

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<p>contribute to the persistence of achieved project outcomes including:</p> <ul style="list-style-type: none"> • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability (<i>including issues of partnerships</i>) 	<p>but this is stated in the Project Design section (paragraph 58).</p>	
<p>I. Factors Affecting Performance These factors are <u>not</u> discussed in stand-alone sections but are integrated in criteria A-H as appropriate. Note that these are described in the Evaluation Criteria Ratings Matrix. To what extent, and how well, does the review report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> • Preparation and readiness • Quality of project management and supervision⁵² • Stakeholder participation and co-operation • Responsiveness to human rights and gender equity • Environmental and social safeguards • Country ownership and driven-ness • Communication and public awareness 	<p>Final report: The section provides a summary of the factors affecting performance.</p>	5
<p>VI. Conclusions and Recommendations</p> <p>Quality of the conclusions: The key strategic questions should be clearly and succinctly addressed within the conclusions section.</p> <p>It is expected that the conclusions will highlight the main strengths and weaknesses of the project, and connect them in a compelling story line. Human rights and gender dimensions of the intervention (e.g. how these dimensions were considered, addressed or impacted on) should be discussed explicitly. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.</p>	<p>Final report: There is a long list of individual concluding statements. Each paragraph in this section is labelled as a separate conclusion, although the text does not reflect this – the text reads as normal summary paragraphs. The conclusions could have synthesized the findings to better conclude how the project performed overall against the review criteria. It would have been more compelling to provide a narrative to discuss the project’s strengths and weaknesses and what this means for the project beneficiaries (environment and people).</p>	3
<p>ii) Quality and utility of the lessons: Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit review findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons are intended to be adopted any time they are deemed to be relevant in the future and must have the potential for wider application (replication and generalization) and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.</p>	<p>Final report: The lessons are well written, rooted in key review findings, and are useful for future interventions.</p>	5

⁵² In some cases ‘project management and supervision’ will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the Executing Agency and the overall supervision/technical backstopping provided by UNEP, as the Implementing Agency. Comments and a rating should be provided for both types of supervision and the overall rating for this sub-category established as a simple average of the two.

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<p>iii) Quality and utility of the recommendations:</p> <p>To what extent are the recommendations <u>proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results?</u> They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when.</p> <p>At least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions, should be given. Recommendations should represent a measurable performance target in order to monitor and assess compliance with the recommendations.</p> <p>In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance.</p> <p>Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.</p>	<p>Final report:</p> <p>The recommendations are useful for future interventions and as such there are no specific timeframes or measurable performance targets. There is also no recommendation on strengthening the human rights and gender dimensions of UNEP interventions.</p>	4
VII. Report Structure and Presentation Quality		
<p>i) Structure and completeness of the report: To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete, including a gender disaggregation total for respondents.</p>	<p>Final report:</p> <p>The report does a good job of following the Evaluation Office structure and formatting guidelines. However, it does not include responses to the key strategic questions from the TOR. In addition, the text refers the reader to Annexes that have not been provided</p>	5
<p>ii) Quality of writing and formatting: Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow UNEP Evaluation Office formatting guidelines?</p>	<p>Final report:</p> <p>The report is quite well written and the tone is appropriate. There were a lot of visuals that provided good representations of the project implementation. However, there were frequent typos, grammatical errors, redundant spaces, and some acronyms were not spelled when initially presented. The report would have benefited from a proof reading.</p>	4
OVERALL REPORT QUALITY RATING		4.1

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the review report is calculated by taking the mean score of all rated quality criteria.

