

**Validated Terminal Review of the UNEP/GEF Project
'Stocktaking and Update of the National Biosafety
Framework of Mauritania' (GEF ID 5639)**

2016 – 2022



UNEP ECOSYSTEMS DIVISION

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This report has been prepared by an external consultant as part of a Terminal Review, which is a management-led process to assess performance at the project's operational completion. The UNEP Evaluation Office provides templates and tools to support the review process and provides a formal assessment of the quality of the Review report, which is provided within this report's annexed material. In addition, the Evaluation Office formally validates the report by ensuring that the performance judgments made are consistent with the evidence presented in the Review report and in line with the performance standards set out for independent evaluations. As such the project performance ratings presented in the Review report may be adjusted by the Evaluation Office. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UNEP Programme Senior Management.

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Stocktaking and Update of the National Biosafety Framework of Mauritania
GEF ID 5639
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This Terminal Review was prepared for the GEF-Biodiversity and Land Degradation Unit by Dr. John Mauremootoo.

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

The reviewer would like to thank the project team, particularly Mr. Moussa Ba (Mauritanian Ministry of Environment and Sustainable Development Director Responsible for Multilateral Environmental Agreements and Biosafety Project Coordinator), Mr. Clouvis Johnbang (International Project Financial and Technical Adviser) and UNEP Task Manager, Mr. Alex Owusu-Biney for their contribution and collaboration throughout the review process. Sincere appreciation is also expressed Ms Aska Ochiel – UNEP GEF Support Officer, GEF-Biodiversity and Land Degradation Unit (Terminal Review Quality Assurance support), Mr. Paul Vrontamitis – UNEP Fund Management Officer, and Mr. Johan Robinson – Senior Programme Officer responsible for the UN Environment-Global Environment Facility Biodiversity & Land Degradation portfolios, who took the time to provide comments on the draft report.

The review consultant hopes that the findings, conclusions and recommendations will contribute to the successful formulation of the next phase and the continuous improvement of similar projects in other countries and regions.

BRIEF EXTERNAL CONSULTANT(S) BIOGRAPHY

Dr. John Mauremootoo is a Mauritian/UK national with over 30 years of diverse experience in the management of projects and programmes in invasive alien species management, biodiversity conservation, biosafety, biosecurity, agriculture and sustainable land management in many countries, but mainly in the African mainland, South Asia and in SIDS. His primary focus is on capacity building, communication, knowledge management and mutual learning for development using empowering participatory approaches within an action learning framework. He has in-depth knowledge and experience of all aspects of project cycle management, including the use of logical frameworks and complementary approaches to planning, monitoring, evaluation, and learning. He has undertaken a wide range of formative and summative evaluations/reviews for various agencies, including UNEP.

Review team

Dr. John Mauremootoo

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 project implemented between 2016 and 2022. The project's overall development goal was *to facilitate compliance with and implementation of Cartagena Protocol on Biosafety through building the necessary policies, regulatory, administrative and technical instruments as well as local capabilities to help to ensure adequate level of protection to biodiversity and human health*. The review sought to assess project performance (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, GEF and the relevant agencies of the project participating countries.

Source(s) of Funding by Country: Mauritania

Source(s) of Funding by Institution Type:

Foundation/NGO	No
Private Sector	No
UN Body	Yes
Multilateral Fund	No
Environment Fund	Yes

Key words: Biosafety, Biodiversity; Genetically Modified Organisms (GMOs), Living Modified Organisms (LMOs), Cartagena Protocol on Biosafety (CPB), National Biosafety Framework (NBF), Legislative Review; Reference Laboratory, Capacity Building; Awareness and Participation, Mauritania, Terminal Review, Global Environment Facility (GEF)¹.

Primary data collection period: 02 February – 03 April 2024

Field mission dates: 07 – 13 April 2024

¹ This data is used to aid the internet search of this report on the Evaluation Office of UNEP Website

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LIST OF ACRONYMS

ANUBIS	A New UNEP Biosafety Information System
BCH	Biosafety Clearing House
BD-SP	Biodiversity Strategic Programme
CBD	Convention on Biological Diversity
CNA	Competent National Authority
CPB	Cartagena Protocol on Biosafety
EA	Expected Accomplishment
GEF	Global Environment Facility
GMO	Genetically Modified Organism
KAP	knowledge – attitude – practice
LDC	Least Developed Country
LMO	Living Modified Organism
M&E	Monitoring and Evaluation
MESD	Ministry of Environment and Sustainable Development [of Mauritania]
MoV	Means of Verification
MRU	Mauritanian Ouguiya
MSP	Medium Size Project
MTS	Medium Term Strategy
NAP	National Adaptation Planning
NBC	National Biosafety Commission
NBF	National Biosafety Framework
NEA	National Executing Agency
NGO	Non-Governmental Organisation
NPC	National Project Coordinator
PCA	Project Cooperation Agreement
PCU	Project Coordination Unit
PDQ	Project Design Quality
PIR	Project Implementation Report
PoW	Programme of Work
PRC	Project Review Committee 0
ProDoc	Project Document
PSC	Project Steering Committee
STC	Scientific and Technical Committee
TM	Task Manager
ToC	Theory of Change
ToR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme
USD	United States Dollars

PROJECT IDENTIFICATION TABLE

Table 1. Project Identification Table

UNEP PIMS ID/SMA ID:	N/A	Grant (GEF) ID	5639
UNEP Management (Division/Branch/Unit):	UNEP Ecosystems Division/ GEF Biodiversity and Land Degradation Unit		
Implementing Partners:	N/A		
Sources of Funding:	Country(ies): Mauritania	Institution Name/Type: Environment Fund	
Relevant SDG(s):	Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture		
MTS (all that apply):		UNEP approval date:	28 April 2016
POW Direct Outcome(s) number/reference (applicable for projects approved from 2022): OR POW Output(s) number/reference (applicable for projects approved pre-2022)	POW Direct Outcome:	MTS 2025 Outcome(s) number/reference (applicable for projects approved from 2022): OR POW Expected Accomplishment(s) number/reference (applicable for projects approved pre-2022):	MTS 2025 Outcome:
	POW Output: Programme of Work for the Biennium 2022-2023 under UNEP Mid-Term Strategy for 2022-2025		POW Expected Accomplishment: Subprogramme 3 – Healthy and productive ecosystems Subprogramme 4 – Environmental governance
Sub-programme:	3 – Healthy and productive ecosystems 4 – Environmental governance	Programme Coordination Project:	N/A
Expected start date:	January 2016	Actual start date:	28 April 2016
Planned completion date:	31 December 2019	Actual operational completion date:	27 January 2023
Planned total project budget ² at approval:	\$878,000	Actual total expenditures reported as of 31 December 2022:	\$853,000
Planned Extra-budgetary Funds ³ :	Cash: In-kind: \$950,000	Secured Extra-budgetary Funds:	Cash: In-kind: \$843,850
		Actual Extra-budgetary Funds expenditures reported as of [date]:	Cash: N/A
First disbursement:	01 July 2016	Planned date of financial closure:	31/12/2022
No. and dates of formal project revisions:	Nine	Date of last approved project revision:	1 January 2023
No. of Steering Committee meetings:	Ten ⁴	Date of Last Steering Committee meeting:	14 Dec 2021

² Total budget may include; Regular Budget, Environment Fund, Extra-Budgetary, including 'softly-earmarked' etc.

³ Extra-budgetary funds may include co-finance (cash/in-kind)

⁴ This figure is an estimate. According to the Steering Committee Members interviewed, SC meetings were held very regularly, but in most instances, minutes were not taken.

Mid-term Review/ Evaluation budgeted:	N/A ⁵	Mid-term Review/ Evaluation (actual date):	N/A
Terminal Review/ Evaluation (<i>planned date</i>):	September 2018	Terminal Review (actual date):	August 2025
Coverage – Implementing Country(ies):	Mauritania	Coverage – Implementing Region(s):	Africa
Dates of previous project phases:	N/A	Status of future project phases:	N/A

⁵ Under four years of implementation, MTRs/MTEs are not governed by alternative Donor agreements

EXECUTIVE SUMMARY

Project background

1. This is the final report of the Terminal Review of the project "Stocktaking and Update of the National Biosafety Framework of Mauritania" (GFL/5639) approved by GEF and UNEP in 2016 for a duration of 3 years (2016-19). The USD 1,828,000, 48% of which represents the GEF allocation (USD 878,000) and the remaining 52% (USD 950,000) to be provided in kind by the Government of Mauritania.
2. The project is a Medium Size Project (MSP) financed through the GEF-5 mechanism and belongs to the GEF Biodiversity Focal Area (Objective Three: Build Capacity for the Implementation of the Cartagena Protocol on Biosafety). The project goal is in alignment with UNEP's Medium-term Strategy 2014-2017 and is part of UNEP's Programme of Work (PoW) 2016-17, under Sub-Programme Environmental Governance, Expected Accomplishment (EA) B: "The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced."
3. Mauritania ratified the Convention on Biological Diversity (CBD) in 1996 and ratified the Cartagena Protocol on Biosafety (CPB) in 2005. At the time of project formulation, Mauritania had no government-approved biosafety policy, no biosafety law or secondary regulation on biosafety, no clear procedures for handling requests on LMOs, and limited capacity for handling requests, decision making and risk assessment of LMOs.
4. This GEF-funded project was expected to address these shortcomings through a stocktaking analysis and using the information generated to finalise and implement the National Biosafety Framework. This process would help Mauritania to strengthen its existing institutional and technical structures and systems needed to meet the obligations of the Protocol. The Project objective was "To assist Mauritania to update the status and capacity for the safe use of biotechnology and to strengthen Mauritania's institutional capacity in the development and implementation of the National Biosafety Framework."
5. The National Executing Agency of the project is the Ministry of Environment and Sustainable Development of Mauritania (MESD), which is responsible for the design, implementation, and monitoring and evaluation of policies related to rural development and the management of the natural environment.
6. During its implementation, the project has been granted 2 no-cost extensions for a total of 30 months due to the challenges caused by the death of the original Project Coordinator in February 2018 and the impact of the COVID-19 pandemic that have affected project implementation, shifting its operational completion date to 30 June 2022. The Review took place between February 2024 and August 2025 and included a mission to Mauritania from 07 - 12 April 2024.

This Review

7. The Terminal Review is undertaken at project completion 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, GEF, and the Ministry of Environment and Sustainable Development of Mauritania (MESD) – the NEA.
8. The main methods and tools used in the Review can be summarised as follows:
 - A Desk Review of all project documents and tools provided, including those from the ANUBIS e-platform (see Annex IV).
 - Exchanges with the Project Management Team at UNEP, namely the Task Manager/ Review Manager, the Review Support Officer, and the Finance and Budget Officer.
 - Questions and discussions with the National Project Coordinator before, during and after the country visit.

- A country visit, which included:
- Meetings with the Project Team, NEA management staff, and representatives of the project's principal stakeholders.
- Drafting of preliminary conclusions and recommendations and discussion with the National Project Coordinator during the final de-briefing.

9. For logistical reasons, the country mission had to take place during the final week of Ramadan when many project stakeholders were unavailable. Despite the Project Coordinator's concerted efforts, only nine (all-male) project stakeholders were interviewed during the mission. Several requests were made to include feedback from female stakeholders, but none were available. This small sample size must be taken into consideration when assessing the robustness of the review findings.

Key findings

10. Through the regular engagement of high-level representatives of key government ministries, decision-makers and academic and research partners, the project has delivered well at the output level, an impressive achievement given the challenging external circumstances and the lengthy governmental procedures to which projects of this nature are subject.

11. Successfully completed outputs related to biosafety information included the stocktaking report on national biosafety capacity in Mauritania, the assessment report, which included a review of all relevant legislation, policies and plans, the guiding paper on laboratory and technical requirements of a GMO detection reference laboratory, and updated national BCH accompanied by a manual for using the BCH.

12. Successfully completed outputs related to the biosafety policy/structure/enabling environment included the biosafety policy, which was approved by the government shortly after project closure, the identification of the roles and responsibilities of the different governmental institutions regarding biosafety, and the preparation of the National framework for conducting environmental risk assessment for LMOs.

13. Successfully completed outputs related to biosafety training included the production of training guidelines on regulatory issues related to biosafety, the training of the Project Steering Committee in biosafety decision-making processes, and the training in the use of the BCH for searching and registering information.

14. Successfully completed outputs related to biosafety awareness included the production of a public education and involvement plan, the production of outreach materials on biosafety, and the undertaking of public awareness workshops on biosafety.

15. The outcome related to capacity – "Sufficient technical and institutional capacities to implement an effective biosafety management system based on quality information" – has been partially achieved. Capacity among members of the Project Steering Committee and the Scientific and Technical Committee has been enhanced through project activities, but there is no evidence that this capacity is sufficient for effective biosafety management.

16. The outcome related to policies and processes – "Enhanced public awareness of biosafety-related issues" – has been partially achieved. The Biosafety Law promulgated in 2022 was a major achievement for the project, and there is a formal system for carrying out risk assessment and decision-making for LMOs. However, these mechanisms are unlikely to be effectively implemented given current capacity constraints

17. The outcome related to public awareness – "Biosafety policy approved and integrated into National plans; b) System in place for handling of requests, carrying out risk assessment and decision making for LMOs" – has been partially achieved. The Public Education and Involvement Plan was only very partially implemented. This was a logical approach, given the foundational nature of the project and its focus on decision-makers.

18. It appears that the national administration is strongly convinced of the importance of biosafety for sustainable development, as evidenced by the promulgation of the Biosafety Law in 2022 and the allocation of approximately USD 50,000 in the 2024 national budget for the finalisation of the implementing regulations of the Biosafety Law.

19. All six of the Direct Outcomes to Intermediate State Assumptions held and one of the three Drivers held – Quality of outputs with potential for high utility, replicability or catalytic effects beyond project closure. Although there was no exit strategy in place to establish the base for financial/institutional sustainability, the continued government support for biosafety indicates that there is a willingness to build on the momentum of the project even in the absence of substantial external donor funding. It would be surprising if the third driver (those trained have acquired the necessary skills to implement an effective biosafety management system) held in the absence of a more in-depth capacity building programme which could be catalysed through a larger follow-up project.
20. Considering all of the above, Effectiveness has been rated as **Satisfactory**.
21. The project has satisfactorily managed financial aspects. Financial reports have been prepared regularly, and appropriate administrative procedures for procurement have been adopted. Nine Budget Revisions have been prepared and approved, mainly for the reallocation of unspent money without substantive changes in budget lines. Overall, Financial Management is rated **Highly Satisfactory**.
22. The project has not been time-efficient. There was a reasonable rate of delivery for the first 15 months of the project. Subsequently, there were very few completed outputs from October 2017 to August 2021, a period during which the first Project Coordinator passed away, and the country went into lockdown because of the COVID-19 pandemic. Apart from these unforeseen circumstances, the delays were related to bureaucratic inertia within the National Executing Agency / Competent National Authority and in the public sector as a whole.
23. The Project Team has regularly monitored activity implementation and the achievement of outputs and indicators, though the results have not been monitored in-depth and insufficient attention has been paid to outcomes. Lack of staff time, insufficient use of existing tools and insufficient understanding of the value of monitoring for results-based management, together with the cumbersome procedures in the government sector, have made it difficult to implement evidence-based changes to make the project more efficient and effective.
24. Considering the above, Efficiency, and Monitoring and Reporting have been rated as **Moderately Satisfactory**.
25. Increased understanding of biosafety among those in governmental institutions, research and academia, certain NGOs and among politicians, government financial support to maintain the momentum built by this project, and widespread support for the coordination role played by the Ministry of Environment and Sustainable Development (MESD) bodes well for sustainability. However, MESD has no staff members working full-time on biosafety coordination. Substantive progress will require full-time staff commitment, which is unlikely to be funded by the core budget in the short term. This underscores the importance of a follow-up project to retain momentum.
26. Sustainability is rated **Moderately Likely (ML)**.

Conclusions

27. The project has significantly contributed to the implementation of the Cartagena Protocol in Mauritania.
28. The project has catalysed an attitudinal shift in decision-makers in Mauritania concerning the value of biosafety.
29. The project has established the basis for socio-political, financial and institutional sustainability. In working with high-level decision-makers in concerned ministries and research bodies, the project has managed to create buy-in among government institutions and research and academic communities.
30. The project management teams in UNEP and MESD should be congratulated on their tenacity and creativity in pursuing the project objectives.
31. Project management could have been more efficient and effective with more available quality staff time.

32. Based on the above, the likelihood of the project results contributing to the achievement of the project's Principal Outcome, i.e. "A transparent NBF in Mauritania", looks **Moderately Likely**.

Table 2. Summary ratings

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

Lessons Learned

33. Lesson 1: The promulgation of the Biosafety Law and its accompanying policy is a significant achievement for the project, which should not be underestimated.
34. Lesson 2: Project processes and results provide a solid foundation for an efficient and effective national biosafety system.
35. Lesson 3: Developing a consensus in a novel field often takes more time than anticipated.
36. Lesson 4: Despite unforeseen constraints, project execution could have been more time-effective.
37. Lesson 5: The process of developing a policy and law was an essential complement to the final product.
38. Lesson 6: International technical support has significantly contributed to project efficiency and effectiveness.
39. Lesson 7: The available monitoring and evaluation tools have not been optimally utilised.
40. Lesson 8: The degree to which the project addresses human rights and gender equality cannot be a mechanistic exercise.

Recommendations

41. Recommendation 1: A second phase project is developed.
42. Recommendation 2: Realistic activity timelines are produced.
43. Recommendation 3: Recruit a full-time Biosafety Secretariat within the MESD.
44. Recommendation 4: Optimise the utility of monitoring and evaluation systems.
45. Recommendation 5: Explicitly include human rights and gender considerations in all stages of the project cycle in a context-specific manner.
46. Recommendation 6: Document the process whereby the National Biosafety Law was successfully promulgated as a case study/good practice example.

Validation

The report has been subject to an independent validation exercise performed by UNEP's Evaluation Office. The performance ratings for the project, 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. Moreover, the Evaluation Office has found the overall quality of the report to be 'Satisfactory' (see Annex XIII).

I. INTRODUCTION

47. This is the final report of the Terminal Review of the project "Stocktaking and Update of National Biosafety Framework of Mauritania" (GEF ID: 5639) which was approved by GEF on December 04 2015 and by UNEP on 28 April 2016 for a duration of 36 months. The project's total budget is USD 1,828,000, 48% of which represents the GEF allocation (USD 878,000) and the remaining 52% (USD 950,000) to be provided in kind by the Government of Mauritania. The Project has been granted two no-cost extensions for a total of 30 months, shifting its official end date to 27 January 2023 (85-month duration). The project has not been reviewed/evaluated in the past.

48. The project is a GEF-5 Medium Size Project under the Biodiversity Focal Area (Objective Three: Build Capacity for the Implementation of the Cartagena Protocol on Biosafety). The project goal is in alignment with UNEP's Medium-term Strategy 2014-2017 and is part of UNEP's Programme of Work (PoW) 2016-17, under Sub-Programme Environmental Governance, Expected Accomplishment (EA) B: "The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced."

49. The National Executing Agency (NEA) of the project is the Ministry of Environment and Sustainable Development of Mauritania (MESD), which is responsible for the design, implementation, and monitoring and evaluation of policies related to rural development and the management of the natural environment. UNEP is the Funding Partner.

50. In line with the UNEP Evaluation Policy and UNEP's Evaluation Guidelines, the Terminal Review is undertaken at project completion 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, GEF, and MESD – the NEA. Therefore, the review will identify lessons of operational relevance for future project formulation and implementation, especially for follow-up projects, if applicable.

51. The primary intended audiences for the review findings will be UNEP staff from the UNEP / Ecosystems Division / GEF Biodiversity and Land Degradation Unit (responsible for project implementation), the UNEP Ecosystems Division and the Evaluation Office, and key project stakeholders responsible for biosafety in Mauritania from the MESD and other government institutions represented on the Project Steering Committee (PSC) and its accompanying Scientific and Technical Committee (STC). Principal uses of review findings will be accountability, reflection and learning as a contribution to organisational effectiveness. Other intended audiences are project partners and beneficiaries who can use review findings for public accountability, knowledge building and sharing, cross-fertilisation of lessons learned and the promotion of good practices.

52. The review took place between February and August 2025 and included a mission to Mauritania from 07 - 12 April 2024. The Review Team consisted of one consultant project review specialist working under the methodological guidelines provided by the UNEP Evaluation Office.

II. REVIEW METHODS

53. The Terms of Reference (ToR) of the review and the tools and templates provided by the UNEP Evaluation Office provided a robust methodological framework for the review exercise, facilitating the systematisation of the review findings.

54. The Desk Review of the project documents and reports filed in ANUBIS (A New UNEP Biosafety Information System) helped to provide relevant information on the project's technical and financial performance.

55. The Review Inception Phase culminating in the delivery of the Inception Report laid the foundations for the main report by including:

- The Review of the Project Design Quality (PDQ) highlighted project design strengths and weaknesses (Chapter V, Section B).
- The construction of the project's Theory of Change (ToC) (Chapter IV).
- The Stakeholder Analysis outlines the expected roles and responsibilities of the project's key players and provides the basis for assessing the project's institutional framework and sustainability (Chapter V, Section G).
- Integrating supplementary and specific questions to the key questions defined in the review ToR.

56. Exchanges with the Review Support Officer of the GEF-Biodiversity and Land Degradation Unit, the Fund Programme Management Officer, and the UNEP Task Manager / Biosafety have provided helpful clarifications on methodological and technical issues regarding the review and project implementation.

57. Some tools prepared in advance by the Consultant were shared with the Project Team before the field mission, notably a revised matrix of Project Outputs with questions and comments and the Financial Tables. All of them were discussed with the Project Team and relevant stakeholders during the country visit.

58. The country visit lasted six days. It enabled the Consultant to physically meet and interview key stakeholders, including representatives of the National Executing Agency (Ministry of Environment and Sustainable Development - MESD), which is also the Competent National Authority for the Cartagena Protocol on Biosafety and the Convention on Biological Diversity, several members of the National Project Steering Committee (PSC), main partner institutions project consultants, an NGO representative and, of course, the National Project Coordinator (also Focal Point for the Cartagena Protocol) (see list in Annex II). The death of the former National Project Coordinator has deprived the mission of his precious experience, information, and perspectives.

59. The main methods and tools used in the Review can be summarised as follows:

- A Desk Review of all project documents and tools provided, including those from the ANUBIS e-platform (see Annex IV).
- Exchanges with the Project Management Team at UNEP, as outlined above.
- Questions and discussions with the National Project Coordinator before, during, and after the country visit.
- A country visit, which included:
 - Meetings with the Project Team, NEA management staff, including its Secretary-General and representatives of the project's principal stakeholders (see above).
 - Drafting of preliminary conclusions and recommendations and discussion with the National Project Coordinator during the final de-briefing.

60. For logistical reasons, the country mission had to take place during the final week of Ramadan when many project stakeholders were unavailable. Despite the Project Coordinator's concerted efforts, only nine (all-male) project stakeholders were interviewed during the mission. We did not meet with the (female) Project Financial and Administration Officer, who was about to give birth. This small

sample size must be taken into consideration when assessing the robustness of the review findings. Despite the explicit requests to engage female stakeholders, the lack of engagement did reflect the reality on the ground.

61. Ethics and human rights issues were paramount in the review process, throughout which every effort was made to represent the views of mainstream and more marginalised groups. Data were collected with respect for ethics and human rights issues. All photographs were taken, and other information was gathered after prior informed consent from people; all discussions remained anonymous, and all data was collected according to the UN Standards of Conduct.

Table 3. 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	4 (3M, 1F)	4 (3M, 1F)	4 (3M, 1F)	100
	Executing agency/ies	2 (1M, 1F)	1 (M)	1 (M)	100
	# entities involved	# entities contacted	# people contacted (M/F)	# respondent (M/F)	% respondent
Project (implementing/ executing) partners (receiving funds from the project)	1		3 (3M)	3 (3M)	100
Project (collaborating/contributing ⁶) partners (not receiving funds from the project)	10	10 (9M, 1F)	10 (9M, 1F)	5 (5M)	50
Beneficiaries: <i>Examples:</i> Duty bearers Gate keepers Direct beneficiaries Indirect beneficiaries Civil society representatives	4	4 (4M)	4 (4M)	1 (1M)	25

⁶ 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

62. The safe use of modern biotechnology can assist Mauritania in addressing the challenges of food security, climate change and desertification through better utilisation of its biodiversity. It can help farming systems to adapt to ecosystem changes, such as drought and salinity. However, the country needs to regulate risks from LMOs to the conservation and sustainable use of its biological resources taking into account the risk to human health. This risk is illustrated by Mauritania being among the centres of origin/diversity for important crop plants, including pulses that need to be protected from potential gene flow from genetically modified species. Mauritania also hosts 1,100 plant species, 61 mammal species, 172 bird species, 72 reptile species, three amphibian species, and 117 fish species. This project will help to ensure that adequate LMO risk assessment, post-release monitoring strategies, technical capabilities and information are available at the national level to avert the potential loss of genetic resources and biodiversity.

63. Recognising the value of the Cartagena Protocol on Biosafety (CPB) as a basis for developing its biosafety framework, the Government of Mauritania ratified the Convention on Biological Diversity on 16 August 1996. It acceded to the Cartagena Protocol on 20 October 2005.

64. Mauritania was among the 18 countries participating in the UNEP-GEF pilot biosafety enabling project 1997-2000. The project aimed to set up National Biosafety Frameworks in the 18 countries and develop systems to address the transboundary movement of living modified organisms. This intervention was not followed up in Mauritania, making it difficult for the country to finalise and implement its draft National Biosafety Framework, produced under the pilot project. The government has, however, developed a draft of the National Biosafety Law, which needs to be further reviewed and updated. At the time of project formulation, Mauritania had no government-approved biosafety policy, no biosafety law or secondary regulation on biosafety, no clear procedures for handling requests on LMOs, and limited capacity for handling requests, decision making and risk assessment of LMOs.

65. This GEF-funded project was expected to address these shortcomings through a stocktaking analysis and using the information generated to finalise and implement the National Biosafety Framework. This process would help Mauritania to strengthen its existing institutional and technical structures and systems needed to meet the obligations of the Protocol and achieve an operational National Biosafety Framework.

66. The death of the original Project Coordinator in February 2018 was a considerable setback for the project, which took some time to get back on track, as was the delayed recruitment of consultants due to a lack of biosafety competency, the slow process of output validation, and the cumbersome national procurement procedures. The national lockdown in response to COVID-19 and the lack of facilities for/culture of working online resulted in very few activities and outputs in 2020.

B. Objectives and components / Results Framework

67. The Project Objective is "To assist Mauritania to update the status and capacity for the safe use of biotechnology and to strengthen Mauritania's institutional capacity in the development and implementation of the National Biosafety Framework."

68. According to the Project Results Framework (Logframe), the project comprises three main components, each with one expected Outcome: 1. Establishing baseline for information on the safe use of biotechnology through stocktaking analysis. This component focuses on updating the national inventory and assessment of biosafety capacities, policies, and relevant legislation in Mauritania to reflect the country's current circumstances. The process includes comprehensive consultations and reviews, aiming to identify gaps and guide the development of a functional biosafety management system. 2. Development of a biosafety policy, administrative, regulatory and technical biosafety frameworks for Mauritania in line with the CPB. This component aims to draft and finalise comprehensive biosafety policy instruments, legislation, and technical guidelines aligned with the Cartagena Protocol. It also includes training and capacity building for government and legal institutions to implement and enforce these frameworks effectively. 3. Public Awareness, Public participation and Education. Efforts under this component are directed at increasing public

knowledge and engagement through updated outreach materials, a dedicated biosafety website, and a national Biosafety Clearing-House. Training and workshops are provided to various stakeholders, including public officials, academia, and the public, to ensure widespread understanding and involvement in biosafety decision-making.

69. During the Review Inception phase planned project outputs and expected outcomes needed to be reformulated to make them consistent with UNEP results definitions and to create the Theory of Change (ToC). The simple table (Annex B in the Inception Report) showing the original version and the revisions proposed for use in the Review is reproduced as Table 8 in this document - *Justification for Reformulation of Results Statements*. The project outcomes listed below are as formulated during the review inception process.

70. The results framework was not entirely consistent. Some results labelled as outcomes were actually outputs (Outcome 1⁷ – *Inventory and assessment...*) while others were mixtures of outputs and outcomes (Outcome 2 – *Biosafety policy drafted...*, and Outcome 3 – *Enhanced public awareness tools/measures...*). Outcome 4 – *Tools to facilitate implementation of the Protocol are easily accessible ...* constituted a stand-alone outcome. The fact that there are five outcomes listed in Section 3.3 (Project components and expected results) compared with four in the results framework affects clarity though not the overall logic. Project components did not correspond with actual outcomes and were not always coherent, although overlap and interaction is inevitable in the real world. Component 1 corresponds to an activity and could be part of a larger component dealing with information. Component 2, in contrast, concerns diverse aspects of the biosafety framework including training which is also covered under Component 3. The pathways of change between outputs and outcomes were comprehensive and logical. However, because of the poor separation of outcomes and outputs and the lack of cohesion within components these pathways were sometimes difficult to disentangle.

Table 4. Reformulated Project Outcomes and Components

PROJECT OUTCOMES	COMPONENTS
1. Sufficient technical and institutional capacities to implement an effective biosafety management system based on quality information.	Information
2. Biosafety policy approved and integrated into National plans.	Policy/structure/enabling environment
3. System in place for handling of requests, carrying out risk assessment and decision making for LMOs.	Training
4. Enhanced public awareness of biosafety related issues.	Awareness

C. Stakeholders

71. The key government duty bearer for biosafety in Mauritania is the Ministry of Environment and Sustainable Development (MESD), which is responsible for the design, implementation, and monitoring and evaluation of policies related to rural development and the management of the natural environment. MESD is the Competent National Authority (CNA) for the Cartagena Protocol, focal point for the Biosafety Clearing-House (BCH) and for the Convention on Biological Diversity (CBD). It has also been the project's National Executing Agency (NEA).

72. Other relevant government players are the Ministries with responsibility for the management of GMOs in their respective areas, including the Ministry of Rural Development (for genetically modified plants and animals), Ministry of Health (for genetically modified derived food, food products and drugs); Ministry of Commerce, Handicraft, and Tourism (for the labelling and packaging of genetically modified food and food products); and Ministry of Finance (Customs). Other national stakeholders include academic and research institutions and civil society organisations, as represented in the figure below.

⁷ The numbering has been added for clarity. Outcomes were not numbered in the Results Framework.

73. The inclusion of gender and marginalized groups is a deliberate aspect of project design, seen in the composition of the Project Steering Committee, outreach, and capacity-building activities. Women, people from indigenous and local communities, and persons living with disabilities are specifically targeted through gender-balanced training, tailored access to information, and participatory mechanisms.

74. While the private sector's involvement has been limited to date, its interests are indirectly represented, and its future participation is anticipated as the framework shifts to implementation. Social safeguards, such as balanced stakeholder participation and accessible training, are built into the project. This inclusive approach aims to embed gender equity and the participation of under-represented groups at all levels, making Mauritania's biosafety governance both equitable and sustainable.

Figure 1 Stakeholders by sector



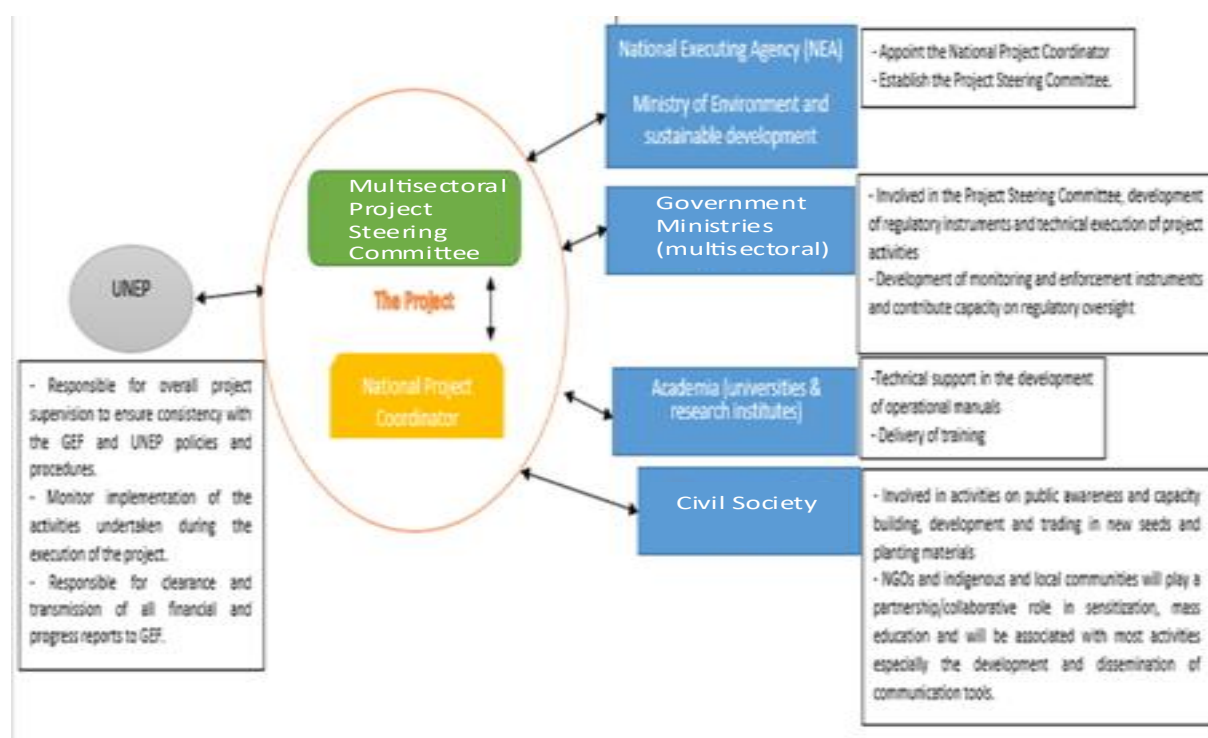
D. Project implementation structure and partners

75. Following the project design outlined in the ProDoc, The Ministry of Environment and Sustainable Development (MESD), in its role as the National Executing Agency of the project, has established the Project Steering Committee (PSC). The Committee was composed of high-level representatives of sixteen institutions: four members of the MESD (including the Chairman, the National Project Coordinator (NPC), and one member from each of the following – Ministry of Environment and Sustainable Development (MESD), Ministry of Commerce, Handicraft, and Tourism, Ministry of Education, Ministry of Finance, Ministry of Fisheries and Maritime Economy, Ministry of Habitat, Urban Affairs and Territorial Administration, Ministry of Health, Ministry of Rural Development, faculty of sciences of the University of Nouakchott, Ecole Nationale de l'Enseignement Supérieur, Ministry of the Interior and Decentralisation, Ministry of Transport and Infrastructure, National Centre for Agricultural Research, National Institute for Public Health Research, National Veterinary Research Center, and the Mauritanian Institute of Oceanographic and Fisheries Research. It was envisaged that the PSC would also serve as the National Biosafety Committee (NBC). However, this was not feasible because the NBC is a legally constituted committee, and the relevant legislation was only passed at the end of the project.

76. The Project Steering Committee has been very active during the project, with about ten meetings from 2016 to 2022. The PSC has continued to meet following project closure. The PSC forms the basis for the National Biosafety Commission and its scientific arm as created by the Biosafety Law (Chapter IV, Section D).

77. The NPC, with the support of a Project Financial and Administrative Officer, constituted the Project Coordination Unit (PCU), which has been responsible for the coordination and supervision of all the activities of the project, such as the preparation of work plans and budgets, communication with authorities and stakeholders, organisation and supervision of consultancies, and monitoring and reporting to UNEP. Universities and research institutes provided technical support in the development of operational manuals and the delivery of training. Civil society organisations were involved in public awareness and capacity building activities. These roles and responsibilities are summarised in the project organisational chart reproduced below.

Figure 2 Organigram of the project with key project stakeholders



E. Changes in design during implementation (including responses to mid-term assessments, where appropriate)

78. The project has been granted nine Budget Revisions, which have been primarily used for reallocating unspent money and did not substantially change the project design. The Project was also granted two no-cost extensions (a total of 30 months), the first of which was given for 18 months until December 2020 (for Technical Completion) for several reasons, including the death of the former National Project Coordinator, Mr Cheikh Sidi Mohamed, and delayed recruitment of consultants due to a lack of biosafety competency. A second extension was granted for 12 months until December 2021 (for Technical Completion) and June 2022 for Administrative Closure because of the impact of the COVID-19 pandemic and difficulties encountered with the cumbersome national procurement procedures.

79. As discussed under Effectiveness (Chapter V, Section D), the project had to give up on targeting one key outcome - secondary legislation on biosafety finalized, approved and published - and find viable, adaptive solutions to pursue its expected results. Nonetheless, it is not considered that the project design has been changed since formulation.

F. Project financing

Table 5. GEF Budget at design and expenditures by Budget Line / Object of Expenditure

UNEP BUDGET LINE / OBJECT OF EXPENDITURE <i>All figures in USD</i>	Estimated cost at design	Actual Cost/ expenditure	Expenditure ratio (actual/planned)
10 PROJECT PERSONNEL	341,000	314,379.67	0.92
20 SUB-CONTRACT		34,000.00	N/A
30 TRAINING	331,500	272,896.48	0.82
40 EQUIPMENT & PREMISES	19,500	17,641.47	0.90
50 MISCELLANEOUS	186,000	239,082.38	1.29
Total	878,000	878,000.00	1.00

Table 6. Expenditure by Outcome/Output (GEF contribution)

Component/sub-component/output <i>All figures in USD</i>	Estimated cost at design	Actual Cost/ expenditure	Expenditure ratio (actual/planned)
Component 1: Establishment of Baseline for information on the safe use of biotechnology through stocktaking analysis	138,000	151,289.74	109.63%
Component 2: Development of a biosafety policy, administrative, regulatory and technical biosafety frameworks for Mauritania – in line with the CPB.	310,000	284,165.3	91.67%
Component 3: Public Awareness, Public participation and Education.	300,000	300,335.8	100.11%
Component 4: Project Monitoring and Evaluation	60,000	64,764.98	107.94%
Component 5: Project Management	70,000	77,444.21	115.63%
Total	878,000	878,000	100%

Table 7. Planned and actual sources of funding/co-financing

Funding source <i>All figures in USD</i>	Planned funding	% of planned funding	Secured funding	% of secured funding
Cash				
Funds from the Environment Fund	878,000	100%	878,000	100%
Funds from the Regular Budget				
Extra-budgetary funding (listed per donor):				
Sub-total: Cash contributions				
In-kind				
Environment Fund staff-post costs				
Regular Budget staff-post costs				
Extra-budgetary funding for staff-posts (listed per donor)				
Sub-total: In-kind contributions				
Co-financing*				
Co-financing cash contribution				
Co-financing in-kind contribution	950,000	100%	950,000	100%
Source: Government of Mauritania				
Sub-total: Co-financing contributions	950,000		950,000	100%
Total	1,828,000		1,828,000	100%

*Funding from a donor to a partner which is not received into UNEP accounts, but is used by a UNEP partner or collaborating centre to deliver the results in a UNEP – approved project

IV. THEORY OF CHANGE AT REVIEW

80. The reconstructed ToC, based on the project's design and logical framework (Project Results Framework, App. 4 of the ProDoc), aims to map the possible pathways of change between project outputs and the expected outcomes up to the intended impact, as well as identifying the main drivers and assumptions which have effects on the envisaged change process.

81. At the time of Project formulation, a ToC was not required. Moreover, the logframe format used only required the identification of results at the outcome level. It was possible, however, to identify the planned logical sequence of activities-outputs-outcomes, as activities and outputs ('deliverables') were defined in the App. 6 of the ProDoc (Key deliverables and benchmarks).

82. Based on an analysis of the Quality of Project Design (Chapter V, Section B), the ProDoc did not fully describe its expected results at different levels, and the logical sequence between Activities, Outputs and Outcomes was not discussed. Project Outcomes were not always clearly formulated in either the ProDoc or the Project Results Framework, and there were also inconsistencies between the two. In light of this, and considering UNEP's (2019) definitions of different results levels, project results have been partially reformulated/rephrased in the reconstructed ToC, which is discussed in the following sections and presented visually in Figure 3.

83. Some results labelled as outcomes were actually outputs (Outcome 1⁸ – *Inventory and assessment...*), while others were mixtures of outputs and outcomes (Outcome 2 – *Biosafety policy drafted...*, and Outcome 3 – *Enhanced public awareness tools/measures...*). Outcome 4 – *Tools to facilitate implementation of the Protocol are easily accessible ...* constituted a stand-alone outcome. Project components did not correspond with actual outcomes and were not always coherent, although overlap and interaction are inevitable in the real world. Component 1 corresponds to an activity and could be part of a larger component dealing with information. Component 2, in contrast, concerns diverse aspects of the biosafety framework including training which is also covered under Component 3. The pathways of change between outputs and outcomes were comprehensive and logical. However, because of the poor separation of outcomes and outputs and the lack of cohesion within components these pathways were sometimes difficult to disentangle.

84. To clarify the results chain, all outputs were grouped into four parallel impact pathways/'strategies' (1. Information, 2. Policy/structure/enabling environment, 3. Training, and 4. Awareness) which were reconstructed, in accordance with the project rationale presented in ProDoc Section 3.3.

85. Table 8 compares the project's results hierarchy for the results as stated in the ProDoc with those as formulated in the ToC at Review and provides justifications for the reformulation.

Table 8. Justification for Reformulation of Results Statements

Formulation in original project document(s)	Formulation for Reconstructed ToC at Review (RToC)	Justification for Reformulation
LONG TERM IMPACT:		
	Biodiversity is conserved in Mauritania	Not stated explicitly in the PD
INTERMEDIATE STATE 2:		
	Sustainable biosafety system mechanisms in place in Mauritania	Not stated explicitly in the PD
PRINCIPAL OUTCOME:		
	A transparent NBF in Mauritania	Not stated explicitly in the PD
INTERMEDIATE STATE 1:		
	Improved LMO decision-making capacity based on quality information, effective mechanisms, and enhanced public awareness.	Not stated explicitly in the PD
PROJECT OBJECTIVE:		
To assist Mauritania to update the status and capacity for the safe use of	To assist Mauritania to strengthen its capacity for the safe use of biotechnology	The abbreviated project objective is overarching

⁸ The numbering has been added for clarity. Outcomes were not numbered in the Results Framework.

Formulation in original project document(s)	Formulation for Reconstructed ToC at Review (RToc)	Justification for Reformulation
biotechnology and to strengthen Mauritania institutional capacity in the development and implementation of the National Biosafety Framework		and therefore covers updating the status for the safe use of biotechnology, and the strengthening of Mauritanian institutional capacity in the development and implementation of the NBF.
PROJECT OUTCOMES:		
1. Inventory of the current national human, technical and institutional capacities to implement a workable and effective biosafety management system in Mauritania.	1. Sufficient technical and institutional capacities to implement an effective biosafety management system based on quality information.	The inventory is an activity which contributes to the outcome.
2. Biosafety policy drafted and made available for approval and integration into National plans. System for handling of requests, carrying out risk assessment and decision making for LMOs including handling, storing and exchange of information in place.	2. Biosafety policy approved and integrated into National plans. 3. System in place for handling of requests, carrying out risk assessment and decision making for LMOs.	The original formulation is a mixture of outputs and outcomes. This has been reformulated into two outcomes.
3. Enhanced public awareness tools/measures and improved information flow to the public with regards to biosafety related issues through the national Biosafety Clearing House •Tools to facilitate implementation of the Protocol are easily accessible to all stakeholders through the BCH in line with the Cartagena Protocol on Biosafety	4. Enhanced public awareness of biosafety related issues	The original formulation is a mixture of outputs and outcomes. This has been reformulated into an outcome.
OUTPUTS:		
1. Stocktaking report on national biosafety capacity in Mauritania including existing national, bilateral or multilateral cooperative programs in capacity building.		
2. Assessment report including a review of all relevant legislations, policies and plans that may affect the use of modern biotechnology.		
3. A guiding paper on laboratory and technical requirements of a reference GMO detection reference laboratory		
4. Unified biosafety policy developed and approved by the government	Unified biosafety policy developed	The project cannot guarantee that the policy will be approved.
5. Primary and secondary legislation on biosafety finalized, approved and published.	Primary and secondary legislation on biosafety drafted	The project cannot guarantee that the legislation will be approved.
6. Training guideline on regulatory issues related to biosafety.	Training guideline on regulatory issues related to biosafety drafted.	The word 'drafted' has been added.
7. Roles, responsibilities of the different governmental institutions with regard to biosafety clearly identified and approved by the government.	7. Roles, responsibilities of the different governmental institutions with regard to biosafety clearly identified.	The project cannot guarantee that the roles and responsibilities will be approved.
8. National framework for conducting environmental risk assessment for LMOs prepared.		
9. National Biosafety Committee trained in Decision making procedures		
10. Inception workshop conducted		
11. Functional and updated national Biosafety Clearing House.	Functional and regularly updated national Biosafety Clearing House.	Added the word 'regularly' to indicate that the BCH is dynamic.

Formulation in original project document(s)	Formulation for Reconstructed ToC at Review (RToc)	Justification for Reformulation
12. Manual for using the BCH prepared.		
13. Representatives from key relevant institutions trained to use the Biosafety clearing house for searching and registering information.		
14. Public education and involvement plan highlighting mechanisms for stakeholder adequate involvement including civil society, academia and private sector developed		
15. Outreach materials on biosafety prepared and disseminated		
16. Enhanced public awareness tools/measures to facilitate implementation of the Protocol	16. Awareness raising and training workshops conducted to facilitate implementation of the Protocol	Rephrased to read more like an output and correspond to the accompanying activities.

86. A major project design weakness is an insufficient identification of risks and assumptions. According to the UNEP Glossary of Results Definitions (UNEP, 2019), assumptions are *significant external factors or conditions that need to be present for the realization of the intended results but are largely beyond the influence of the project and its partners* [emphasis added]. Assumptions are often positively formulated risks. Most of the risks identified in the results framework (e.g. *Update and putting in place of Mauritania NBF is carried out in isolation from national context and international obligations, Stocktaking activity is not well structured, does not target the right audience, and Quality of the workshops and outreach material is not satisfactory*) are largely under project control/influence. Only one of the 12 'risks' outlined in the Results Framework identifies external factors that could threaten the realisation of the intended results – *Regulatory regime cannot be easily finalised because of lack of government support*. All the accompanying 'assumptions' describe project quality management measures designed to improve delivery, e.g. *Careful planning of the stocktaking activity, Targeting the right participants, and Careful identification of the resource persons and participants*. Important assumptions relating to human and institutional capacity, possible poor governance systems, and public support for the biosafety process are described, albeit as risks, in ProDoc Section 3.5. (Risk analysis and risk management measures). There is no assumption relating to public participation in awareness raising activities, and no assumption that national legislation will be adopted and implemented despite the fact that this is a major premise for sustainability. Therefore, the following outputs to direct outcomes assumptions were added to the reformulated ToC (in red in Figure 3): *Legislation on biosafety is enacted, and Public participate in consultative activities*. The direct outcomes to principal outcome assumptions are all implicit in the ProDoc as conditions that need to be met for outcomes to emerge from project outputs. The assumption that *a base for financial/institutional sustainability is maintained after project closure* has been inserted between the principal outcome and impact (via an intermediate state) to emphasise the fact that this project is necessary but not sufficient for long-term impact.

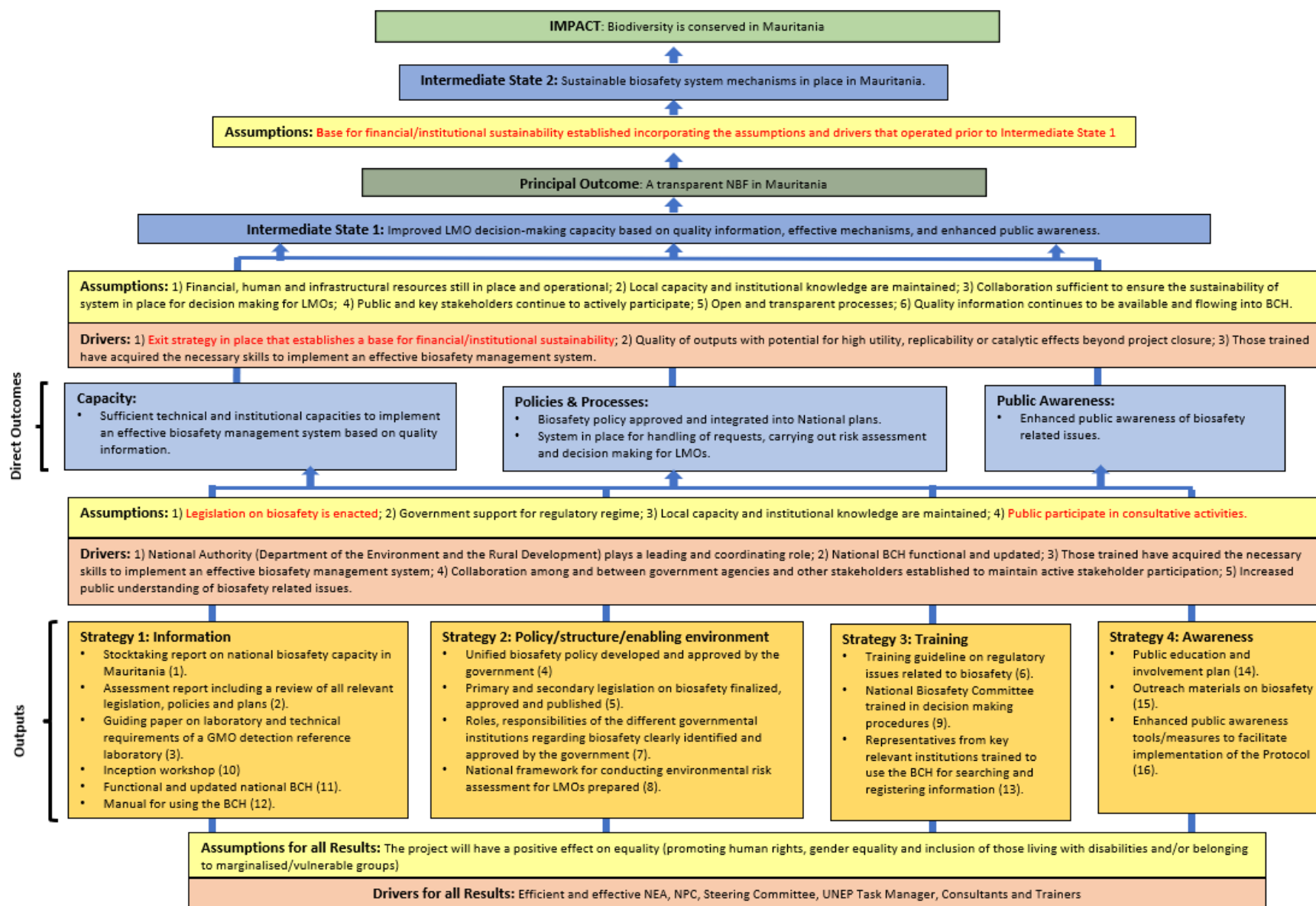
87. The drivers for all results, drivers between outputs and direct outcomes and drivers between the direct outcomes and principal outcome were all derived from the results framework and the project narrative, apart from *Exit strategy in place that establishes a base for financial/institutional sustainability*, which has been added. There are no drivers between the principal outcome and impact as this phase of the ToC would follow project closure.

88. Drivers and assumptions between direct outcomes and the main outcome relate to sustainability in its many dimensions. The drivers relate to an exit strategy as a base for financial/institutional sustainability, the quality and utility of outputs, and skill acquisition of those trained under the project. Assumptions relate to resource availability, capacity and institutional knowledge, collaboration and participation, transparency, and information quality.

The first intermediate state relates to the availability of improved LMO decision-making capacity as a basis for the principal outcome – *A transparent NBF in Mauritania*, which represents a small rewording of the main outcome or project objective in the ProDoc which is described as follows: *This project aims to assist Mauritania to have a workable and transparent NBF by the end of 2017 so as to fulfil its obligations as a Party to the CPB*. This transparent NBF will require a sustainability mechanism to be fully functional and sustainable. Hence, an additional intermediate state was inserted before Impact – *Sustainable biosafety system mechanisms in place in Mauritania*.

Figure 3 Reconstructed Theory of Change (ToC)

Text in red refers to drivers and assumptions not included in the ProDoc



V. REVIEW FINDINGS

89. The review findings are based on sound evidence and analysis, clearly documented in the report. Information has been triangulated as far as possible. The findings have been grouped according to review criteria rated on a six-point scale: Highly Unsatisfactory (HU); Unsatisfactory (U); Moderately Unsatisfactory (MU); Moderately Satisfactory (MS); Satisfactory (S); and Highly Satisfactory (HS). The set of nine review criteria are: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the availability of 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.

A. Strategic Relevance

Alignment to UNEP's UNEP Medium Term Strategy⁹ (MTS), Programme of Work (POW) and Strategic Priorities

90. The project spans three UNEP Medium-Term Strategies (2014–2017, 2018– 2021, and 2022– 2025) and four Biennial PoWs (Programme of Work), i.e. 2016–2017, 2018–2019, 2020–2021, and 2022–2023. Table 9 provides a summary of the contribution of the project to the Expected Accomplishments (EA) of Subprogramme 3 – Healthy and Productive Ecosystems, and Subprogramme 4 – Environmental Governance Sub-Programme under the three Medium-term Strategies.

Table 9. Contribution of the project to the Medium-Term Strategy (MTS)

Expected Accomplishment (EA)	Contribution of the Project
MTS 2014-2017, Sub-programme Environmental Governance, EA2: Law: The capacity of countries to develop and enforce laws and strengthen institutions to achieve internationally agreed environmental objectives and goals and comply with related obligations is enhanced.	Support for the implementation of the NBF Draft Biosafety Policy Draft Biosafety Law and Regulations, Guidelines
MTS 2014-2017, Sub-programme Ecosystem Management, EA1: Production: Increased use is made of the ecosystem approach in countries, with a view to maintaining ecosystem services and the sustainable productivity of terrestrial and aquatic systems.	Capacity building in risk assessment and management Capacity building and outreach activities for public awareness and information

91. Alignment to UNEP's MTS, POW and strategic priorities is rated **Highly Satisfactory (HS)**.

Alignment to Donor/GEF/Partners Strategic Priorities

92. The project strongly focuses on strengthening the capacity to implement the Convention on Biological Diversity objectives in line with GEF/Donor strategic priorities. It is a Medium Size Project (MSP) financed through GEF-5 under the Biodiversity Focal Area. It is relevant to GEF Biodiversity Strategic Programme 3 (BD-SP3): Building Capacity for the Implementation of the Cartagena Protocol on Biosafety.

93. Alignment to Donor/GEF/Partners Strategic Priorities is rated **Highly Satisfactory (HS)**.

⁹ 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>.

Relevance to Global, Regional, Sub-regional and National Priorities

94. The project strongly focuses on strengthening capacity and technology support building, considering international agreements in line with the Bali Strategic Plan.
95. Biosafety is of great relevance to Mauritania, as well as throughout the West Africa Region, as an inescapable component of Sustainable Development to be considered when planning the use of Genetically Modified Organisms (GMOs) for agricultural production (both for food security and market purposes), without harming the environment and the socio-economic context of traditional agriculture.
96. South-South collaboration is important in this area, highlighting the need to strengthen Mauritanian capacity to contribute to regional efforts to develop capacity in risk and impact assessment, risk management, monitoring the environmental effects of LMOs, and transboundary movement and exchange of materials. That being said, the principal project focus is on national priorities.
97. Alignment to Donor/GEF/Partners Strategic Priorities is rated **Highly Satisfactory (HS)**.

Complementarity with Existing Interventions/Coherence

98. The ProDoc states that the project provides opportunities for linkages with the Global Support Programme for advancing the National Adaptation Planning (NAP) process in LDCs via the potential for the safe use of biotechnology for further enhancement of drought-resistant crops. The ProDoc highlights the potential for synergies with the GEF-funded Mauritania LDCF Project - The Development of an Improved and Innovative Delivery System for Climate Resilient Livelihoods in Mauritania but the alignment and relevance are implied rather than explicitly stated.
99. Complementarity with Existing Interventions/Coherence is rated **Moderately Satisfactory (MS)**.

Rating for Strategic Relevance:	HS (Highly Satisfactory).
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B. Quality of Project Design

100. The Project Design Quality (PDQ) has been assessed in the Inception Report of the review through the detailed "Template for the assessment of the Project Design Quality (PDQ)", prepared by the UNEP Evaluation Office, which uses a numerical rating system based on the following six-point scale: Highly Satisfactory (6), Satisfactory (5), Moderately Satisfactory (4), Moderately Unsatisfactory (3), Unsatisfactory (2), Highly Unsatisfactory (1), also in use for the main review.
101. The Review of the Project Design Quality (PDQ) has been carried based on the Project Document (ProDoc) and its Appendices, particularly Appendix 1 (Budget), Appendix 3 (Incremental cost analysis), Appendix 4 (Results Framework), Appendix 5 (Workplan and timetable), Appendix 6 (Key deliverables and benchmarks), Appendix 7 (Costed M&E plan), Appendix 11 (Terms of Reference) Appendix 15 (Tracking tools). The project also underwent a needs assessment, identifying existing gaps in biosafety practices. This analysis helped to ensure that the project design was tailored to the specific context and challenges faced by the country.
102. The ProDoc is logically laid out and simple to follow with self-contained sections, albeit with some necessary duplications, as the content is complimentary and needs to be read as a whole. The logical thread that connects the baseline with the intervention strategy (alternative) is clear. However, as discussed in Chapter IV (Theory of Change at Review), the pathways of change described in the ProDoc are incomplete. The rating assigned to each of the review criteria is summarised in the table below, while the detailed review is presented in Inception Report Annex D (Completed matrix of the overall project design quality, PDQ). Every criterion has a rating (from 1 to 6), and each has a different weighting, with the final score being the product of them (last column). On this basis, the average score for the whole of the Project Design is 3.88 (**Moderately Satisfactory**).

Table 10. Summary of Project Design Quality (PDQ) scores (see Inception Report Annex D)

	SECTION	RATING (1-6)	WEIGHTING	TOTAL (Rating x Weighting/10)
A	Operating Context	3	0.4	0.12
B	Project Preparation	5	1.2	0.60
C	Strategic Relevance	5	0.8	0.40
D	Intended Results and Causality	4	1.6	0.64
E	Logical Framework and Monitoring	4	0.8	0.32
F	Governance and Supervision Arrangements	5	0.4	0.20
G	Partnerships	5	0.8	0.40
H	Learning, Communication and Outreach	5	0.4	0.20
I	Financial Planning / Budgeting	5	0.4	0.20
J	Efficiency	4	0.8	0.32
K	Risk identification and Social Safeguards	4	0.8	0.32
L	Sustainability / Replication and Catalytic Effects	4	1.2	0.48
M	Identified Project Design Weaknesses/Gaps	4	0.4	0.16
	TOTAL SCORE (Sum Totals)			4.36

Rating for Project Design: Satisfactory (S)

C. Nature of the External Context

103. Located in the Western Sahel, Mauritania is prone to persistent drought and encroaching desertification punctuated with periods of severe drought, flooding, and locust infestations. The World Food Programme estimated that half a million Mauritians (approximately 12% of the population) faced acute food insecurity in July and August 2020 due to the droughts that hit the region. These issues are likely to become accentuated by climate change, population growth, and increasing agricultural activities with concomitant overgrazing and deforestation.

104. The socio-political environment is also challenging, with a history of violent transitions from one president to the next. In addition, Mauritania has had to deal with increasing levels of armed group activities in its territory and over its borders. These developments have brought refugees to Mauritania, mainly from Mali, and have diverted scarce resources towards the military.

105. These negative developments are further compounded by the structural constraints of a very low population density, a very large territory, and a harsh climate. All these factors influence overall national priorities and socio-political focus, possibly diverting political interest towards issues that are perceived to be of greater urgency.

Rating for Nature of the external context: Moderately Unfavourable (MU)

D. Effectiveness

Availability of Outputs

106. The information provided in the "Final Project Output Summary", along with supporting evidence in the PIRs, was reviewed and organised according to the Theory of Change to highlight the linkages between Outputs and Immediate Outcomes, as documented in Table 8 (Chapter IV, Theory of Change at Review) and in Figure 3 (Causal logic from Outputs to Outcome).

Outputs related to **Strategy 1: Information** (Outputs 1,2, 3, 10, 11, and 12 in Figure 3)

107. **Stocktaking report on national biosafety capacity in Mauritania** (1). The report was completed in a timely manner by November 2016 following consultative meetings. The report shows evidence of wide consultation among both government stakeholders and stakeholders from research institutions and proposes an ambitious action plan to promote biotechnology in Mauritania to "contribute to the achievement of sustainable food security objectives of poverty reduction, accelerated growth and

shared prosperity." The accompanying budget for the five-year action plan is USD 7.11 million (about MRU 2.5 billion).

108. **Assessment report including a review of all relevant legislation, policies and plans** (2). This report was also completed in a timely manner, with the draft dated October 2016. It provides a comprehensive breakdown of relevant policies and institutions and indicates a very low capacity for LMO-related activities. The recommendations are somewhat generic in nature. The report includes a comprehensive draft Biosafety Bill.

109. **Guiding paper on laboratory and technical requirements of a GMO detection reference laboratory** (3). Drafted in July 2017, the report provides a generic Laboratory and technical requirements of a GMO Detection Reference Laboratory. There is no information on the laboratory situation in Mauritania, and how to scale up to an appropriate LMO Detection Facility. There is a reference to the fact that this information will be provided through national consultancy, but no such information was found in the submitted documents. No cost estimates were provided for the recommendations.

110. **Inception workshop** (10). Participation in the Inception Workshop (24 July 2016) was dominated by participants from the government sector. The recommendations included:

- The selection of participants in activities related to training should be based on the stakeholders' needs assessment (not achieved as there was no training needs assessment).
- *The duration of certain training activities may need to be extended* (not achieved, and in several cases, the training durations were less than planned).
- The experience of NGOs involved in the implementation of National programs should be considered in the implementation of this project (achieved with NGOs utilised as information dissemination organs).
- Seminars on basic biosafety information should be a first step toward public involvement in decision-making (this was achieved under the project).
- Public awareness should include different specified target groups and different tools should be used for different target groups (this was achieved with more generalised information being disseminated through NGOs, targeted awareness raising for decision-makers, and detailed technical material disseminated among researchers and technicians).
- *Biosafety should be included in relevant university curricula* (this was achieved by integrating biosafety into biological science courses provided by training and research institutions in Mauritania).
- *All project's manuals and guidelines should be made available on the biosafety website* (this was mostly achieved, but not all of these outputs have been made available - see below).

111. **Functional and updated national BCH** (11). The National Biosafety Website exists, but it is only partially functional. The downloads page contains links to 13 project outputs (eight documents and five communication tools for public participation, education and awareness on biosafety). In contrast, the other pages are scantily populated. The National correspondence page correctly refers to Mr Moussa Ba as the Clearing-House Mechanism National Focal Point, but the page on National Competent Authorities still lists the late project coordinator, Cheikh Ould Sidi Mohamed (last updated on 14 August 2019). There are no documents in the pages on decisions and declarations or risk assessments (in this case for logical reasons), and the page on capacity building contains a single reference to a regional "Training Workshop on New Tools for Risk Assessment and their Application in Decision-making Process for Testing and Deployment of New and Emerging Genetic Biocontrol Technologies" in September 2022 but nothing from the NBF Project. The list of experts contains only the name of one Egyptian expert, Mr Ossama Abdel-Kawy, whose details were entered in March 2016.

112. **Manual for using the BCH** (12). The Manual provided an overview of the BCH, details on how to search and register information on the BCH, how to use the BCH as an information resource to support Biosafety Decision-making, information on how to identify tools on the BCH and how to use them, and guidelines for collection, labelling and documentation.

Outputs related to **Strategy 2: Policy/structure/enabling environment** (Outputs 4, 5, 7, and 8 in Figure 3)

113. Unified biosafety policy developed and approved by the government (4). A consultant was contracted to draft the biosafety policy and design and to help conduct consultative meetings with the relevant stakeholders. The draft report was timely completed by March 2017. The output was flagged as completed in the 2018 PIR but subsequently revised as 90% complete until finally finalised during the 2021 to 2022 reporting period. Following numerous meetings and seminars with parliamentarians, the Biosafety Law (Law Number 2022-015) was officially promulgated by a unanimous Parliamentary vote on 4 August 2022, shortly after the project's technical completion. This promulgation was the culmination of a long consultative process during which attitudes towards LMOs among decision-makers changed from near blanket opposition with the widespread interpretation that LMOs were "anti-Islamic" to a consensus on the value of biosafety as a transparent risk-based approach to LMO management.

114. Primary and secondary legislation on biosafety finalized, approved and published (5). Activities contributing to this output follow a similar trajectory to the above, with the draft National Law on Biosafety documents completed in July 2017. The output was flagged as completed in the 2018 PIR but subsequently revised as 90% complete until finally finalised during the 2021 to 2022 reporting period. As reported above, the Biosafety Law was officially promulgated on 4 August 2022. The executive directives lagged behind with draft publication in 2021 and validation under the project in 2022. This project output forms the basis of executive directives, which are currently being finalised post-project.

115. Roles, responsibilities of the different governmental institutions regarding biosafety clearly identified and approved by the government (7). Published in July 2019, the internal manual on procedures for handling requests and decision-making on LMOs clearly establishes relevant roles and responsibilities. According to project reports, the manual was only reported as validated by the Steering Committee in the 2022 PIR.

116. National framework for conducting environmental risk assessment for LMOs prepared (8). Completed in October 2017 and August 2021, the Training Manual on GMO Detection and the National framework for conducting environmental risk assessment for GMOs form the basis for this output. The gap in time reflects the hiatus in project outputs between late 2017 and mid-2021 that coincided with the death of the previous project coordinator and the response to the COVID-19 pandemic.

Outputs related to **Strategy 3: Training** (Outputs 6, 9, and 13 in Figure 3)

117. Training guideline on regulatory issues related to biosafety (6). According to the 2021 PIR, A draft training guideline on regulatory issues related to biosafety has been validated and approved by the Steering Committee as of 30 June 2020 (10% Implementation status as of 30 June 2020 according to the 2020 PIR).

118. National Biosafety Committee trained in decision making procedures (9). Was scheduled to be held when all the key instruments were available. According to the 2022 PIR, the training of National Biosafety Committee Members on decision making procedures and relevant issues was conducted in the year ending 30th June 2022. However, no means of verification had been provided. This is an illustration of inadequate attention to detail during reporting (Chapter V, Section G), as the sort theoretical training was actually undertaken with members of the Project Steering Committee in view of the fact that the NBC had not yet been officially constituted. No report was produced.

119. Representatives from key relevant institutions trained to use the BCH for searching and registering information (13). A comprehensive training workshop was conducted by two international consultants from 30th May – 1st June 2022. However, there were only three national participants. The Task Manager recommended that those trained should set up another training to train others. This training is planned for 2024.

Outputs related to **Strategy 4: Awareness** (Outputs 14, 15, and 16 in Figure 3)

120. Public education and involvement plan (14). The Plan was drafted early in the project (October 2016) and included a highly ambitious costed Operational Plan for Communication on Biosafety in

Mauritania consisting of 18 tasks. These tasks were highly generic and had no clear objectives in mind. Instead, the project took a more pragmatic route of focusing on decision-makers and the research and academic community to help ensure the creation of a foundational biosafety framework.

121. **Outreach materials on biosafety** (15). Some outreach materials on Biosafety have been produced (three simple tri-fold brochures in French and English on biotechnology definitions, applications, and impacts). These were first reported in the 2018 PIR (output implementation status of 30%) with the same text used in each subsequent PIR (2019 – 60%, 2020 – 37%, 2021 – 40%, 2022 – 10%). These brochures represent the output of only one of the 18 tasks listed in the Public Education and Involvement Plan.

122. **Enhanced public awareness tools/measures to facilitate implementation of the Protocol** (16). This consisted of five activities: 1) Two Awareness raising workshops on biosafety policy (awareness seminars, workshops, debates and meetings for specific target groups, such as farmers and consumers on importance of biosafety) – no MoV; 2) Two Awareness raising workshops on the biosafety law and the biosafety executive directives – no MoV; 3) Public awareness workshop on the guideline on regulatory issues related to biosafety – no MoV; 4) Training workshop on the National framework for conducting environmental risk assessment for GMOs – Risk Analysis Framework for GMOs in Mauritania (August 2021), Guidelines for the Environmental Risk Assessment of Genetically Organisms in Mauritania (August 2021), and the Training Manual on Conducting Environmental Risk Assessment of Genetically Organisms in Mauritania (September 2021) were provided as MoV but no information was given on the training workshop dates and participants; 5) Training workshop on the manual on GMOs detection – The manual on GMOs detection (October 2017) produced under Output 8 was used as MoV but no information was given on the training workshop dates and participants.

Final remarks on Outputs achievement

123. The project has delivered an impressive number of outputs, most of which were formulated in a participatory manner with a high level of stakeholder involvement. This is noteworthy when considering not only the challenging socio-political and institutional context of the country but also the exceptional unforeseen factors that have caused a serious disruption to project operations (the death of the project coordinator in February 2018 and the 2020 lockdowns in response to the COVID-19 pandemic).

124. In addition to unforeseen circumstances, the overall socio-political environment, linked to a complex bureaucracy, has led to delays, meaning that it has often taken years for outputs substantially completed early in the project to be validated, thus reducing their utility. This tendency has diminished project momentum.

125. Faced with considerable obstacles, the National Executing Agency and its partners have, through adaptive management, delivered outputs that are potentially useful for the implementation of the NBF.

126. Availability of outputs is rated **Satisfactory (S)**.

Achievement of Project Outcomes

127. The Review assessed the extent to which the actual delivery of the Outputs has contributed to the institutional changes and systemic effects (Outcomes), resulting in a transparent National Biosafety Framework in Mauritania. On this basis, this section presents a qualitative analysis and interpretation of the Outcomes achieved in the light of the reconstructed Theory of Change (ToC) from Outputs to Outcomes, visualised in Figure 3

128. Outcome 1 **Capacity**: Sufficient technical and institutional capacities to implement an effective biosafety management system based on quality information has been partially achieved. Capacity among members of the Project Steering Committee and the Scientific and Technical Committee has been enhanced through project activities, but there is no evidence that this capacity is sufficient for effective biosafety management. There is some evidence that the capacity-building initiatives pioneered during this project have been replicated beyond the small group of trainees through high-level ministerial briefing meetings and the adoption of biosafety modules in degree-level courses. However, the fact that the National Biosafety Website has not been fully updated with project outputs, the Biosafety Clearing House contains no details of Mauritanian national biosafety experts, and the

lack of information provided in the Fourth National Report on the Implementation of the Cartagena Protocol on Biosafety (NR4), submitted in 2022, supports the assertion that technical and institutional biosafety capacity levels in Mauritania remains low.

129. Outcome 2 **Policies and Processes**: a) Biosafety policy approved and integrated into National plans; b) System in place for handling of requests, carrying out risk assessment and decision making for LMOs has been partially achieved. The Biosafety Law promulgated in 2022 was a major achievement for the project. There is a formal system for carrying out risk assessment and decision-making for LMOs. Given these achievements, it would seem logical to state that the Outcome has been fully achieved. However, given the capacity constraints outlined above, these mechanisms are unlikely to be effectively implemented.

130. Outcome 3 **Public Awareness**: *Enhanced public awareness of biosafety-related issues* has been partially achieved. The project made positive contributions towards this Outcome, including the production of an ambitious Public Education and Involvement Plan, the organisation of awareness-raising workshops, and the production of awareness-raising materials. However, the Public Education and Involvement Plan was only very partially implemented. This was a logical approach, given the foundational nature of the project and its focus on decision-makers. Comprehensive awareness-raising activities among the general public, as advocated in the Public Education and Involvement Plan, would likely serve little purpose if not accompanied by tangible action on the ground.

Final remarks on Outcomes achievement

131. The Mauritanian Biosafety Framework began at a very low baseline but has progressed despite a challenging context. The scores presented by the Project Team in the Initial, and Final Biosafety Tracking Tools objectively reflect this positive progress. They were, respectively, 3/32 (03 September 2015), and 17/32 (31 December 2022). There was no Tracking Tool submission at mid-term, which would have helped shed more light on the pattern of progress.

132. The following Outputs to Direct Outcomes Assumptions held – 1) Legislation on biosafety is enacted; and 2) Government support for regulatory regime; while the remaining two only partially held – 3) Local capacity and institutional knowledge are maintained; and 4) Public participate in consultative activities. Two of the four drivers held – 1) National Authority plays a leading and coordinating role; and 4) Collaboration among and between government agencies and other stakeholders established to maintain active stakeholder participation; while the remaining drivers were partially fulfilled – 2) National BCH functional and updated; 3) Those trained have acquired the necessary skills to implement an effective biosafety management system; and 5) Increased public understanding of biosafety related issues.

133. Despite the challenging context, it was clear that intended Outcomes did partially emerge from Project Outputs.

Likelihood of Impact

134. The possible pathway from the Project Outcome to the intended Impact has been discussed in Chapter 4 and visualised in Figure 3. As explained, the conditionality of the overall socio-political and institutional context is extremely strong and can be unmanageable for a circumscribed and seemingly arcane agenda like biosafety, at present, in Mauritania.

135. However, in the case of Mauritania, it appears that the national administration is strongly convinced of the importance of biosafety for sustainable development, as evidenced by the promulgation of the Biosafety Law in 2022 and the allocation of MRU 2 million (approximately USD 50,000) in the 2024 national budget for the finalisation of the implementing regulations ("textes d'application") of the Biosafety Law.

136. All six of the Direct Outcomes to Intermediate State Assumptions held and one of the three Drivers held – Quality of outputs with potential for high utility, replicability or catalytic effects beyond project closure. Although there was no exit strategy in place to establish the base for financial/institutional sustainability, the continued government support for biosafety indicates that there is a willingness to build on the momentum of the project even in the absence of substantial external donor funding. It would be surprising if the third driver (those trained have acquired the necessary skills to implement an effective biosafety management system) held in the absence of a

more in-depth capacity building programme which could be catalysed through a larger externally funded follow-up project.

137. Nonetheless, Mauritania faces huge challenges in priority sectors like Health, Education, and National Security, which may jeopardise Government support for the implementation of the Biosafety Framework. Mauritania scores 156 out of 189 countries in the Human Development Index and 150 out of 159 on the Human Capital Index. Therefore, regional and international support must still play a major role in maintaining biosafety on the national agenda if outcomes are to be translated into impact.

138. The Likelihood of Impact is rated **Moderately Likely (ML)**.

Rating for Effectiveness: Satisfactory

E. Financial Management

139. The Project has satisfactorily managed financial aspects. Financial reports have been prepared regularly, and appropriate administrative procedures for procurement have been adopted. Nine Budget Revisions have been prepared and approved, mainly for the reallocation of unspent money without substantive changes in budget lines. Overall, Financial Management is rated **Highly Satisfactory** (see tables below).

Table 11. Expenditure by Outcome/Output¹⁰

Component/sub-component/output <i>All figures in USD</i>	Estimated cost at design	Actual Cost/ expenditure	Expenditure ratio (actual/planned)
1. Establishing baseline for information on the safe use of biotechnology through stocktaking analysis	138,000	151,289.74	109.63%
2. Development of a biosafety policy, administrative, regulatory and technical biosafety frameworks for Mauritania in line with the CPB	310,000	284,165.3	91.67%
3. Public Awareness, Public participation and Education	300,000	300,335.8	100.11%
4. Monitoring and Evaluation	60,000	64,764.98	107.94%
5. Project Management	70,000	77,444.21	115.63%
Total	878,000,000	878,000	100%

Table 12. GEF Budget at design and expenditures by Budget Line / Object of Expenditure (31/12/2022). Includes USD44,794.62 of committed funds¹¹

UNEP BUDGET LINE / OBJECT OF EXPENDITURE (<i>All figures as USD</i>)	Estimated cost at design (USD)	Actual Cost	Expenditure ratio (actual/planned)
10 PROJECT PERSONNEL	341,000.00	314,379.67	0.92
20 SUB-CONTRACT	0.00	34,000.00	N/A
30 TRAINING	331,500.00	272,896.48	0.82
40 EQUIPMENT & PREMISES	19,500.00	17,641.47	0.90
50 MISCELLANEOUS	186,000.00	239,082.38	1.29
Total	878,000.00	878,000.00	1.00

Adherence to UNEP's Financial Policies and Procedures

140. The project has **Highly Satisfactorily** complied with UNEP's Financial Policies and Procedures (see table below).

¹⁰ This information is also provided in Table 6

¹¹ This information is also provided in Table 5

Table 13. Adherence to UNEP's Financial Policies and Procedures

Financial management components:	Rating	Evidence/ Comments
1. Adherence to UNEP's policies and procedures:	HS	
Any evidence that indicates shortcomings in the project's adherence to UNEP or donor policies, procedures or rules	No	• Periodic expenditure reports provided. • Final financial statement prepared (all in ANUBIS). • Project complied with UN procurement procedures. • Project has undergone five successful audits – 2017, 2018, 2019, 2020, and a final audit (reports in ANUBIS)

Completeness of Financial Information

141. Completeness of financial information was **Satisfactory** (see table below).

Table 14. Completeness of Financial Information

Financial management components:		Rating	Evidence/ Comments
2. Completeness of project financial information:		S	
Provision of key documents to the reviewer (based on the responses to A-H below)		Yes/No or N/A	
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	Co-financing and Project Cost's tables at design (by budget line) available in ANUBIS.
B.	Revisions to the budget	Yes	Revisions to the budget in ANUBIS
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	The PCA and its amendment. Co-financing letters and all relevant project legal agreements in ANUBIS
D.	Proof of fund transfers	Yes	All proofs of fund transfers in ANUBIS
E.	Proof of co-financing (cash and in-kind)	No	The co-financing total stated in the Terminal Report, but no details are provided
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	Summary reports on project expenditures by budget line provided through financial reports in ANUBIS
G.	Copies of any completed audits and management responses (<i>where applicable</i>)	Yes	Completed audits available in ANUBIS
H.	Any other financial information that was required for this project (list):	N/A	

Communication Between Finance and Project Management Staff

142. Communication between finance and project management staff was **Highly Satisfactory** (see table below).

Table 15. Communication Between Finance and Project Management Staff

Financial management components:	Rating	Evidence/ Comments
3. Communication between finance and project management staff	HS	
Project Coordinator and/or Task Manager's level of awareness of the project's financial status.	HS	Project Coordinator and Task Manager fully aware of the project's financial status
Fund Management Officer's knowledge of project progress/status when disbursements are done.	HS	Fund Management Officer's aware of project progress/status when disbursements were done
Level of addressing and resolving financial management issues among Fund Management Officer and Project Coordinator/Task Manager.	HS	Financial management issues timely addressed
Contact/communication between Fund Management Officer, Project Coordinator/Task Manager during the preparation of financial and progress reports.	HS	Regular Contact/communication between Fund Management Officer, and Project Coordinator/Task Manager
Project Coordinator, Task Manager and Fund Management Officer responsiveness to financial requests during the review process	HS	Project Coordinator, Task Manager and Fund Management Officer responsive to financial requests during the review process

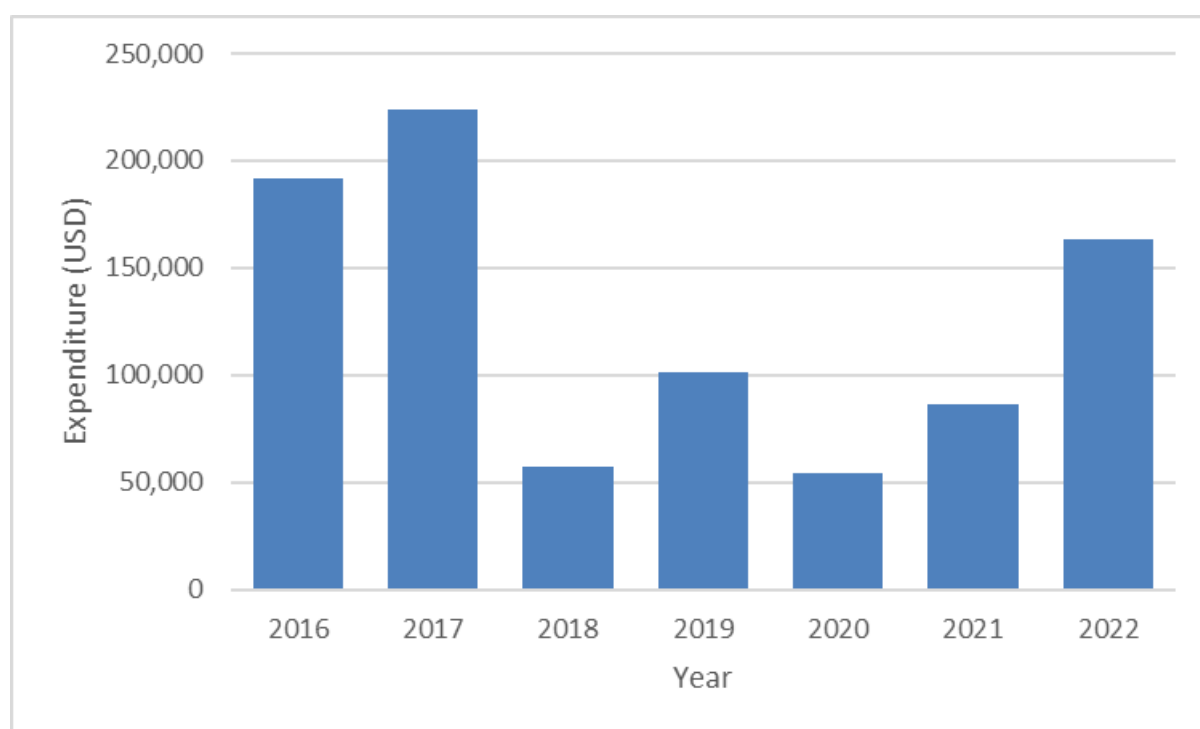
Rating for Financial Management: Highly Satisfactory

F. Efficiency

143. Despite some extenuating circumstances, the project has not been time-efficient (see diagram below). There was a reasonable rate of delivery for the first 15 months of the project (until October 2017). Subsequently, there were very few completed outputs from October 2017 to August 2021, a period during which the first Project Coordinator passed away, and the country went into lockdown because of the COVID-19 pandemic. This period spanned the original project termination date (June 2018) and included two no-cost extensions of 18 months and 12 months, respectively. Apart from unforeseen circumstances, the delays were related to bureaucratic inertia within the National Executing Agency / Competent National Authority and in the public sector as a whole.

144. As stated in the ProDoc: 'This project aims to assist Mauritania to have a workable and transparent NBF by the end of 2017'. The failure to do so mainly reflects the underestimation of the time taken to initiate legal and policy reforms. However, it also reflects unforeseen, inherent, and avoidable inefficiencies.

Figure 4 Flow of expenditures



145. 2018 saw a sharp drop in project outputs as the new project management team failed to get to grips with project administration. This inefficiency could have been addressed earlier, but it was tackled in the Task Manager's project supervisory mission before 30 June 2018 PIR, with the recruitment of a consultant International Project Financial and Technical Adviser to guide the project management team on project processes. The cumbersome nature of the recruitment process is illustrated by the fact that the International Adviser was recruited on 25 October 2018 and finally contracted on 01 January 2019. Nevertheless, this measure illustrates project adaptive management.

146. Another important adaptive management measure undertaken was the hiring of international consultants to help facilitate the following documents and accompanying training when it was clear that national capacity in Mauritania was not available - Laboratory and Technical Requirements for a GMO Detection Reference Laboratory; Training Manual on GMO Detection; National Framework for Conducting Environmental Risk Assessment for GMOs; Training Manual on Conducting Environmental Risk Assessment of Genetically Organisms in Mauritania; and Training Manual on the Use of BCH for Searching and Registering Information for Mauritania.

147. The project has achieved most programmed outputs within the secured budget. The budget allocated has been spent at 100%. The project has relied upon collaborative agreements and partnerships, building upon pre-existing networks and fostering synergies and complementarities.

Rating for Efficiency: Moderately Satisfactory (MS)

G. Monitoring and Reporting

Monitoring Design and Budgeting

148. The costed Monitoring and Evaluation (M&E) Plan (ProDoc Appendix 7) was budgeted at USD 60,000. This included USD 20,000 for a Mid-term Review/Evaluation, which was replaced by a Task Manager Project Supervisory Mission. The budget also included USD 25,000 for the Final Review and USD 15,000 for Auditing. Other monitoring was to be implemented through activities budgeted under other project outputs, such as the Project Inception Meeting, measurement of project indicators (Outcome Indicators at the start, mid and end of project and Progress/Performance Indicators annually) as part of NPC responsibilities, reports of PSC meetings, and the annual Project Implementation Report (PIR). The monitoring design and budgeting are considered to be adequate for

a project of this nature. However, as Chapter IV (Theory of Change at Review) indicates, the “outcome” indicators devised are mostly more suitable for activities and outputs.

149. Monitoring Design and Budgeting is rated **Moderately Satisfactory (MS)**.

Monitoring of Project Implementation

150. The Project Team has regularly monitored activity implementation and the achievement of outputs and indicators, though the results have not been monitored in-depth and insufficient attention has been paid to outcomes. This lack of depth has made it problematic to implement evidence-based changes to make the project more efficient and effective. Lack of available project coordination time, insufficient use of existing tools and insufficient understanding of the value of monitoring for results-based management, together with the cumbersome procedures in the government sector as a whole, have also made it difficult to follow up on monitoring results.

151. Project Steering Committee meeting notes would have been a useful vehicle for monitoring project implementation, but for six of the 10 meetings, minutes were not available, and even those notes that were taken lacked specifics that would serve project implementation monitoring purposes.

152. Project progress reports did not appear to reflect systematic monitoring rigour, being in most cases “copy and paste exercises” from previous iterations, with just a few lines updating activities/outputs. This lack of rigour is reflected in systematic inconsistencies between each PIR, with changes in the percentage of implementation frequently contradicting those reported in previous years. Therefore, the Project implementation data were incomplete and could not be used to validate indicators. Data collected were not disaggregated by vulnerable/marginalized groups, including gender.

153. The principal reporting instrument focussed on outcomes specific to biosafety projects is the “GEF Biosafety Tracking Tool”, which was scheduled for preparation at the project's beginning, and end. The baseline and end-of-project results provide a useful picture of the contribution of the project to an improved biosafety landscape. However, given the significant extensions of the project, it would have been very useful to have completed the Tracking Tool at the time of the first 18-month extension in June 2018 (the original project termination date). Failure to do so represents a lost opportunity.

154. Monitoring of Project Implementation is rated **Moderately Satisfactory (MS)**.

Project Reporting

155. The main instruments for monitoring implementation have been the workplans and the tools of the Project Implementation Report (PIR), which schematically address the project's level of progress towards its objectives and through its ratings of the percentage of implementation. In most instances, the Progress Reports have often been a “copy and paste exercise” from one report to the next, with just a few lines updating activities/outputs. There are systematic inconsistencies between each PIR, with changes in the percentage of implementation frequently contradicting those reported in previous years. However, the detail contained in project reports did improve towards the end of the project, possibly due to the inputs from the consultant International Project Financial and Technical Adviser. The Task Manager has provided continuous support and follow-up, but the comments are not extensive, and it is clear that the TM does not have sufficient time to provide comprehensive feedback on the numerous progress reports received all at once.

156. The value of the ANUBIS platform as a hub for project reports cannot be overemphasised. However, it could be improved with the addition of a data dashboard with standard infographics/data visualisation tools. This, of course, would require substantial upfront UNEP investment. This observation notwithstanding, most of the documentation available for this review has been through data posted in ANUBIS.

157. Project Reporting is rated **Moderately Satisfactory (MS)**.

Rating for Monitoring and Reporting:	Moderately Satisfactory (MS)
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H. Sustainability

158. The review has assessed the extent to which follow-up work has been initiated and how project results could be sustained and enhanced over time. Three aspects of sustainability have been addressed: a) Socio-political sustainability, b) Financial sustainability and c) Institutional sustainability.

Socio-political Sustainability

159. The project has provided substantive momentum in advancing various aspects of the biosafety agenda with a range of national partners. Those in governmental institutions, research and academia, certain NGOs and politics currently know much more about biosafety than they did seven years ago. This awareness is a precondition for socio-political sustainability.

160. Biosafety is likely to gain more support if it is clearly linked to the country's Biodiversity and Natural Resources Management programmes. There is virtually no reference to biosafety in the last National Biodiversity Strategy and Action Plan (2011 - 2020) nor in the Fifth National Report submitted in 2014. Therefore, the inclusion of Biosafety in the NBSAP can be a useful driver for the socio-political sustainability of the National Biosafety Framework.

161. Socio-political sustainability will also depend upon a transparent process of discussion, decision-making and implementation of the biosafety agenda at the national level, which has been reinvigorated during this project. This momentum has been maintained following project closure (Chapter V, Section D). So, it currently seems unlikely that Mauritania will face a situation reminiscent of that which followed the closure of the UNEP-GEF pilot country project in 2000, after which progress stagnated.

162. Socio-political sustainability is rated **Moderately Likely (ML)**.

Financial Sustainability

163. The allocation of national budgetary resources to biosafety in Mauritania is an impressive outcome. However, given the severe limitations of the national budget, biosafety will still need external support, and it would be valuable for national stakeholders to produce an exit strategy/resource mobilisation and fund-raising plan (Driver in Figure 3), most likely with external support such as under UNEP or through regional initiatives such as NEPAD or under bilateral cooperation.

164. Financial Sustainability is rated **Moderately Likely (ML)**.

Institutional Sustainability

165. The Ministry of Environment and Sustainable Development (MESD) has shown a high level of commitment to the project, and the senior representation of other ministries on the Project Steering Committee reflects its leadership on biosafety. The anchorage of Biosafety within the MESD Division of Multilateral Environmental Agreements is a positive factor. This highlights the international commitment and accountability of the country to its obligations under the Cartagena Protocol, which gives biosafety more institutional weight and relevance, hence sustainability.

166. Currently, MESD has no staff members working full-time on biosafety coordination. The ministry, therefore, is highly dependent on the activities of other government and research institutions and independent consultants. Building on the foundations of this project will require full-time staff commitment, which is unlikely to be funded by the core budget in the short term. This underscores the importance of a follow-up project to retain momentum.

167. Institutional Sustainability is rated **Moderately Likely (ML)**.

Rating for Sustainability: Moderately Likely (ML)

I. Factors Affecting Performance and Cross-Cutting Issues

Preparation and Readiness

168. The project's planned start date was January 2016, but it actually started on April 28, 2016. The first disbursement was in July 2016. Project coordination staff were appointed, and it was very important to have a high-level officer as the Project Coordinator. This enabled access to decision-makers, which was vital for a project of this nature. However, staffing arrangements did not provide for full-time project administrative positions, which would become a factor that negatively impacted day-to-day project management (Chapter V, Section D). Activities were programmed with an annual, costed workplan developed with appropriate detail; discussions with key partners were carried out, the Steering Committee was created, and twice-yearly meetings were planned. The Steering Committee had full, appropriate representation of governmental agencies that have mandates relevant to biosafety and the safe use of biotechnology and the scientific community. High-level officers sat on the PSC, and their participation was maintained for the duration of the project. However, representation of private sector and civil society stakeholders was lacking. An inception meeting was held and reported on.

169. Preparation and readiness is rated **Moderately Satisfactory (MS)**.

Quality of Project Management and Supervision

170. The Steering Committee was established, and functioning and high-level participation ensured effective inter-ministerial dialogue. A limited subset of reports/minutes were provided, so it is difficult to ascertain the degree to which members attended and contributed. Teams involved in the implementation of activities were managed moderately well with timely outputs, considering the delays caused by logistical and procedural factors (Chapter V, Section F). The working relationship between both Project Coordinators/TM and project partners has been constructive and effective, as evidenced by the long but productive process through which the Biosafety Law was adopted by Parliament and promulgated by the President of the Republic.

171. UNEP's technical and administrative advice and inputs were much appreciated throughout the project and beyond. The sudden need to change the Project Coordinator in 2018 led to a prolonged hiatus in project activities and problems getting to grips with project administration. The appointment of an International Project Financial and Technical Adviser at the start of 2019 helped to resolve the situation. This process was facilitated by the UNEP Task Manager (Chapter V, Section F). However, as reported elsewhere (Chapter V, Section G), the Task Manager's heavy workload prevented him from optimally facilitating project M&E.

172. Quality of Project Management and Supervision is rated **Moderately Satisfactory (MS)**.

Stakeholders Participation and Cooperation

173. This project's major focus was establishing a foundation for biosafety in Mauritania through the development of a biosafety framework. This involved a great deal of participation and cooperation with decision-makers from the governmental sector and technicians from academia and research. These groups were substantially engaged in all stages of the project. However, the involvement of the wider public was limited, and the Operational Plan for Communication on Biosafety in Mauritania was barely implemented. This reflects a targeted and strategic approach to project management rather than the mechanistic implementation of generic recommendations.

174. Stakeholders Participation and Cooperation is rated **Satisfactory (S)**.

Responsiveness to Human Rights and Gender Equality

175. In project reports, it has been repeatedly stated that "Engagement of women and youth in project delivery has improved. Ongoing efforts are being made to ensure more dedicated involvement of gender within the socio-economic setting of Mauritania where there are more men involved in the Life Sciences." This represents a superficial summary of the approach adopted among project stakeholders, reflecting the lack of depth in much of the project reporting (Chapter V, Section D). Gender disaggregated information on project participation was not collected, which is an omission. However, in a technical subject such as biosafety, it is important to work with appropriately qualified

and experienced personnel regardless of gender. Currently, this group is largely male in Mauritania. Encouragingly, there is gender parity among Mauritanian bioscience undergraduates, so the future gender makeup of those involved in biosafety is likely to be very different from that of today. This information came to light during interviews with those from the research community. The fact that this information was not provided in project reports further reflects their perfunctory nature. Human rights of disadvantaged groups, including those with specific needs due to vulnerability or marginalisation (e.g. through disability), are dealt with below under Environmental and Social Safeguards.

176. Responsiveness to Human Rights and Gender Equality is rated **Moderately Satisfactory (MS)**.

Environmental and Social Safeguards

177. The project did not explicitly address Environmental and Social Safeguards, including the human rights of disadvantaged groups. However, within the policy, legal and institutional measures that have been developed to guide LMO management of LMOs domesticate the environmental and social safeguards management in line with the obligations under the Cartagena Protocol on Biosafety. The key challenge addressed in this project is the need to establish a policy, regulatory, and administrative framework to assist in biosafety decision-making and ensure that environmental and social safeguards are adhered to when handling modern biotechnology products.

178. Environmental and Social Safeguards is rated **Satisfactory (S)**.

Country Ownership and Driven-ness

179. The project effectively engaged government / public sector agencies, with a breadth of agency involvement and consistency in the individuals of high seniority who were involved. The continued momentum from project outcomes towards intermediate states has demonstrated this ownership. The passing of the Biosafety Law and the securing of national funding for the completion of the implementing regulations provide evidence for the level of ownership generated by the project over outputs and outcomes, and that is necessary for long-term impact to be realised. This ownership, however, does not necessarily demonstrate adequate representation of the needs of interest of all gendered and marginalised groups.

180. Country Ownership and Driven-ness is rated **Satisfactory (S)**.

Communication and Public Awareness

181. The communication between project partners and interested groups has transformed the attitudes towards biosafety among decision-makers from a blanket rejection of biotechnology to one of support for a risk-based management system based upon a transparent decision-making process. This can be attributed to the project communication and awareness activities. Public awareness activities have been equally effective but have been necessarily limited in scope. It is highly unlikely that the project has substantially influenced attitudes or shaped behaviour among wider communities and civil society at large. More efforts could have been made in this direction, but they would have detracted from the project's strategic focus.

182. Communication and Public Awareness is rated **Moderately Satisfactory**.

Rating for Factors Affecting Performance and Cross-Cutting Issues:	Satisfactory
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VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

183. **The project has significantly contributed to the implementation of the Cartagena Protocol in Mauritania.** After a 16-year hiatus, from 2000, the project has reinvigorated the biosafety agenda in Mauritania through the production of quality outputs with potential for high utility, replicability or catalytic effects beyond project closure, a National Authority (Ministry of Environment and Sustainable Development) that is playing a leading and coordinating role, a functional National BCH, a number of stakeholders who have acquired the necessary skills to implement an effective biosafety management system, and improved collaboration among and between government agencies and other stakeholders established to maintain active stakeholder participation. There has also been a limited increase in public understanding of biosafety-related issues.

184. **The project has catalysed an attitudinal shift in decision-makers in Mauritania concerning the value of biosafety.** At the beginning of the project, there was widespread suspicion of all GMOs among decision-makers and other stakeholders outside the research community and that any biosafety programme was tantamount to an agenda that, among many individuals, was interpreted as being "anti-Islamic" (cross-reference). Through an intensive consultation process, project personnel and partners have catalysed an attitudinal shift in decision-makers in Mauritania concerning the value of biosafety as a transparent risk-based approach to LMO management. This shift was manifested in the unanimous Parliamentary vote to promulgate the Biosafety Law in August 2022.

185. **The project has established the basis for socio-political, financial and institutional sustainability.** In working with high-level decision-makers in concerned ministries and research bodies, the project has managed to create buy-in among government institutions and research and academic communities. The national budgetary allocation to finalise the implementing regulations for the biosafety law is a step in the direction of financial sustainability, although further international funding will be needed to build upon the results of this project. The leadership shown by the Ministry of Environment and Sustainable Development (MESD) and the high-level collaboration of the concerned ministries is an encouraging step towards institutional sustainability. However, increased MESD staff commitment to biosafety functions will be required to operationalise its coordination role.

186. The project management teams in UNEP and MESD should be congratulated on their tenacity and creativity in pursuing the project objectives. For a variety of reasons, the project could not make steady progress. The death of the original Project Coordinator and the consequences of the COVID-19-related restrictions were unavoidable setbacks. Insufficient capacity among national consultants and procedural delays also slowed project momentum. Adaptive management measures undertaken at the initiative of the UNEP Task Manager with the support of the Project Coordinator and a resolute focus on the project's principal objectives ensured successful execution, albeit with a considerable delay in delivery.

187. **Project management could have been more efficient and effective with more available quality staff time.** As outlined above, some of the delays were unavoidable, but others were due to inefficient project execution. Given the need for high-level discussions, the appointment of a senior official as the Project Coordinator was correct. However, there was a need for full-time project support to take care of day-to-day administration and backstopping. In the absence of this role, it was not possible to deal with every issue in a timely manner. Nor was there ever time to effectively implement a results-based management system. As a consequence, project reports lacked detail and precision and invariably failed to highlight project specificities, which could have enhanced stakeholders' understanding of the project process. The Task Manager's (TM) commitment is unquestioned, but his workload meant that he could not devote enough time to ensure adequate quality assurance.

188. Based on the above, the likelihood of the project results contributing to the achievement of the project's Principal Outcome, i.e. "A transparent NBF in Mauritania", looks Moderately Likely.

B. Summary of project findings and ratings

189. The table below provides a summary of the ratings and findings discussed in Chapter V. Overall, the project demonstrates a rating of 'Satisfactory'.

UNEP Evaluation Office Validation of Performance Ratings:

The UNEP Evaluation Office formally quality assesses (see Annex XIII) 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 assesses the quality of the Report at the 'Satisfactory' level and validates the overall project performance rating at the **'Moderately Satisfactory'** level.

Table 16. 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		HS	The rating is validated	HS
1. Alignment to UNEP MTS, POW and strategic priorities	Highly relevant to UNEP MTS, POW and Strategic Priorities, notably those related to environmental governance and ecosystem management.	HS	The rating is validated	HS
2. Alignment to Donor/Partner strategic priorities	Highly relevant to GEF-5 Biodiversity Strategic Programme 3: Building Capacity for the Implementation of the Cartagena Protocol on Biosafety.	HS	The rating is validated	HS
3. Relevance to global, regional, sub-regional and national environmental priorities	Strong focus on strengthening capacity and technology support building in line with the Bali Strategic Plan. Biosafety is relevant to Mauritania and the West Africa Region as a component of Sustainable Development to be considered when planning the use of GMOs for agricultural production without harming the environment and the socio-economic context of traditional agriculture.	HS	The rating is validated	HS
4. Complementarity with relevant existing interventions/coherence	Acknowledges coherence/complementarity with recent and ongoing interventions, but the complementarity is implied rather than explicit.	MS	The rating is validated	MS
Quality of Project Design	The ProDoc is logically laid out and simple to follow. The logical thread that connects the baseline with the intervention strategy is clear. However, the pathways of change described in the ProDoc are incomplete.	S	Whereas the report contains two contradictory ratings (Moderately Satisfactory in Para. 103 and Satisfactory in Table 10), the rating is validated in line with the weighted score for the criterion.	S
Nature of External Context	Low economic development levels, a very low population density, a very large territory, a harsh climate, and a challenging sociopolitical environment influence overall national priorities, possibly diverting political interest towards issues that are perceived to be of greater urgency.	MU	The rating is validated.	MU
Effectiveness		S	The rating is adjusted to ' Moderately Satisfactory ' based on a weighted aggregation of the sub-categories below.	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
1. Availability of outputs	An impressive number of outputs, most of which were formulated in a participatory manner with a high level of stakeholder involvement. This is noteworthy when considering Mauritania's challenging socio-political and institutional context and the exceptional unforeseen factors that have caused a serious disruption to project operations (the death of the project coordinator in 2018 and the 2020 COVID-19 pandemic responses). Delays have meant that it has often taken years for outputs substantially completed early in the project to be validated, thus reducing their utility.	S	The rating is validated.	S
2. Achievement of project outcomes	Despite the challenging context, it was clear that intended Outcomes did partially emerge from Project Outputs. All of the Outputs to Direct Outcomes Assumptions and Drivers held for at least partially held. A good progress indicator is an increase in the overall Biosafety Tracking Tool Score from 3/32 at the baseline to 17/32 at the end of the project.	S	All three outcomes were partially achieved (paragraphs 129 – 131). The rating is thus adjusted to ' Moderately Satisfactory ' in line with the Evaluation Office guidance contained in the Criterion Description Matrix.	MS
3. Likelihood of impact	The government appears to be strongly convinced of the importance of biosafety for sustainable development, as evidenced by the promulgation of the Biosafety Law in 2022 and the allocation of MRU 2 million (approximately USD 50,000) in the 2024 national budget for the finalisation of the implementing regulations of the Biosafety Law. Nonetheless, Mauritania faces huge challenges in priority sectors, which may jeopardise Government support for the implementation of the Biosafety Framework. Therefore, regional and international support must still play a major role in maintaining biosafety on the national agenda if outcomes are to be translated into impact.	ML	The rating is validated.	ML
Financial Management		HS	The rating is validated.	HS
1. Adherence to UNEP's financial policies and procedures	Project complied with UN procurement procedures. Periodic expenditure reports, final financial statement, and five successful audits (all in ANUBIS)	HS	The rating is validated.	HS
2. Completeness of project financial information	Financial reporting and auditing were timely and satisfactory. All relevant documentation is provided in ANUBIS. However, although the co-financing total was stated in the Terminal Report, no details are provided.	S	The rating is 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
3. Communication between finance and project management staff	Project Coordinator and Task Manager were fully aware of the project's financial status, Fund Management Officer's were aware of project progress/status when disbursements were done, financial management issues were timely addressed, and there was regular communication between Fund Management Officer, and Project Coordinator/Task Manager.	HS	The rating is validated.	HS
Efficiency	Despite some extenuating circumstances, the project has not been time-efficient. There was a reasonable rate of delivery for the first 15 months of the project. Subsequently, there were very few completed outputs from October 2017 to August 2021, a period during which the first Project Coordinator passed away, and the country went into lockdown because of the COVID-19 pandemic. Apart from unforeseen circumstances, the delays were related to bureaucratic inertia within the National Executing Agency / Competent National Authority and in the public sector as a whole. Nevertheless, the project has implemented adaptive management solutions to mitigate unfavourable circumstances, which has assisted in the achievement of most programmed outputs within the secured budget.	MS	The rating is adjusted to ' Moderately Unsatisfactory ' considering that the project had two 'no cost' project extensions for a period over one year. This is in line with guidance provided in the UNEP Evaluation Office Criterion description matrix.	MU
Monitoring and Reporting		MS	The rating is validated since adjustment of rating of one of the subcategories doesn't change the overall rating.	MS
1. Monitoring design and budgeting	The monitoring design and budgeting are considered to be adequate for a project of this nature. However, the "outcome" indicators devised are mostly more suitable for activities and outputs.	MS	The rating is validated.	MS
2. Monitoring of project implementation	The Project Team has regularly monitored activity implementation and the achievement of outputs and indicators, though the results have not been monitored in-depth and insufficient attention has been paid to outcomes. This superficiality has made it problematic to implement evidence-based changes to make the project more efficient and effective.	MS	The rating is 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. Project reporting	Most of the documentation necessary for this review has been through data posted in ANUBIS. However, the Progress Reports have mostly been a "copy and paste exercise" from previous iterations, with just a few lines updating activities/outputs. There are systematic inconsistencies between each PIR, with changes in the percentage of implementation frequently contradicting those reported in previous years.	MS	Paragraph 156 notes that there were 'systematic inconsistencies' in project reporting and reported data wasn't disaggregated by either gender or vulnerable groups. The above assessment is consistent with a 'Moderately Unsatisfactory' rating in line with guidance provided in the UNEP Evaluation Office Criterion description matrix. The rating is thus adjusted to ' Moderately Unsatisfactory '	MU
Sustainability		ML	The rating is validated.	ML
1. Socio-political sustainability	Those in governmental institutions, research and academia, certain NGOs and politics know much more about biosafety than they did seven years ago. This awareness is a precondition for socio-political sustainability.	ML	The rating is validated.	ML
2. Financial sustainability	The allocation of national budgetary resources to biosafety in Mauritania is an impressive outcome. However, given the severe limitations of the national budget, biosafety will still need external support.	ML	The rating is validated.	ML
3. Institutional sustainability	The Ministry of Environment and Sustainable (MESD) Development has shown a strong commitment to the project, and the senior representation of other ministries on the PSC reflects its leadership on biosafety. However, MESD has no staff members working full-time on biosafety coordination. Building on the foundations of this project will require full-time staff commitment, which is unlikely to be funded by the core budget in the short term. This underscores the importance of a follow-up project to retain momentum.	ML	The rating is validated.	ML
Factors Affecting Performance		S	The rating is validated.	S
1. Preparation and readiness	The project's planned start date was January 2016, but it actually started on April 28, 2016. The first disbursement was in July 2016. Project coordination staff were appointed, and it was very important to have a high-level officer as the Project Coordinator. However, staffing arrangements did not provide for full-time project administrative positions, which would become a factor that negatively impacted day-to-day project management	MS	The rating is 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
2. Quality of project management and supervision		MS	The rating is validated.	MS
2.1 UNEP/Implementing Agency:	UNEP's technical and administrative advice and inputs were much appreciated. This support is illustrated by the role played by the task manager in helping to bridge the hiatus left by the sudden need to change the Project Coordinator in 2018. However, the TM's heavy workload prevented him from optimally facilitating project M&E.	MS	The rating is validated.	MS
2.2 Partners/Executing Agency:	The Steering Committee was established, and functioning and high-level participation ensured effective inter-ministerial dialogue. A limited subset of reports/minutes were provided, so it is difficult to ascertain the degree to which members attended and contributed. Teams involved in the implementation of activities were managed moderately well with timely outputs, considering the delays caused by logistical and procedural factors	MS	The rating is validated.	MS
3. Stakeholders' participation and cooperation	This project's major focus was establishing a foundation for biosafety in Mauritania through the development of a biosafety framework. This involved a great deal of participation and cooperation with decision-makers from the governmental sector and technicians from academia and research. These groups were substantially engaged in all stages of the project. However, the involvement of the wider public was limited. This reflects a targeted and strategic approach to project management.	S	The rating is validated.	S
4. Responsiveness to human rights and gender equality	From project reports, it appears that human rights and gender equality issues had not been explicitly addressed. However, a nuanced picture of gender and biosafety, not captured in project reports, emerged during interviews. This reflects the lack of depth in project reporting. Human rights considerations are dealt with below under Environmental and Social Safeguards.	MS	The rating is validated.	MS
5. Environmental and social safeguards	The project did not explicitly address Environmental and Social Safeguards. However, within the policy, legal and institutional measures that have been developed to guide LMO management of LMOs domesticate the environmental and social safeguards management in line with the obligations under the Cartagena Protocol on Biosafety.	S	The rating is 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
6. Country ownership and driven-ness	The passing of the Biosafety Law and the securing of national funding for the completion of the implementing regulations provide evidence for the level of ownership generated by the project over outputs and outcomes, and that is necessary for long-term impact to be realised. This ownership, however, does not necessarily demonstrate adequate representation of the needs of interest of all gendered and marginalised groups.	S	The rating is validated.	S
7. Communication and public awareness	Communication between project partners and interested groups has transformed the attitudes towards biosafety among decision-makers from a blanket rejection of biotechnology to one of support for a risk-based management system based upon a transparent decision-making process. Greater effort could have been made towards communications with society at large, but they may well have detracted from the project's strategic focus.	MS	The rating is validated.	MS
Overall Project Performance Rating		S	The rating is adjusted to ' Moderately Satisfactory ' based on a weighted aggregation of the review criteria.	MS

C. Lessons learned

Lesson Learned #1:	The promulgation of the Biosafety Law and its accompanying policy is a significant achievement for the project, which should not be underestimated.
Context/comment:	At the time of project inception, there was a widespread fear among decision-makers of adopting a legal framework that was perceived as “pro-LMO”. It took many group and one-on-one meetings to discuss the details of biosafety and the Cartagena Protocol to change this perception from one of widespread opposition to 100% approval of a transparent risk-based LMO management system among Parliamentary deputies as enshrined in the legal instruments. The fact that so many projects fail to achieve legislative change is a testament to the success of this project in this regard. See Chapter V, Section D – Effectiveness.
Lesson Learned #2:	Project processes and results provide a solid foundation for an efficient and effective national biosafety system.
Context/comment:	The passing of the Biosafety Law and Policy and the accompanying buy-in among decision-makers, the establishment of a network which will be the basis of the National Biosafety Commission, and project technical outputs have elevated the biosafety baseline in Mauritania in line with the project objective (a workable and transparent NBF). However, as stated in the reconstructed Theory of Change, this will not result in Intermediate State 2 “Sustainable biosafety system mechanisms in place in Mauritania” unless the framework is actually implemented. Momentum has been maintained with the planned implementing regulations, funded from the national budget. However, more substantial funds are required for a second phase project to build biosafety implementation capacity among the key agencies. See Chapter V, Section D – Effectiveness.
Lesson Learned #3:	Developing a consensus in a novel field often takes more time than anticipated.
Context/comment:	Even if project activities had been implemented entirely as planned, it is very unlikely that they would have more effectively contributed to the intended outcomes. New ideas take time to communicate, especially considering that decision-makers face many other demands that compete for precious time and attention. These constraints need to be factored in when planning and executing biosafety projects and other projects of a similar nature. See Chapter V, Section B – Quality of Project Design - and Section D – Effectiveness.
Lesson Learned #4:	Despite unforeseen constraints, project execution could have been more time-effective.
Context/comment:	The project was initially planned for a 48-month duration but actually lasted 74 months (for technical completion). In addition to unforeseen circumstances, the overall socio-political environment, linked to a complex bureaucracy and approval processes, has led to delays. It has often taken years for outputs substantially completed early in the project to be validated, thus potentially compromising their utility. Timeliness has also been compromised because of insufficient project management capacity. These potentially preventable delays have diminished project momentum. See Chapter V, Section D – Effectiveness, and Section F – Efficiency.

Lesson Learned #5:	The process of developing a policy and law was an essential complement to the final product.
Context/comment:	At the beginning of the project, there was a great deal of opposition to the concept of LMOs among decision-makers, and biosafety was seen as a means of gaining blanket approval for the introduction of LMOs. The project provides a platform for discussions between the research community and decision-makers, which, over time, created a consensus on biosafety and a more nuanced attitude towards LMOs. This long process was an indispensable component of the knowledge-attitude-practice (KAP) sequence. See Chapter V, Section B – Quality of Project Design, D – Effectiveness, and H – Sustainability
Lesson Learned #6:	International technical support has significantly contributed to project efficiency and effectiveness.
Context/comment:	Executing a GEF project is often technically and administratively challenging. Under the guidance of the Task Manager, the project management helped address these challenges by recruiting international consultants. See Chapter V, Section B – Quality of Project Design, D – Effectiveness, and E – Financial Management.
Lesson Learned #7:	The available monitoring and evaluation tools have not been optimally utilised.
Context/comment:	The documents available in ANUBIS have been extremely useful in this review. However, in many instances, reports do not go into great depth and large sections are often copied and pasted from prior reports with only minor tweaks. This has led to informational inconsistencies/contradictions. In many instances (e.g. human rights and gender equality), responses are generic and do not reflect the realities on the ground. The non-use of the Biosafety Tracking Tool at mid-term represents a lost opportunity. See Chapter V, Section B – Quality of Project Design - and Section D – Achievement of Project Outcomes.
Lesson Learned #8:	The degree to which the project addresses human rights and gender equality cannot be a mechanistic exercise.
Context/comment:	The approach to reporting on human rights and gender equality was to repeat the same passages of generic text from report to report. This implies a lack of consideration of these issues, which may not actually be the case. The fact that gender-disaggregated data was not collected may reflect insufficient attention being paid to this issue. Equally, it may reflect the lack of an M&E mindset, as documented above. See Chapter V, Section G – Monitoring and Reporting, and Section I – Factors Affecting Performance and Cross-Cutting Issues.

D. Recommendations

Recommendation #1:	A second phase project is developed.
Challenge/problem to be addressed by the recommendation:	The project has established a basis for the development of a sustainable biosafety system for Mauritania, and measures have been put in place at the national level post-project to sustain the project's achievements. However, the capacity, in terms of technical know-how and infrastructure, remains insufficient for on-the-ground implementation of biosafety mechanisms. It is highly unlikely that Mauritania will be able to maintain the momentum established by this project in the medium term without external financial and technical support. If this support is not provided, the progress made during and immediately after this project is likely to be lost.
Priority Level:	High
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2025 – 2029
Cross-reference(s) to rationale and supporting discussions	See Chapter V, Section D – Effectiveness.

Recommendation #2:	Realistic activity timelines are produced.
Challenge/problem to be addressed by the recommendation:	Even accounting for unforeseen circumstances, this project would have overrun because legal and policy change tends to be a lengthy process, and government procedures are often cumbersome in many developing countries, including Mauritania. These are circumstances that are unlikely to change in the foreseeable future. Therefore, it is proposed that any follow-up project consider this experience during project planning.
Priority Level:	High
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2025 – 2029
Cross-reference(s) to rationale and supporting discussions	Chapter V, Section D – Effectiveness, and F – Efficiency.

Recommendation #3:	Recruit a full-time Biosafety Secretariat within the MESD.
Challenge/problem to be addressed by the recommendation:	Without diminishing Recommendation #2, it has been repeatedly observed that project efficiency has been hampered by the lack of full-time project support to take care of administration and backstopping. This situation needs to be addressed in any follow-up projects.
Priority Level:	High
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2025 – 2029
Cross-reference(s) to rationale and supporting discussions	Chapter V, Section D – Effectiveness, F – Efficiency, H – Sustainability, and I – Factors Affecting Performance and Cross-Cutting Issues.

Recommendation #4:	Optimise the utility of monitoring and evaluation systems.
Challenge/problem to be addressed by the recommendation:	Due to time and capacity constraints, results-based monitoring and evaluation systems were not utilised optimally – to provide evidence of results to meet accountability requirements, and to promote operational improvement, learning and knowledge sharing. Making better use of an M&E system will require technical training, mentoring, staff time and commitment/buy-in.
Priority Level:	High
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2025 – 2029
Cross-reference(s) to rationale and supporting discussions	Chapter V, Section F – Efficiency, G – Monitoring and Reporting.

Recommendation #5:	Explicitly include human rights and gender considerations in all stages of the project cycle in a context-specific manner.
Challenge/problem to be addressed by the recommendation:	Despite universally agreed principles, human rights and gender considerations are not always amenable to generic measures in specific projects in specific circumstances. Reporting on human rights and gender appeared to be a box-ticking exercise in this project, but when interviewing stakeholders, it appears that these issues had been addressed, at least implicitly. The implicit needs to be made explicit, which is likely to require training, mentoring, staff time and commitment/buy-in.
Priority Level:	High
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2025 – 2029
Cross-reference(s) to rationale and supporting discussions	Chapter V, Section I – Factors Affecting Performance and Cross-Cutting Issues.

Recommendation 6:	Document the process whereby the National Biosafety Law was successfully promulgated as a case study/good practice example.
Challenge/problem to be addressed by the recommendation:	Legal / policy change is an objective for many GEF projects but legislation is not passed in a high proportion of these projects. The process whereby the National Biosafety Law was successfully promulgated in Mauritania was not narrated in depth in project reports but was recounted in more detail during in-person interviews. This experience could be shared via an online publication, which could be of value to other projects operating in similar environments.
Priority Level:	Low
Type of Recommendation	Project, Partners
Responsibility:	Ministry of Environment and Sustainable Development and UNEP
Proposed implementation time-frame:	2024 – 2025
Cross-reference(s) to rationale and supporting discussions	Chapter V, Section D – Effectiveness, and I – Factors Affecting Performance and Cross-Cutting Issues.

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Table 17. Response to stakeholder comments received but not (fully) accepted by the reviewers, where appropriate

Page Ref	Stakeholder comment	Reviewer Response
Quality of Project Design (Paras 98 - 100)	PCU – It should be rated Highly Satisfactory. Based on: Comprehensive Needs Assessment The project underwent a thorough needs assessment, effectively identifying existing gaps in biosafety practices. This comprehensive analysis ensured that the project design was tailored to the specific context and challenges faced by the country. Alignment with UNEP/GEF Priorities The project aligns closely with UNEP and GEF strategic priorities which was reviewed by both reviewers from UNEP and GEF Clear Objectives and Outcomes The project design articulated clear, measurable objectives aligned with national and international biosafety goals. The logical framework provided a solid basis for tracking progress and outcomes, demonstrating a robust planning process.	Rating revised to Satisfactory. This rating was given at the Review Inception stage and was not challenged. However, the rating was revised based upon taking into consideration the Needs Assessment which was valuable but lacked detail (text added to para 99 & Table 10 revised),
Nature of the External Context (Paras 101 - 103)	PCU – It should be rated Favourable. Based on: The project design includes adaptive strategies that directly address the harsh environmental conditions, such as drought and desertification. By implementing sustainable land management practices, the project aims to enhance resilience in the face of climate change. The project emphasizes community involvement and local knowledge, which can empower populations to effectively cope with environmental stressors. The project aligns with national and regional strategies aimed at addressing food security and climate resilience. This alignment not only legitimizes the project but also positions it as a critical component of broader developmental goals, potentially garnering political support. By focusing on capacity building within local institutions and communities, the project seeks to strengthen governance and enhance the capacity to respond to socio-political challenges	Rating unchanged. This rating was given at the Review Inception stage and was not challenged. The PCU observations are acknowledged, and the efforts of the project management team are to be commended. However, the measures implemented can only mitigate the effects of external circumstances which, by their very nature, are not under the control of the project.
Effectiveness (Paras 104 - 136)	PCU – It should be rated Highly Satisfactory. Based on: The project produced a diverse range of outputs through participatory processes, enhancing their relevance and ownership. Key reports, like stocktaking and legislation assessment, were completed on time, providing valuable insights for biosafety in Mauritania. The promulgation of the Biosafety Law in 2022 represents a major milestone achieved through the project, marking a substantial shift in the regulatory landscape. This legislative success indicates significant progress towards establishing a robust biosafety framework.	Rating unchanged. Outputs were achieved but not necessarily always on time, nor were the quality of outputs of consistent excellence. Regarding outcomes, all project outcomes were not fully achieved assumptions for progress from project outputs to project

Page Ref	Stakeholder comment	Reviewer Response
	The project has improved stakeholder capacity and raised public awareness about biosafety issues, despite ongoing challenges. Initial training and awareness-raising laid the groundwork for future development, and the integration of biosafety into university curricula is a long-term benefit. The project successfully navigated significant challenges like political instability and the COVID-19 pandemic, demonstrating resilience and effective management. It established vital institutional frameworks for biosafety management, ensuring clarity in roles among governmental institutions. The project's outputs have high potential for replicability and catalytic effects, indicating the foundations can lead to further developments in biosafety practices. The government's commitment to the Biosafety Law, reflected in the allocation of budget, is crucial for its sustainability. The project also established a monitoring and evaluation framework, although not fully utilized, to assess progress and impact, which can be further developed for future initiatives.	outcome(s) did not hold fully, and drivers to support transition from outputs to project outcome(s) were not fully in place. Regarding likelihood of impact, all intermediate states were not fully achieved, all assumptions for the change process from intermediate state(s) to impact did not hold, and drivers to support transition from intermediate state(s) to impact were not fully in place.
Efficiency (Paras 141 - 145)	PCU – It should be rated Highly Satisfactory. Based on: The project demonstrated strong adaptive management by addressing challenges and utilizing resources effectively. It utilized its budget 100%, demonstrating a strategic allocation of resources. Collaborative partnerships and pre-existing networks allowed for efficient output delivery and synergies. The project achieved timely initial outputs, demonstrating effective planning and execution. Strategic recruitment of an International Project Financial and Technical Adviser was a strategic move to address capacity gaps. Comprehensive training initiatives, facilitated by international consultants, were developed to build long-term institutional capacity. The project successfully navigated challenges like the passing of the project coordinator and the COVID-19 pandemic, maintaining focus on objectives and implementing adaptive strategies. Despite delays, most programmed outputs were completed within the secured budget, demonstrating the project's resilience. The project contributed to the development of essential institutional frameworks for biosafety, demonstrating strategic planning. The outputs have the potential for long-term impact, demonstrating the project's strategic foresight and efficiency in resource utilization. The project shows substantial strengths in adaptive management, financial utilization, collaborative efforts, and the achievement of significant outputs, even amidst challenges. These factors collectively suggest that the efficiency of the project should be rated as Highly Satisfactory, recognizing the effective management and delivery of results under difficult circumstances.	Rating revised to Moderately Satisfactory based on the evidence of the application of cost-effective approaches to support the achievement of project targets (as outlined in paragraphs 146-148). However, the intended (first approval) timeframe was not on schedule to be implemented within the timeframe even before the much-documented extenuating circumstances – death of the original Project Coordinator in and the impact of the COVID-19 pandemic (as outlined in paragraphs 66 and 78). Many of the training initiatives were implemented very late in the project, for a short duration, and were delivered to very small groups of trainees (paragraphs 119-120 and 129).
Monitoring and Reporting (Paras 146 - 155)	PCU – It should be rated Satisfactory. Based on: The project demonstrates notable strengths in engaging expertise, maintaining regular monitoring activities, and recognizing areas for improvement. The project team engaged in several key improvements to improve monitoring and reporting practices. The International Project Financial and Technical Adviser was recruited to provide guidance in complex project administration. The budget allocated for the Monitoring and Evaluation (M&E) Plan was reasonable, and the project engaged in regular monitoring activities. Existing tools were utilized, such as the Project Inception Meeting and annual Project Implementation Reports (PIRs), to integrate monitoring into the project's operational	Rating revised to Moderately Satisfactory based on evidence to support the key improvements to monitoring and reporting practices (paragraph 156 including updated text). However, a rating of Satisfactory cannot be justified because of the inconsistency representing progress (for example, copy and paste errors in routine reports) and the lack of

Page Ref	Stakeholder comment	Reviewer Response
	processes. The GEF Biosafety Tracking Tool was developed, providing valuable insights into the project's contributions to the biosafety landscape. The team recognized challenges and took proactive steps to overcome them. Structured documentation, such as meeting notes and work plans, was used to maintain records of project activities. The review identified areas for improvement, which can be leveraged for future projects. The ANUBIS platform was called for improvements, including a data dashboard, to enhance monitoring capabilities. The Task Manager's continuous support demonstrates a commitment to ensuring compliance with monitoring and reporting processes, demonstrating diligence in project oversight.	disaggregated data including gender and minority/disadvantaged groups (paragraphs 153, 156 and 176).
Sustainability (Paras 166 - 165)	PCU – It should be rated Highly Likely. Based on: acknowledging the robust foundations established and the ongoing commitment from various stakeholders. The project has significantly increased awareness and knowledge about biosafety among key stakeholders, creating a strong foundation for ongoing support and advocacy for biosafety initiatives. The momentum generated during the project has been maintained post-closure, suggesting stakeholders are committed to continuing the biosafety agenda. The project's integration with national strategies, the Ministry of Environment's commitment, the allocation of national budget resources, and support for external resource mobilization are all indicators of institutional sustainability. The anchoring of biosafety within the MESD's Division of Multilateral Environmental Agreements strengthens the institutional framework, aligning with international commitments. The groundwork laid by the project provides a solid basis for future initiatives, and the potential for replication in other regions or sectors can amplify its impact. Aligning with regional initiatives like NEPAD or bilateral cooperation can enhance resource mobilization and support for biosafety in Mauritania, contributing to long-term sustainability.	Rating unchanged. The progress made by the project is commendable and has been acknowledged. However, using the evaluation criteria related to dependency on social/political factors and measures taken to mitigate this dependency, it is clear that the dependency is high and mitigation measures have been substantial but certainly not 100%. It is also clear that sustained benefits will depend on future funding requirements which have not been completely secured. Institutional support has been impressive but it is clear that staff capacity and continuity remain an issue
Factors Affecting Performance and Cross-Cutting Issues (Paras 166 - 180)	PCU – It should be rated Highly Satisfactory. Based on: The project demonstrated strong preparation and coordination, with a high-level officer appointed as Project Coordinator and a Steering Committee with appropriate representation. Despite challenges, the project maintained effective management practices, demonstrating a proactive approach to ensuring project success. High-level stakeholder engagement was successful, fostering inter-ministerial dialogue and demonstrating strong ownership and commitment from key decision-makers. The project's focus on establishing a biosafety framework led to tangible outcomes, such as the promulgation of the Biosafety Law, demonstrating the effectiveness of the project in advancing biosafety in Mauritania. The project successfully transformed attitudes among decision-makers from opposition to support for biotechnology, laying the groundwork for a more favourable policy environment for biosafety. The project laid the foundation for future stakeholder participation and cooperation, creating a platform for ongoing dialogue and collaboration. The project's commitment to gender and human rights reflects a forward-looking approach. Alignment with national priorities enhances its relevance and sustainability, increasing the likelihood of continued support from government entities. Effective communication strategies were employed, engaging decision-makers and creating a supportive environment for biosafety initiatives. The outcomes achieved create a foundation for broader societal impacts in the future.	Rating unchanged. In terms of preparation and readiness the project fulfils the criteria for a Highly Satisfactory rating. However, in terms of quality of project management and supervision sufficient evidence to support the case for effective steering committee oversight meetings was not available.

ANNEX II. REVIEW FRAMEWORK/MATRIX

REVIEW CRITERIA	REVIEW INDICATORS	MEANS OF VERIFICATION
A. Strategic relevance: Extent to which the activity is suited to the priorities and policies of the target group, recipient and donor		
<i>i. Alignment to the UNEP Medium Term Strategy (MTS) and Programme of Work (POW)</i>		• Described in the assessment of project design quality (PDQ)
<i>ii. Alignment to UNEP /GEF/Donor Strategic Priorities</i>		
<i>iii. Relevance to Regional, Sub-regional and National Environmental Priorities</i>		
<i>iv. Complementarity with Existing Interventions</i>		
B. Quality of Project Design		
C. Nature of External Context		
D. Effectiveness: Achievement of outputs, achievement of direct outcomes and likelihood of impact		
<i>i. Achievement of outputs</i>		
Outputs: How successful was the project in producing the programmed outputs, both in quantity and quality, as well as their usefulness and timeliness?	• Output level indicators of Results Framework (including outcome indicators that are actually output indicators)	• Project progress reports/PIR • Tangible products (publications, studies, manuals, TORs, etc.) • Interviews with program staff, partner organisations, project beneficiaries
<i>ii. Attainment of Direct Outcomes</i>		
<u>Capacity:</u> To what extent and how effectively did the project training – and information – related outputs contribute to increased technical and institutional capacities to implement an effective biosafety management system based on quality information?	• Outcome level indicators: Indicators classified under Information: By project end biosafety management system in place based upon quality information produced by the project. Indicators classified under Training: By project end there is sufficient technical and institutional capacity in place to implement an effective biosafety management system.	• Project progress reports/PIR • Tangible products (publications, studies, manuals, TORs, etc.) • Interviews with program staff, partner organisations, project beneficiaries
<u>Policies & Processes:</u> To what extent and how effectively did the Policy/structure/enabling environment-related outputs contribute to: • An approved Biosafety Policy integrated into National plans? • A system in place for handling of requests, carrying out risk assessment and decision making for LMOs?	• Outcome level indicators: Indicators classified under Policies & Processes: By project end a unified biosafety policy is approved by the government; Primary and secondary legislation on biosafety is finalized, approved and published.	• Project progress reports/PIR • Tangible products (publications, studies, manuals, TORs, etc.) • Interviews with program staff, partner organisations, project beneficiaries

REVIEW CRITERIA	REVIEW INDICATORS	MEANS OF VERIFICATION
	By project end roles and responsibilities of the different governmental institutions with regard to biosafety clearly identified and approved by the government.	
<u>Public awareness:</u> To what extent and how effectively did the awareness-related outputs contribute to enhanced public awareness of biosafety related issues?	• Outcome level indicators: Indicators classified under Awareness: By project end biosafety awareness levels of target groups have been tangibly enhanced.	• Project progress reports/PIR • Tangible products (publications, studies, manuals, TORs, etc.) • Interviews with program staff, partner organisations, project beneficiaries
<i>iii. Likelihood of impact</i>		
<u>Assumptions:</u> To what extent did the project assumptions stated in the results framework and those in the reconstructed ToC hold?	• Level of compliance with assumptions	• Project progress reports/PIR (Project Implementation Review) • Interviews with project staff, key stakeholders • Analysis of Review of Outcomes to Impacts (ROtI) vs. project results
<u>Drivers:</u> To what extent did the project drivers stated in the results framework and those in the reconstructed ToC hold?	• Level of compliance with drivers	• Project progress reports/PIR • Interviews with project staff, key stakeholders • Analysis of ROtI vs. project results
<u>Catalytic role:</u> To what extent did the project create opportunities for particular individuals or institutions ("champions") to catalyse change without which the project would not have achieved all of its results?	• Number of identified follow up initiatives by partner organizations or individuals to replicate lessons from project • Degree of participation of new relevant institutional stakeholders	• Interview with project staff and key stakeholders • Leveraged financing
<u>Replication or scaling up:</u> Are lessons and experiences from the project being replicated or scaled up? What are the factors that may influence replication and scaling up of project experiences and lessons?	• Documented examples of replication or up-scaling	• Interviews with project staff, key stakeholders • Reports and publications by other institutions
E. Financial management		
<u>Completeness:</u> How complete is the financial information provided by the project?	• Level of completeness and accuracy of reports	• Project financial reports • Interviews with project staff

REVIEW CRITERIA	REVIEW INDICATORS	MEANS OF VERIFICATION
<u>Communication</u> : How complete was the communication between financial and project management staff?	• Perception of effectiveness of communication between financial and project management staff	• Project financial reports • Interviews with project staff
<u>Compliance</u> : To what extent did the project comply with the relevant UN financial management standards and procedures?	• Number of cases of irregularities reported	• Project financial reports • Interviews with project staff
F. Efficiency: Cost-effectiveness and timeliness of project execution		
<u>Connectedness</u> : Did the project build adequately on existing institutions, lessons of other initiatives, data sources, partnerships with third parties and ongoing projects?	• Level of inclusion of pre-existing initiatives and institutions	• Project document • Interviews with key stakeholders (pre-existing initiatives and institutions) • Evaluation of project design
<u>Timeliness</u> : To what extent did the timing of operational execution correspond with original planning timelines?	• Level of compliance with project planning / annual plans	• ProDoc • Project annual plans • Project progress reports/PIR • Interviews with project staff
<u>Budget fidelity</u> : To what extent did the budget for operational execution correspond with original budget? Was the project implemented cost-effectively?	• Level of compliance with project financial planning / annual plans	• ProDoc • Project annual plans • Project financial reports • Interviews with project staff
<u>Implementation delays</u> : Where applicable, what have been the main reasons for delay/changes in implementation? Have these affected project execution, costs and effectiveness?	• List of reasons, validated by project staff	• ProDoc • Project annual plans • Project progress reports/PIR • Interviews with project staff
<u>Adaptive management</u> : 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?	• Measures taken to improve project implementation based on project monitoring and evaluation	• Project progress reports/PIR • Project financial reports • Interview with project staff and UNEP Task Manager
G. Monitoring and Reporting		
<i>i. Monitoring design and budgeting:</i>		
Was the project supported by a sound monitoring plan designed to track progress against SMART indicators towards the achievement of the projects outputs and direct outcomes, including at a level disaggregated by gender or groups with low representation?	• Level of completeness of monitoring plan	• Project M&E plan

REVIEW CRITERIA	REVIEW INDICATORS	MEANS OF VERIFICATION
<i>ii. Monitoring implementation</i>		
Was the M&E system operational and did it facilitate timely tracking of results and progress towards projects objectives throughout the project implementation period? Were the results used to improve project performance and to adapt to changing needs?	• Level of implementation of M&E system (execution of activities) • Changes in project implementation as result of supervision visits	• Project M&E plan • Project progress reports/PIR • Interview with project staff and UNEP Task Manager
<i>ii. Project Reporting</i>		
Were PIR reports, half-yearly Progress & Financial Reports complete and accurate?	• Level of completeness and accuracy of reports	• Project M&E plan • Project progress reports/PIR • Interview with project staff and UNEP Task Manager
H. Sustainability: Achievement of outputs, achievement of direct outcomes and likelihood of impact		
<i>i. Socio-political Sustainability</i>		
To what extent are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts?	• Key social and political factors positively or negatively impacting project results	• Interviews with project staff, key stakeholders • Project progress reports/PIR • Contextual literature
<i>ii. Financial Sustainability</i>		
To what extent are the continuation of project results and the eventual impact of the project dependent on (continued) financial support? What is the likelihood that adequate financial resources will be or will become available to continue implementation the programs, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardise sustained project results and onward progress towards impact?	• Estimates of financial requirements for sustained results • Estimates of future budget of key stakeholders	• Documented estimations of future budget commitments • Interviews with project staff and key stakeholders
<i>iii. Institutional Sustainability</i>		
How robust are the institutional arrangements required to sustain project results and to lead those to impact on human behaviour and environmental resources, goods or services?	• Level of commitment, indicated by formal agreements, recommendations, declarations, of key stakeholders on institutional frameworks including the BCH, that sustain project results	• Analysis of existing institutional framework • Documentation (agreements, declarations, meeting minutes) on institutional framework

REVIEW CRITERIA	REVIEW INDICATORS	MEANS OF VERIFICATION
		• Interviews with project staff and key stakeholders
I. Factors and Processes Affecting Project Performance		
<i>i. Preparation and Readiness</i>		
Were appropriate measures taken to address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation?	• Degree to which project design weaknesses and changes between project approval, the securing of funds and project mobilisation were addressed in project inception documents. • Changes in project implementation as recommendations in project inception documents.	• ProDoc • Project inception documents • Project progress reports/PIR • Interview with project staff and UNEP Task Manager
<i>ii. Quality of Project Management and Supervision</i>		
How adequate were project supervision plans, inputs and processes?	• Level of completeness and accuracy of reports • Perception of effectiveness • Documented backstopping activities by UNEP to project staff	• ProDoc • Project progress reports/PIR • Interview with project staff and UNEP task manager
<i>iii. Stakeholder participation and cooperation</i>		
To what extent and how effectively did project management communicate and consult with stakeholders throughout the project to maximise collaboration and coherence between stakeholders including the participation of all differentiated groups.	• Local stakeholders (governmental agencies, academia and research bodies, private industry, organisations of beneficiaries, etc.) perceive better capacities to sustain project results, through improved understanding and participation • Formal agreements, included recommendations, declarations, of key stakeholders relating to project results	• Project progress reports/PIR • Interviews with key stakeholders • Documentation of project activity implementation • Documentation on activities of key stakeholders
<i>iv. Responsiveness to human rights and gender equity</i>		
To what extent has the project applied the UN Common Understanding on the human rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People, including adhering to UNEP's Policy and Strategy for Gender Equality and the Environment.	• Level of completeness of gender and human rights analysis • Degree to which gender and human rights considerations have been incorporated into project implementation	• Interviews with project staff • Project progress reports/PIR • Stakeholder interviews
<i>v. Country ownership and driven-ness</i>		
How and how well did the project stimulate country ownership of project outputs and outcomes?	• Endorsement of project by governmental agencies • Provision of counterpart funding • Extent of participation of national and local agencies in project activities • Perception of ownership by national and local agencies	• Interviews with national partners, and project staff • Project progress reports/PIR • Documented endorsements and co- financing

ANNEX III. PEOPLE CONSULTED DURING THE REVIEW

Table 18. People consulted during the Review

Organisation	Name	Position	Gender
UNEP	Mr Alex Owusu-Biney	Project Task Manager (UNEP-GEF Portfolio Manager for Biosafety) and Terminal Review Coordinator	Male
UNEP	Ms Aska Ochiel	UNEP GEF Support Officer, GEF-Biodiversity and Land Degradation Unit (Terminal Review Support Officer)	Female
UNEP	Mr Paul Vrontamitis	Fund Programme Management Officer	Male
UNEP	Mr Solomon Kinuthia	Finance and Budget Assistant	Male
MESD	Mr Moussa Ba	Director Responsible for Multilateral Environmental Agreements and Biosafety Project Coordinator	Male
MESD	Mr Mohamed El Moustapha Idoumou Abdi Jiyed	Secretary-General	Male
MESD	Dr Mohammed-Yahya Lafdal	GEF Focal Point	Male
University of Nouakchott, Department of Biology	Dr Dieng Hamidou	Lecturer and Researcher (Project Consultant)	Male
Ecole Normale Supérieure de Nouakchott	Pr Abdellahi Mohamed Vall	Scientific Adviser (PSC Member)	Male
Department of Animal Health and Food Hygiene (ONARDEP)	Dr Barry Yahya	Coordinator	Male
Oceanographic and Fisheries Mauritanian Research Institute (IMROP)	Mr Mohamed Ould Mahfoudh	Scientific Coordinator	Male
NAFORE (NGO)	Mr Ould Mahmoud N'Hade	President	Male
Ministry of the Interior	Mr Seyidi Abdel Kader Jeilani Cisse	Director of Administration and Finance	Male
Consultant	Mr Clouvis Johnbang	International Project Financial and Technical Adviser	Male

ANNEX IV. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- Terms of Reference of the Terminal Review (2024) and the following annexed files: 1. Review Process Outline for Review Consultants; 2. Review Criteria and Ratings Table; 3. Guidance on the Structure and Contents of the Inception Report; 4. Template for the Assessment of Project Design Quality (PDQ); 5. Use of Theory of Change in project evaluations; 6. A Decision Tree to Guide the Rating Likelihood of Impact along a Causal Pathway; 7. Stakeholder Analysis in the Evaluation Process; 8. Guidance on the Structure of the Main Review Report; 9. Financial Tables; 10. Quality Assessment of the Review Report.
- ROTI - Review of Outcomes to Impact: Practitioners Handbook, 2009, GEF
- From Anubis:
 - Project Document "Stocktaking and Update of National Biosafety Framework of Mauritania" and Annexes
 - PIRs: 2017, 2018, 2019, 2020, 2021 and 2022
 - Tracking Tools (Initial and Final)
 - Nine Budget Revisions
 - Four Steering Committee minutes
 - Technical reports, Meeting reports, etc.
 - Audit Reports: 2017, 2018, 2019, 2020, FINAL (2022)

Project outputs – Overall

- From ANUBIS: PIRs, budget revisions, audit reports, workshop and meeting reports, awareness materials, etc.
- IRM (2017). National Law on Biosafety (Draft). Nouakchott, Government of Mauritania.
- IRM (2017). National Biosafety Policy of Mauritania (Draft). Nouakchott, Government of Mauritania.
- MESD (2016). Stocktaking report on national biosafety capacity in Mauritania including existing national, bilateral or multilateral cooperative programs in capacity building.
- MESD (2016). Assessment report including a review of all relevant legislations, policies and plans that may affect the use of modern biotechnology (Draft). Nouakchott, Government of Mauritania.
- MESD (2016). Public Education and Involvement Plan. Nouakchott, Government of Mauritania.
- MESD (2017). Laboratory and Technical Requirements for a GMO Detection Reference Laboratory (Draft). Nouakchott, Government of Mauritania.
- MESD (2017). Guidelines for the Application of Biosafety Law (Draft). Nouakchott, Government of Mauritania.
- MESD (2017). Training Manual on GMO Detection (Draft). Nouakchott, Government of Mauritania.
- MESD (2019). Internal manual on procedures for handling requests and decision making on LMOs. Nouakchott, Government of Mauritania.
- MESD (2021). Training Manual on the use of BCH for searching and registering information for Mauritania. Nouakchott, Government of Mauritania.
- MESD (2021). Training Manual on Conducting Environmental Risk Assessment of Genetically Organisms in Mauritania. Nouakchott, Government of Mauritania.

- MESD (2021). National framework for conducting environmental risk assessment for LMOs Nouakchott, Government of Mauritania.
- Ossama Abdel Kawy (2016). Project Inception Workshop Report
- Range of national documents from ANUBIS and other sources relating to: capacity building; public awareness; and the legal and institutional environment (reference list to be finalised after country mission).

Global/Reference documents

- GEF Evaluation Office. (2009). The R0tI handbook: Towards enhancing the impacts of environmental projects. Global Environment Facility and Conservation Development Centre. <https://www.scribd.com/document/172281656/M2-R0tI-Handbook>
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- Risoli, C., & Niggebrügge, J. (2016). Terminal Review of the Project 'Development of National Biosafety Frameworks'. New York: United Nations Environment Programme Evaluation Office. https://wedocs.unep.org/bitstream/handle/20.500.11822/7373/875_2341_2582_2016_TE_UNEP_REGIONAL_BD_FSP_Development-National_Biosafety_Frameworks.pdf
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- UNEG (2016). Norms and Standards for Evaluation. New York: United Nations Evaluation Group. <https://www.unevaluation.org/document/detail/1914>
- UNEP (2004). Bali Strategic Plan for Technology Support and Capacity-building. Nairobi, Kenya: United Nations Environment Programme. <https://npser.eu.org/capacity-building-plan-pdf>
- UNEP (2015). United Nations Environment Programme Medium-term Strategy 2014–2017. Nairobi, Kenya: United Nations Environment Programme. <https://www.unep.org/resources/report/unep-medium-term-strategy-2014-2017>
- UNEP (2016). Programme of work and budget for 2016–2017. Nairobi, Kenya: United Nations Environment Programme. <https://www.unep.org/resources/report/unepea2inf9-programme-work-and-budget-2016-2017>
- UNEP (2020). UNEP Environmental, Social and Economic Sustainability Framework. Nairobi, Kenya: United Nations Environment Programme. <https://www.unep.org/resources/report/un-environments-environmental-social-and-economic-sustainability-framework>
- UNEP (2022). United Nations Environment Programme Evaluation Manual. Nairobi, Kenya: United Nations Environment Programme. <https://wedocs.unep.org/20.500.11822/42025>
- UNEP-GEF Biosafety Unit (2006). A Comparative Analysis of Experiences and Lessons from the UNEP-GEF Biosafety Projects. United Nations Environment Programme.
- UNEP-GEF Biosafety Unit (2008). Guidance towards Implementation of National Biosafety Frameworks: Lessons Learned from the UNEP Demonstration Projects.
- UNEP-GEF Biosafety Unit (2008). The Global UNEP-GEF BCH Capacity Building Project Learning from Experience. United Nations Environment Programme.

ANNEX V. REVIEW ITINERARY

Activity	Date(s)
Data collection and analysis, desk-based interviews and surveys	Jan-Mar 2024
Kick-off meeting (via VoIP) with UNEP Task Manager (Mr Alex Owusu-Biney) and Mr Moussa Ba (National Project Coordinator)	February 24 2024
Inception Report submitted	March 20 2024
Field Mission approx. 7 days in Mauritania (based on meeting arrangements and available budget)	April 7 – 12 2024
Consultant arrives in Nouakchott, Mauritania	April 7 2024
Inception Meeting with NPC (Nouakchott Hotel)	April 7 2024
Meeting project stakeholders (MESD Nouakchott): Dr Dieng Hamidou (Lecturer and Researcher (Project Consultant) - University of Nouakchott, Department of Biology) Pr Abdellahi Mohamed Vall (Scientific Adviser (PSC Member) - Ecole Normale Supérieure de Nouakchott) Dr Barry Yahya (Coordinator, Department of Animal Health and Food Hygiene (ONARDEP)) Mr Mohamed Ould Mahfoudh (Scientific Coordinator - Oceanographic and Fisheries Mauritanian Research Institute (IMROP)) Meeting with Dr Mohammed-Yahya Lafdal (GEF Focal Point) (MESD Nouakchott)	April 8 2024
Meeting with Mr Mohamed El Moustapha Idoumou Abdi Jiyed (MESD Secretary-General) (MESD Nouakchott) Meeting with NGO contact Mr Ould Mahmoud N'Hade - President NAFORE (Nouakchott Hotel)	April 9 2024
Consolidation of preliminary mission findings	April 10 – 11 2024
Meeting with Mr Seyidi Abdel Kader Jeilani Cisse (Director of Administration and Finance, Ministry of the Interior & PSC member (Nouakchott Hotel) Round-up meeting and debriefing with NPC (Nouakchott Hotel)	April 12 2024
Consultant returns to UK	April 12 2024
Draft Report shared with UNEP Task Manager	May 21 2024
Draft Report shared with wider group of stakeholders	April 25 2025
Reviewed Report returned to Consultant	May 16 2025
Final Report submitted	August 13 2025

ANNEX VI. PROJECT BUDGET AND EXPENDITURES
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Table 19. Project Funding Sources Table (WITHIN THE REPORT: Table 7)

Table 20. Expenditure by Outcome/Output (WITHIN THE REPORT: Table 6 and Table 11)

ANNEX VII. FINANCIAL MANAGEMENT

Table 21. Financial Management Table (ALREADY WITHIN THE REPORT: Table 13)

ANNEX VIII. COMMUNICATION AND OUTREACH TOOLS

Terminal Review Preliminary Findings Presentation

Slide 1

Stocktaking and Update of the
National Biosafety Framework of
Mauritania



Terminal Review;
Preliminary
Findings
Presentation

Project GEF ID 5639
Nouakchott, Mauritania, 11 April 2024
Consultant: Dr John Mauremootoo

Overall rating: Satisfactory

Slide 2

Agenda

- TERMINAL REVIEW PROCESS
- THE PROJECT
 - Context
 - Objectives and components / Results Framework
 - Stakeholders
 - Project implementation structure and partners
 - Changes in design during implementation
 - Project financing

Slide 3

Agenda

REVIEW FINDINGS

- A. Strategic Relevance
- B. Quality of Project Design
- C. Nature of the External Context
- D. Effectiveness
- E. Financial Management
- F. Efficiency
- G. Monitoring and Reporting
- H. Sustainability
- I. Factors Affecting Performance and Cross-Cutting Issues

CONCLUSIONS AND RECOMMENDATIONS

- A. Conclusions
- B. Summary of project ratings
- C. Lessons learned
- D. Recommendations

Q&A

Slide 4

The TR process

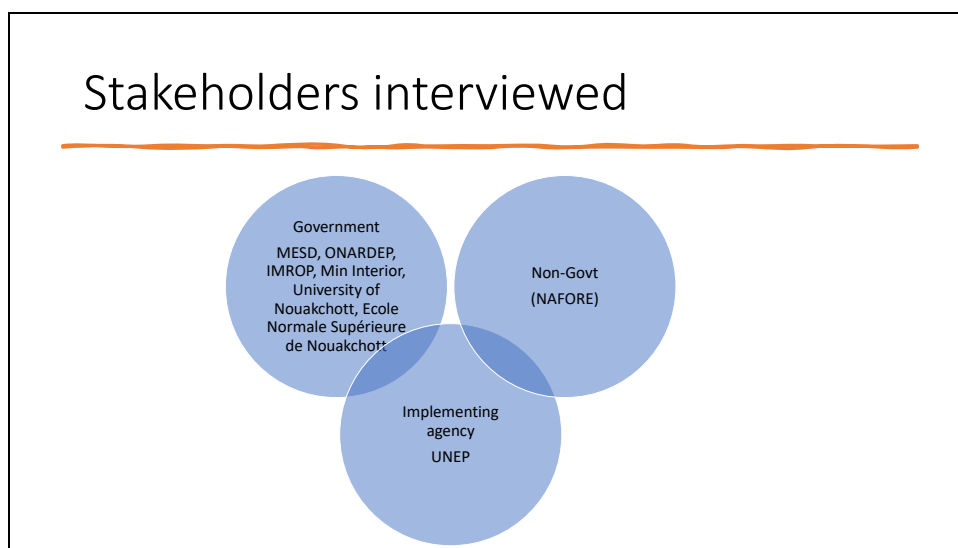
Terminal Review Essentials

The Terminal Review (TR) is undertaken at 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, GEF, and the Ministry of Environment and Sustainable Development of Mauritania (MESD) which was the National Executing Agency. Therefore, the review will identify lessons of operational relevance for future project formulation and implementation, especially for the follow-up projects, if applicable.

TR Process

1. Desk top review (PIR; Financial Reports; Project Reports; National reports)
2. Semi-structured interviews.
3. Triangulation of data.
4. Presentation of findings .

Slide 5



Slide 6

Project context

- The safe use of modern biotechnology can help Mauritania address environmental and socio-economic challenges.
- The country needs to regulate risks from LMOs to the conservation and sustainable use of its biological resources taking into account the risk to human health.
- Mauritania ratified the CBD in 1996 & acceded to the CBP in 20 2005.
- Mauritania was among the 18 countries participating in the UNEP-GEF pilot biosafety enabling project 1997-2000. The project aimed to set up National Biosafety Frameworks in the 18 countries and develop systems to address the transboundary movement of living modified organisms. This intervention was not followed up in Mauritania
- At the time of project formulation, Mauritania had no government-approved biosafety policy, no biosafety law or secondary regulation on biosafety, no clear procedures for handling requests on LMOs, and limited capacity for handling requests, decision making and risk assessment of LMOs.
- This GEF-funded project aimed to address this shortcoming by updating the earlier inventory through a stocktaking analysis and using the information generated to finalise and implement the National Biosafety Framework.
- Challenges faced by the project: COVID-19 and the death of the project coordinator, delayed recruitment of consultants due to a lack of biosafety competency, cumbersome national procurement procedures.

Slide 7

Project Objectives and components / Results Framework

- Project Objective “To assist Mauritania to update the status and capacity for the safe use of biotechnology and to strengthen Mauritania’s institutional capacity in the development and implementation of the National Biosafety Framework.”
- The Project comprises three main components, each with one expected Outcome.
 1. Establishing baseline for information on the safe use of biotechnology through stocktaking analysis
 2. Development of a biosafety policy, administrative, regulatory and technical biosafety frameworks for Mauritania in line with the CPB
 3. Public Awareness, Public participation and Education

Slide 8

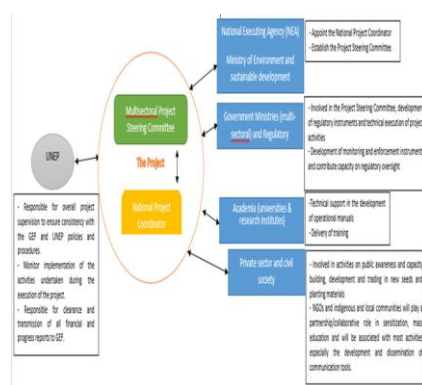
Project Stakeholders

Stakeholders by sector

Public sector - Ministry of Environment and Sustainable Development - Min. Commerce, Handicraft, & Tourism - Min. Education - Min. Fisheries & Maritime Economy, - Min. Habitat, Urban Affairs, & Territorial Administration - Min. Health - Min. Industry & Mines - Min. Justice, Min. Public Function, Employment, & Professional Training - Min. Rural Development - Min. Social, Child, & Family Affairs - Min. Finance	Research & Academic Institutions - University of Nouakchott - National Institute of Research in Public Health - Centre for Veterinary Research - National Centre for Agricultural Research - Ecole Normale Supérieure - Institute of Oceanography and Fisheries	Private Sector ??	Civil Society - NAFORE - AMC - ELHKAL - BARAKA
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Slide 9

Project implementation structure and partners



Slide 10

Changes in design during implementation

- **Nine Budget Revisions**, which have been primarily used for re-allocating unspent money and did not substantially change the project design.
- The Project was also granted **two no-cost extensions** (total of 30 months),
 1. 18 months until December 2020 (for Technical Completion) for a number of reasons including the death of the former National Project Coordinator Mr. Cheikh Sidi Mohamed, and delayed recruitment of consultants due to a lack of biosafety competency.
 2. 12 months until December 2021 (for Technical Completion) and June 2022 for Administrative Closure because of the impact of the COVID-19 pandemic and difficulties encountered with the cumbersome national procurement procedures.
- **Project design has not substantively changed since project formulation**

Slide 11

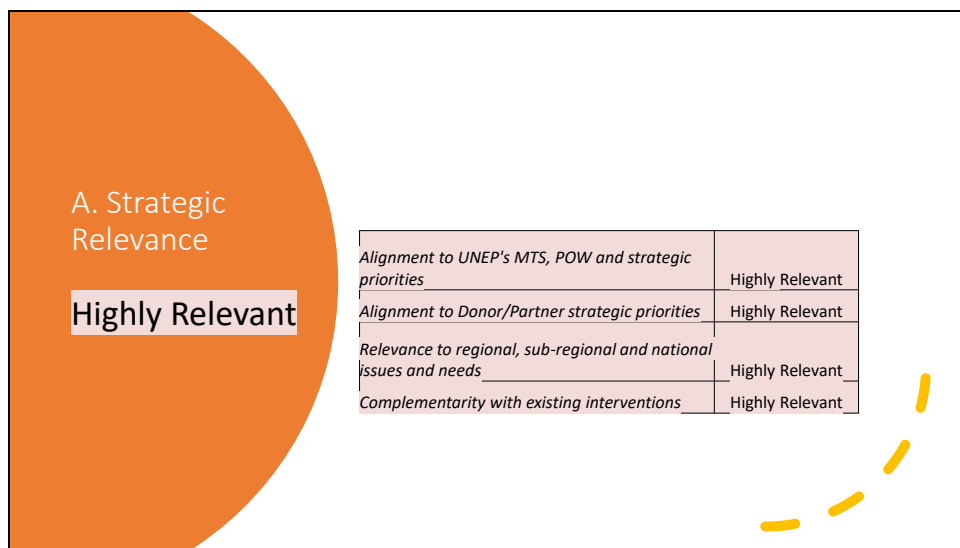
Project financing

Component/sub-component/output <i>All figures as USD</i>	Estimated cost at design	Actual Cost/ expenditure	Expenditure ratio (actual/planned)
Component 1: Establishment of Baseline for information on the safe use of biotechnology through stocktaking analysis	138,000	Not available	
Component 2: Development of a biosafety policy, administrative, regulatory and technical biosafety frameworks for Mauritania – in line with the CPB.	310,000	Not available	
Component 3: Public Awareness, Public participation and Education.	300,000	Not available	
Component 4: Project Monitoring and Evaluation	60,000	Not available	
Component 5: Project Management	70,000	Not available	
Total	878,000	878,000	100%

Slide 12

REVIEW FINDINGS

Slide 13

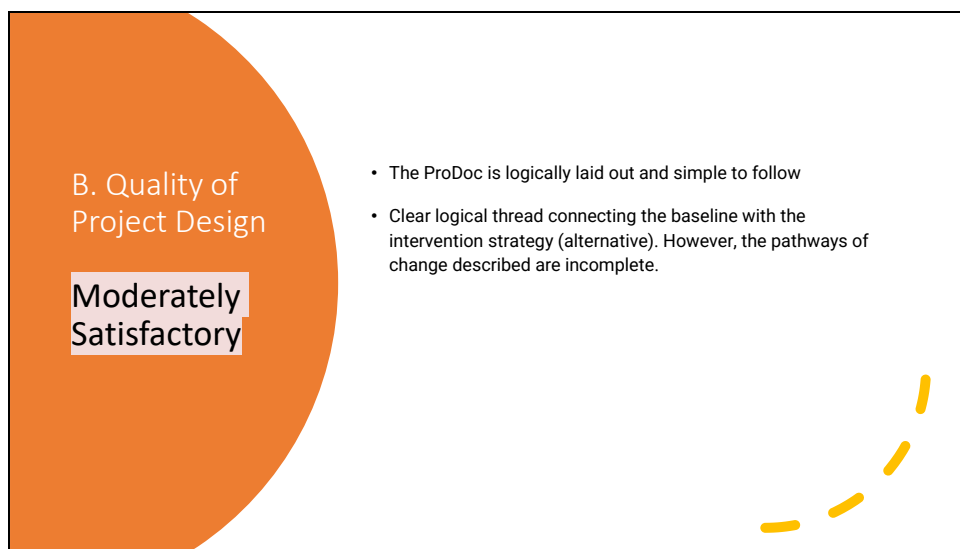


A. Strategic Relevance

Highly Relevant

Alignment to UNEP's MTS, POW and strategic priorities	Highly Relevant
Alignment to Donor/Partner strategic priorities	Highly Relevant
Relevance to regional, sub-regional and national issues and needs	Highly Relevant
Complementarity with existing interventions	Highly Relevant

Slide 14



B. Quality of Project Design

Moderately Satisfactory

- The ProDoc is logically laid out and simple to follow
- Clear logical thread connecting the baseline with the intervention strategy (alternative). However, the pathways of change described are incomplete.

Slide 15

C. Nature of the External Context

Moderately Unfavourable

- Mauritania is prone to persistent drought and encroaching desertification punctuated with periods of severe drought, flooding, and locust infestations.
- The socio-political environment is also challenging, with a history of violent transitions from one president to the next. In addition, Mauritania has had to deal with increasing levels of armed group activities in its territory and over its borders. These developments have brought refugees to Mauritania, mainly from Mali, and have diverted scarce resources towards the military.
- These negative developments are further compounded by the structural constraints of a very low population density, a very large territory, and a harsh climate. All these factors influence overall national priorities and socio-political focus, possibly diverting decisionmakers' interest towards more urgent issues.

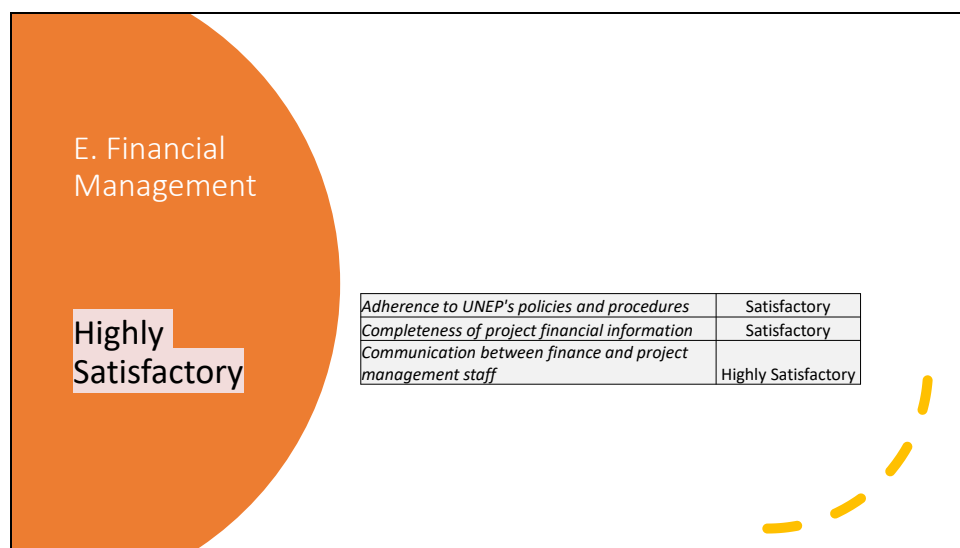
Slide 16

D. Effectiveness

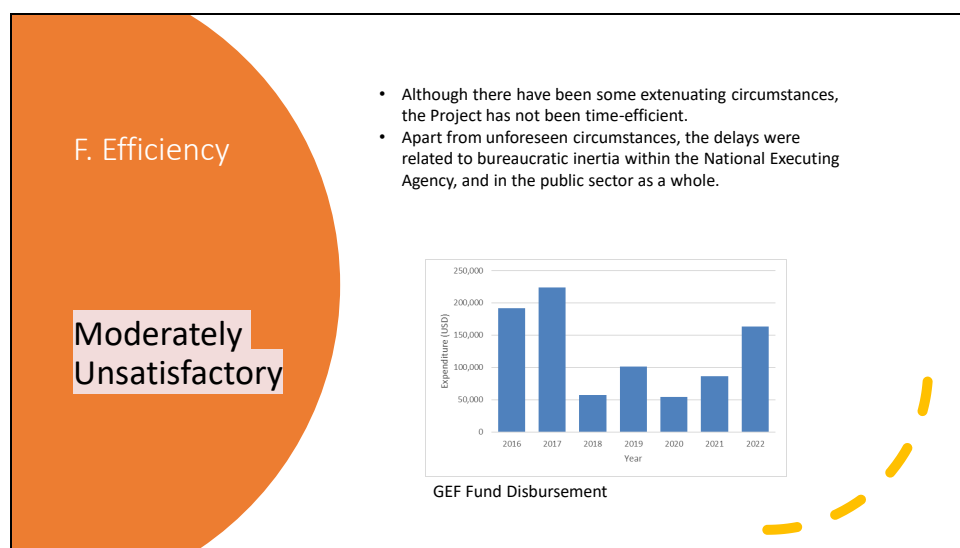
Satisfactory

Availability of outputs	Satisfactory
Achievement of project outcomes	Satisfactory
Likelihood of impact	Moderately Likely

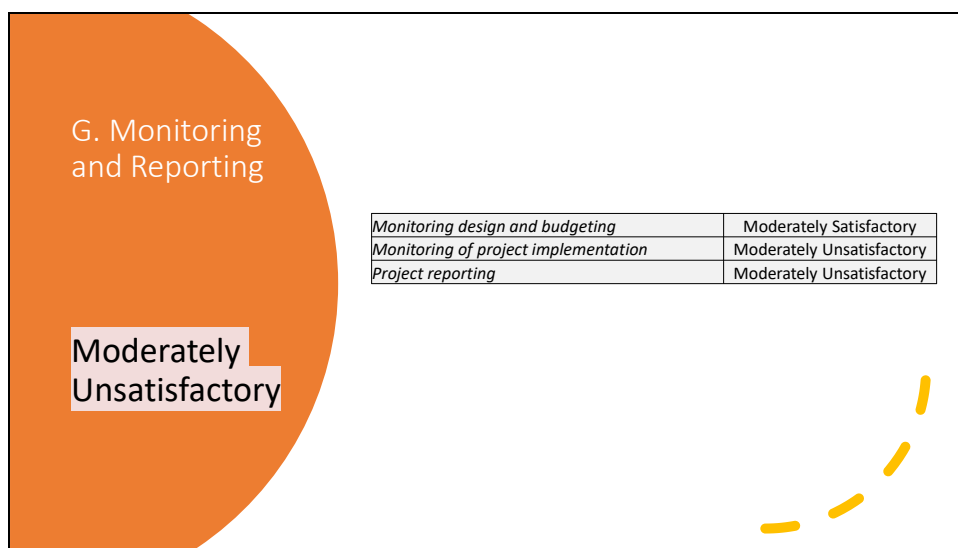
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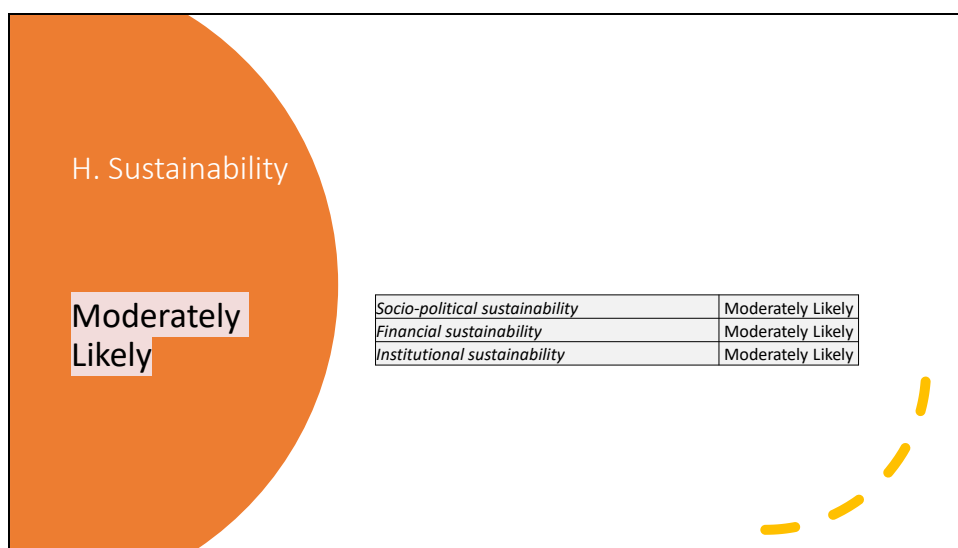
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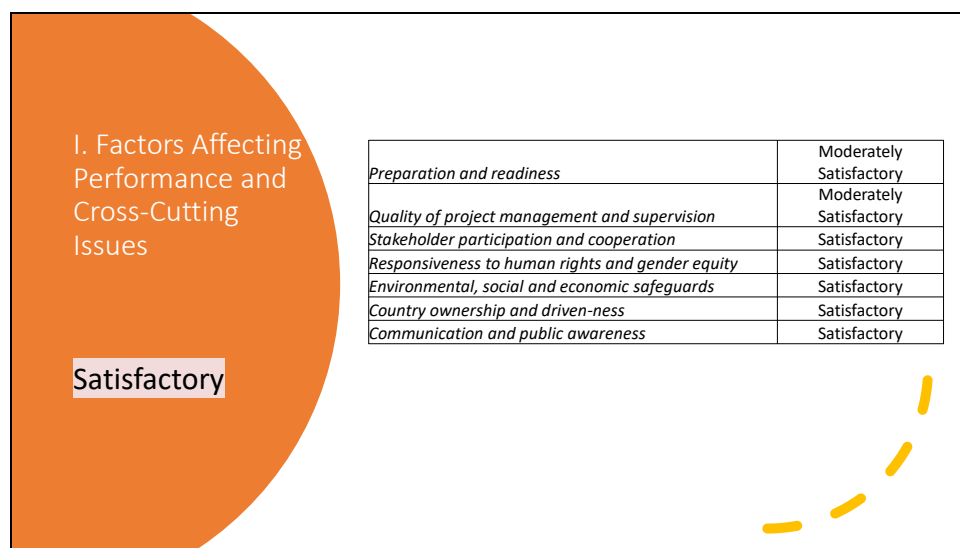
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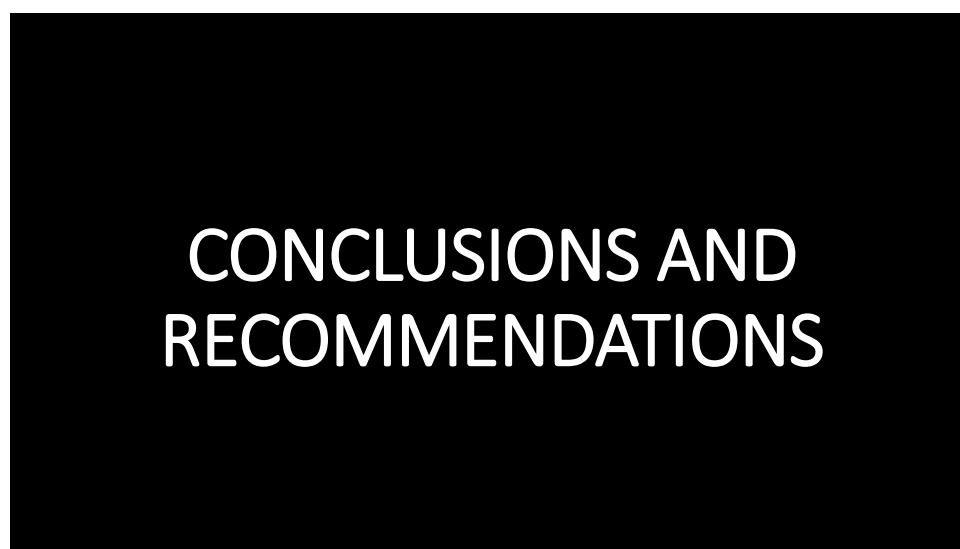
Slide 20



Slide 21



Slide 22



Slide 23

Conclusions

1. The project has significantly contributed to the implementation of the Cartagena Protocol in Mauritania
2. The project has catalysed an attitudinal shift decision-makers in Mauritania concerning the value of biosafety
3. The project management teams in UNEP and in MESD should be congratulated on their tenacity and creativity in pursuing the project objectives
4. Project management could have been more effective with more available quality staff time

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Summary of project ratings

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

Slide 25

Lessons Learned

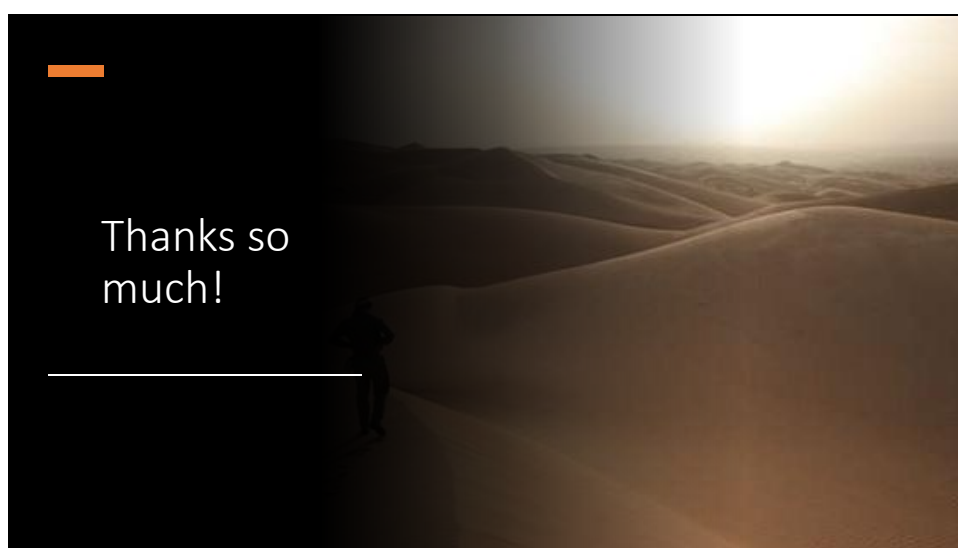
1. The promulgation of the Biosafety Law and its accompanying policy is a significant achievement for the project, which should not be underestimated.
2. Project processes and results provide a solid foundation for an efficient and effective national biosecurity system.
3. Developing a consensus in a novel field often takes more time than anticipated.
4. Despite unforeseen constraints project execution could have more time effective
5. International technical support has significantly contributed to project efficiency and effectiveness
6. The available Monitoring and Evaluation tools have not been optimally utilised
7. The degree to which the project addresses human rights and gender equality cannot be a mechanistic exercise

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Recommendations

1. A second phase Project is developed.
2. Realistic activity timelines are produced.
3. Recruit a Full time Biosafety Secretariat within the MESD.
4. Optimise the utility of Monitoring & Evaluation systems.
5. Explicitly include human rights and gender considerations in all stages of the project cycle in a context-specific manner.
6. Document the process whereby the National Biosafety Law was successfully promulgated as a case study/good practise example

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ANNEX IX. BRIEF CV OF THE REVIEWER

Name

Profession	Independence Consultant: Project and Programme Management, Planning, Monitoring & Evaluation
Nationality	Mauritian/UK
Country experience	- Europe: Belgium, France, Germany, Norway, Spain, UK. - Africa: Burundi, Cameroon, Cape Verde, Comoros, Ethiopia, Ghana, Kenya, La Réunion, Madagascar, Mauritania, Mauritius, Mozambique, Senegal, Seychelles, South Africa, Tanzania, Tunisia, Uganda, Zambia - Americas: Brazil, Canada, USA (Hawaii), USA (Mainland). - Asia: Bangladesh, Cambodia, India, Malaysia, Philippines, Sri Lanka. - Oceania: New Zealand
Education	1992 PhD in Applied Ecology, University of Southampton, UK 1987 MA in Applied Biology, Cambridge University, UK 1984 BA (Hons), Class 2.1. in Applied Biology, Cambridge University, UK 1983 BA in Geography, Cambridge University, UK

Short biography

Dr (Mr) John Retnon Mauremootoo is an independent Consultant with over 30 years of diverse experience in the management of projects and programmes in invasive alien species management, biodiversity conservation, biosafety, biosecurity, agriculture and sustainable land management in many countries, but mainly in the African mainland, South Asia and in SIDS. Comfortable working in spoken and written English and French and in written Spanish.

Key specialities and capabilities cover:

- Capacity building, communication, knowledge management and mutual learning for development using empowering participatory approaches within an action learning framework.
- In-depth knowledge and experience of all aspects of project cycle management, including the use of the logical framework and complementary approaches to planning, monitoring, evaluation and learning.

Selected assignments and experiences

Independent reviews/evaluations/monitoring and evaluation support:

- 2011 (ODI, UK Overseas Development Institute) Outcome Mapping and Needs Assessment.
- 2011 (Oak Foundation, USA): Evaluation to assess the results of the global Child Protection in Crisis (CPC) Network.
- 2012 (UNEP): Development of a Project Benefit Monitoring and Evaluation (PBME) system for the Cameroon Biosecurity Project.
- 2012 (Darwin Initiative, UK): Development of a project monitoring and evaluation system under the UK Darwin Initiative Project - Enhancing the relationship between people and pollinators in Eastern India.
- 2013 (DFID, UK): Summative evaluation of The Team – a platform to facilitate gender equality for Search for Common Ground.
- 2013-2018 (USAID): Project Technical Advisor on Planning, Monitoring and Evaluation for the WildTeam Bengal Tiger Action Plan.
- 2014 (EU): Outcomes and impacts assessment of activities implemented under the IOC's Call for Proposals scheme for ReCoMaP (Regional Programme for the Sustainable Management of the Coastal Zones of the Indian Ocean Countries).
- 2017 (UNEP): Terminal evaluation of the project: Building Capacity for the Detection and Monitoring of LMOs in Cambodia.
- 2018 (Wellcome Trust): Facilitation of training and mentoring for Wellcome Trust M&E staff on the use of Outcome Harvesting in their M&E and Learning framework.
- 2019: (US State Department): Terminal evaluation of the project: "Foundations for Interparty Dialogue" implemented by the Netherlands Institute for Multiparty Democracy (NIMD) and the Burundi Leadership Training Program (BLTP).

ANNEX X. REVIEW TORS (WITHOUT ANNEXES)

<i>Job Opening number:</i>	23-United Nations Environment Programme-204970-Consultant
<i>Job Title:</i>	Terminal Review Expert of the Project - Stocktaking and Update of the National Biosafety Framework of Mauritania (GEFID 5639)
<i>General Expertise:</i>	Environmental Affairs
<i>Category:</i>	Evaluation
<i>Department/ Office:</i>	United Nations Environment Programme
<i>Organizational Unit:</i>	UNEP ODED DEPI BLB GEF BLDU

Purpose

Terminal Evaluation Report of the "UNEP-GEF Project: GEF ID 5639 -Stocktaking and Update of the National Biosafety Framework of Mauritania

Duties and Responsibilities

Background The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. Its mandate is to coordinate the development of environmental policy consensus by keeping the global environment under review and bringing emerging issues to the attention of governments and the international community for action. UNEP's Ecosystems Division works with international and national partners, providing technical assistance and capacity development for the implementation of environmental policy, and strengthening the environmental management capacity of developing countries and countries with economies in transition. The GEF- Biodiversity and Land Degradation Unit is seeking to recruit a consultant to conduct a Management Led Terminal Review of the Project on "Stocktaking and Update of the National Biosafety Framework of Mauritania" to assess the overall achievements of the project, the challenges faced and engage with project counterparts to address and management the issues in managing their national biosafety obligations. This consultancy post is located in UNEP / Ecosystems Division / GEF Biodiversity and Land Degradation unit. The Review Consultant will work under the overall guidance of Alex Owusu-Biney, the Task Manager and will report to the Portfolio Manager of the GEF Biodiversity Unit based in Nairobi. Duties and Responsibilities Specifically, the consultant will be required to complete the following tasks: Inception phase: - preliminary desk review and introductory interviews with project staff; - prepare the review framework in line with UNEP's evaluation guidelines; - identify stakeholders; - develop the interview/questions matrix; - plan the review schedule; - prepare the

Inception Reports; Data collection and analysis phase of the Main Review, including: • conduct further desk review and in-depth interviews with project implementing and executing agencies,

project partners and project stakeholders. regularly report back to the Task Manager on progress and inform of any possible problems or issues encountered and; Reporting phase, including: • draft the Main Review Reports, ensuring that the review report is complete, coherent and consistent with the task Manager guidelines both in substance and style; • liaise with the Task Manager on comments received (including from the UNEP Evaluation Office) and finalize the Review Reports, ensuring that comments are taken into account until approved by the Task Manager • prepare a Response to Comments annex for the main report, listing those comments

not accepted and indicating the reason for the rejection; and Managing relations, including:

- maintain a positive relationship with stakeholders, ensuring that the review process is as participatory as possible but at the same time maintains its independence.
- communicate in a timely manner with the Task Manager on any issues requiring its attention and intervention.

The consultant will prepare the following documents for both projects, in consultation and collaboration with the Project team and in line with the detailed Terms of Reference for the Review and the guidance package provided by the UNEP Evaluation Office:

1. Review Inception Report: containing an assessment of the project, project stakeholder analysis, review framework and a tentative review schedule.
2. 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, and act to ensure all information sources have been accessed and provide an opportunity to verify emerging findings.
3. Draft and Main Final Review Report: containing an executive summary that can act as a stand-alone document; detailed analysis of the review findings organized by review criteria and supported with evidence; lessons learned and recommendations and an annotated rating table. The consultancy will be home-based with possible field visits.

Ultimate result of service

Terminal Evaluation Report of the "UNEP-GEF Project: GEF ID 5639 -Stocktaking and Update of the National Biosafety Framework of Mauritania

Output/Work Assignments

- Inception Report by 20 August - 5 days
- Field Review Mission by 25 August 2023 - 7 days
- E-based Telephone interviews, surveys, etc. by 31 August 2023 - 7 days
- PowerPoint/presentation on preliminary findings and recommendations by 15 September 2023 - 3 days
- Draft report to Task Manager (and Project Manager) by 20 September 2023 - 10 days
- Draft Report shared with the wider group of stakeholders by 15 October 2023 - 4 days
- Final Main Review Report approved by UNEP by 20 November 2023 - 4 days

Note: Depending on the role, the no. of days for each assignment in the above schedule may change. This is acceptable with the understanding that a total of 40 days will be covered within the 4 month period.

Qualification Requirements/Evaluation Criteria

Education:

An advanced University degree in environmental sciences, Environmental Law and Policy, Biotechnology, Biosafety, Biosecurity, international development or other relevant political or social sciences area is required. A University degree in the same areas is acceptable with two additional years of relevant experience.

Language:

- English and French are the working languages of the United Nations Secretariat. For this consultancy, fluency in oral and written English is a requirement.

JFQ/JSQ:

- 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 is required.
- A good/broad understanding of Biosafety and Biotechnology issues as well as experience in broad understanding of regulatory management of modern biotechnology and related biosafety decision making, is desirable.

ANNEX XI. GEF PORTAL INPUTS (for GEF funded projects)

The following table contains text to be uploaded to the GEF Portal. **It will be drawn from the Review Report, either as copied or summarised text.** In each case, references should be provided for the paragraphs and pages of the report from which the responses have been copied or summarised.

Table X: GEF portal inputs

Question: What was the performance at the project's completion against Core Indicator Targets? (For projects approved prior to GEF-7¹², these indicators will be identified retrospectively and comments on performance provided¹³).
Response: The Mauritanian Biosafety Framework began at a very low baseline but has progressed despite a challenging context. The scores presented by the Project Team in the Initial, and Final Biosafety Tracking Tools objectively reflect this positive progress. They were, respectively, 3/32 (03 September 2015), and 17/32 (31 December 2022) (~127).
Question: What were the progress, challenges and outcomes regarding engagement of stakeholders in the project/program as evolved from the time of the MTR? <i>(This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval) mmm</i>
Response: This project's major focus was establishing a foundation for biosafety in Mauritania through the development of a biosafety framework. This involved a great deal of participation and cooperation with decision-makers from the governmental sector and technicians from academia and research. These groups were substantially engaged in all stages of the project. However, the involvement of the wider public was limited, and the Operational Plan for Communication on Biosafety in Mauritania was barely implemented. This reflects a targeted and strategic approach to project management rather than the mechanistic implementation of generic recommendations (~167).
Question: What were the completed gender-responsive measures and, if applicable, actual gender result areas? <i>(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)</i>
Response: <i>(Might be drawn from Factors Affecting Performance section)</i> In project reports, it has been repeatedly stated that "Engagement of women and youth in project delivery has improved. Ongoing efforts are being made to ensure more dedicated involvement of gender within the socio-economic setting of Mauritania where there are more men involved in the Life Sciences." This represents a superficial summary of the approach adopted among project stakeholders, reflecting the lack of depth in much of the project reporting (Chapter V, Section D). Gender disaggregated information on project participation was not collected, which is an omission. However, in a technical subject such as biosafety, it is important to work with appropriately qualified and experienced personnel regardless of gender. Currently, this group is largely male in Mauritania. Encouragingly, there is gender parity among Mauritanian bioscience undergraduates, so the future gender makeup of those involved in biosafety is likely to be very different from that of today. This information came to light during interviews with those from the research community.

¹² 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)

¹³ This is not applicable for Enabling Activities

The fact that this information was not provided in project reports further reflects their perfunctory nature (~169).
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. <i>(Any supporting documents gathered by the Consultant during this review should be shared with the Task Manager for uploading in the GEF Portal)</i>
Response: <i>(Might be drawn from Factors Affecting Performance section)</i> Not Applicable: Safeguards Plan not required at CEO Approval.
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? <i>(This should be based on the documentation approved at CEO Endorsement/Approval)</i>
Response: <i>(Might be drawn from Factors Affecting Performance section)</i> The project delivered several knowledge products, including a website, biosafety manuals and guidelines, brochures, presentations and a highly/over-ambitious Operational Plan for Communication on Biosafety in Mauritania. These were partially disseminated through the National Biosafety Website. However, the fact that this website has not been fully updated with project outputs, the Biosafety Clearing House contains no details of Mauritanian national biosafety experts, and the lack of information provided in the Fourth National Report on the Implementation of the Cartagena Protocol on Biosafety (NR4), submitted in 2022, supports the assertion that knowledge management has not been optimal. This can be partially attributed to the lack of full-time staff working on biosafety within the Ministry of Environment and Sustainable Development (MESD).
Question: What are the main findings of the evaluation?
Response: The project has significantly contributed to the implementation of the Cartagena Protocol in Mauritania. The project has catalysed an attitudinal shift in decision-makers in Mauritania concerning the value of biosafety. The project has established the basis for socio-political, financial and institutional sustainability. In working with high-level decision-makers in concerned ministries and research bodies, the project has managed to create buy-in among government institutions and research and academic communities. The project management teams in UNEP and MESD should be congratulated on their tenacity and creativity in pursuing the project objectives. Project management could have been more efficient and effective with more available quality staff time. Based on the above, the likelihood of the project results contributing to the achievement of the project's Principal Outcome, i.e. "A transparent NBF in Mauritania", looks Moderately Likely

ANNEX XII. IMPLEMENTATION PLAN OF RECOMMENDATIONS

Project Title and Reference No.: GEF ID: 5639

Contact Person (TM/PM): Alex Owusu-Biney

RECOMMENDATIONS	PLANS			
	ACCEPTED (YES/NO/ PARTIALLY)	WHAT WILL BE DONE?	EXPECTED COMPLETION DATE	REPOSIBLE OFFICER/ UNIT/ DIVISION/ AGENCY
A second phase project is developed.	Yes	UNEP and GEF had discussed that the reviewed project should be seen as pilot phase of capacity building on biosafety issues and that a new project needs to be developed to build on the pilot work in line with Mauritania's obligation to the Cartagena Protocol on Biosafety (CPB). Discussions on a possible follow up project under the GEF 9 Trust or the GBF fund has been held with the GEF OFP and the National Focal Point for CPB.	31/12/2026	Alex Owusu-Biney Ecosystems Division and Ministry of Environment and Sustainable Development (MESD) Mauritania
Realistic activity timelines are produced.	Yes	Continuous consultative processes will be engaged to ensure realistic time frames are adhered to but it is difficult to change national processes and can only be addressed when there is a follow up project	31/12/2026	Alex Owusu-Biney Ecosystems Division and Ministry of Environment and Sustainable Development (MESD) Mauritania
Recruit a full-time Biosafety Secretariat within the MESD.	Yes	A dedicated Secretariat needs to set up in line with the Biosafety Law	Immediate in line with Biosafety law within national processes	Ministry of Environment and Sustainable Development (MESD) Mauritania
Optimise the utility of monitoring and evaluation systems.	Yes	As part of any project development clearly defined M & E strategy with clearly developed plans will be incorporated	Immediate	Ministry of Environment and Sustainable Development (MESD) Mauritania
Explicitly include human rights and gender considerations in all stages of the project cycle in a context-specific manner.	No	Human Rights Based approaches including gender will be incorporated in any new future project	Beyond the current and specific project	Ministry of Environment and Sustainable Development (MESD) Mauritania
Document the process whereby the National Biosafety Law was successfully promulgated as a case study/good practice example.	Yes	Lessons learnt documented and shared on biosafety platforms and to be updated on the BCH	Immediate	Ministry of Environment and Sustainable Development (MESD) Mauritania and BCH Focal Point

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

Quality Assessment of the Terminal Review Report

Review Title: Terminal Review of the UNEP/GEF Project 'Stocktaking and Update of the National Biosafety Framework of Mauritania' (GEF ID 5639) 2016 – 2022.

Consultant: Dr. John Mauremootoo

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).

Report Quality Criteria	UNEP Evaluation Office Comments	Final Review Report Rating
Quality of the Executive Summary <u>Purpose:</u> acts as a stand alone and accurate <u>summary</u> of the main review product, especially for senior management. To include: • concise overview of the review object • clear summary of the review objectives and scope • overall review rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria • reference to where the review ratings table can be found within the report • summary response to key strategic review questions • summary of the main findings of the exercise/synthesis of main conclusions • summary of lessons learned and recommendations.	Final report (coverage/omissions): All required elements are addressed. Final report (strengths/weaknesses): The executive summary provides a stand-alone summary of the evaluation report.	5
Quality of the 'Introduction' Section <u>Purpose:</u> introduces/situates the evaluand in its institutional context, establishes its main parameters (time, value, results, geography) and the purpose of the review itself. To include: • institutional context of the project (sub-programme, Division, Branch etc) • date of PRC approval, project duration and start/end dates • number of project phases (where appropriate) • results frameworks to which it contributes (e.g. POW Direct Outcome) • coverage of the review (regions/countries where implemented) • implementing and funding partners • total secured budget • whether the project has been reviewed/evaluated in the past (e.g. mid-term, external agency etc.) • concise statement of the purpose of the review and the key intended audience for the findings.	Final report (coverage/omissions): The report covers all the expected element of the introduction section. Final report (strengths/weaknesses): The report present a concise summary that situates the evaluand in its institutional context. The report also defines most of the parameters (time, budget, and results). The report doesn't explicitly define the geographical scope of the evaluand.	5

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Quality of the 'Review Methods' Section <u>Purpose:</u> provides reader with clear and comprehensive description of review methods, demonstrates the <u>credibility</u> of the findings and performance ratings. To include: • description of review data collection methods and information sources • justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face) • number and type of respondents (see <i>table template</i>) • selection criteria used to identify respondents, case studies or sites/countries visited • strategies used to increase stakeholder engagement and consultation • methods to include the voices/experiences of different and potentially excluded groups (e.g. vulnerable, gender, marginalised etc) • details of how data were verified (e.g. triangulation, review by stakeholders etc.) • methods used to analyse data (scoring, coding, thematic analysis etc) • review limitations (e.g. low/ imbalanced response rates across different groups; gaps in documentation; language barriers etc) • ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected. Is there an ethics statement? 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>	Final report (coverage/omissions): The report includes a section on the review methods with some of the expected elements included in the writeup. Final report (strengths/weaknesses): The section of review methods addresses some of the expected elements including the review methods, the number and type of respondents and review limitations. However, the report doesn't provide justification for the data collection methods used, the selection criteria for respondents. The report also doesn't describe the methods used to analyse the data and strategies used to increase stakeholder engagement and consultation.	4
Quality of the 'Project' Section <u>Purpose:</u> describes and <u>verifies</u> key dimensions of the evaluand relevant to assessing its performance. To include: • <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> 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	Final report (coverage/omissions): The report contains a description of all expected dimensions of the evaluand. Final report (strengths/weaknesses): The report clearly defines the problem that the project sought to address, the stakeholder groups that were involved, the project implementation structure, changes in design during implementation and project financing. However, the results framework didn't clearer outline the project outputs linked to each of the outcomes.	5

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<i>Project financing:</i> completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing		
Quality of the Theory of Change <u>Purpose:</u> to set out the TOC at Review in diagrammatic and narrative forms to support consistent project performance; to articulate the causal pathways with drivers and assumptions and justify any reconstruction necessary to assess the project's performance. To include: - description of how the <i>TOC at Review</i>¹⁴ was designed (who was involved etc) - confirmation/reconstruction of results in accordance with UNEP definitions - articulation of causal pathways - identification of drivers and assumptions - identification of key actors in the change process - summary of the reconstruction/results re-formulation in tabular form. <i>The two results hierarchies (original/formal revision and reconstructed) 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.	Final report (coverage/omissions): The report presents the Theory of Change in both narrative and diagrammatic formats. Final report (strengths/weaknesses): The report includes a description of the ToC including the causal pathways. Also included are the assumptions, drivers and the actors involved in the change process. The report also made a commendable attempt at clarifying the intervention logic by rephrasing some of the results statements. However, some of the revised results statements could have been sharpened for example Outcome 2. 'Biosafety policy approved and integrated into National plans.' doesn't mention the responsible actors.	4
Quality of Key Findings within the Report <u>Presentation of evidence:</u> nature of evidence should be clear (interview, document, survey, observation, online resources etc) and evidence should be explicitly triangulated unless noted as having a single source. <u>Consistency within the report:</u> all parts of the report should form consistent support for findings and performance ratings, which should be in line with UNEP's Criteria Ratings Matrix. <u>Findings Statements (where applicable):</u> The frame of reference for a finding should be an individual review criterion or a strategic question from the TOR. A finding should go beyond description and uses analysis to provide insights that aid 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.	Final report (strengths/weaknesses): The presentation of findings in the report are clear, are based on evidence and consistent. However in some instances the analysis relied heavily on progress reports with minimal triangulation of data sources.	5
Quality of 'Strategic Relevance' Section <u>Purpose:</u> to present evidence and analysis of project strategic relevance with respect to UNEP, partner and	Final report (coverage/omissions): This section of the evaluation report presents an analysis of the relevance of the evaluand to UNEP, GEF, regional and national priorities and	5

¹⁴ During the Inception Phase of the review process a *TOC at Review Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the review process this TOC is revised based on changes made during project intervention and becomes the *TOC at Review*.

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geographic policies and strategies at the time of project approval. To include: Assessment of the evaluand's relevance vis-à-vis: - Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities - Alignment to Donor/GEF/Partners Strategic Priorities - Relevance to Regional, Sub-regional and National Environmental Priorities - Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation¹⁵), with other interventions addressing the needs of the same target groups.	complementarity with existing interventions. Final report (strengths/weaknesses): The report highlight the relevance of the project to UNEP, GEF and reginal priorities. However beyond mentioning that the project is relevant to the target country's priorities, no specifics are included in the report. the report doesn't	
Quality of the 'Quality of Project Design' Section <u>Purpose:</u> to present a summary of the strengths and weaknesses of the project design, on the basis that the detailed assessment was presented in the Inception Report.	Final report (strengths/weaknesses): The report includes presents a summary of strength and weaknesses in project design including a summary assessment.	5
Quality of the 'Nature of the External Context' Section <u>Purpose:</u> to describe and recognise, when appropriate, key <u>external</u> features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval¹⁶), and how they affected performance. While additional details of the implementing context may be informative, this section should clearly record whether or not a major and unexpected disrupting event took place during the project's life in the implementing sites.	Final report (strengths/weaknesses): The analysis of the nature of eternal context is generic and doesn't any include specifics on the project's implementing context.	3
Quality of 'Effectiveness' Section (i) Availability of Outputs: <u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the outputs made available to the intended beneficiaries. To include: - a convincing, evidence-supported and clear presentation of the outputs made available by the project compared to its approved plans and budget - assessment of the nature and scale of outputs versus the project indicators and targets - assessment of the timeliness, quality and utility of outputs to intended beneficiaries - identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Final report (coverage/omissions): The report includes a section on 'availability of outputs' as expected. Final report (strengths/weaknesses): The report provides an analysis of the availability of each of the planned outputs including their quality and utility. However, the analysis presented relied heavily on project reporting and did little to triangulate reported data with other data sources.	4

¹⁵ 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.

¹⁶ 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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ii) Achievement of Project Outcomes: <u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the uptake, adoption and/or implementation of outputs by the intended beneficiaries. This may include behaviour changes at an individual or collective level. To include: • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects' work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Final report (coverage/omissions): The report includes an analysis of the uptake of project outputs by intended users. Final report (strengths/weaknesses): Despite the absence of clear indicators for the outcomes, the report presents a well-reasoned qualitative analysis of outcomes.	5
(iii) Likelihood of Impact: <u>Purpose:</u> to present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact, including an assessment of the extent to which drivers and assumptions necessary for change to happen, were seen to be holding. To include: • an explanation of how causal pathways emerged and change processes can be shown • an explanation of the roles played by key actors and change agents • explicit discussion of how drivers and assumptions played out • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Final report (coverage/omissions): The report includes a section on the 'likelihood of impact'. Final report (strengths/weaknesses): The analysis of "likelihood of Impact is generic. Beyond stating that 'All six of the Direct Outcomes to Intermediate State Assumptions held and one of the three Drivers held' the report doesn't explore doesn't analyse the individual causal pathways nor does it test individual assumption and drivers in the Theory of Change (ToC).	3
Quality of 'Financial Management' Section <u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table (may be annexed). Consider how well the report addresses the following: • <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	Final report (coverage/omissions): The report includes a section on financial management that covers all assessment parameters. Final report (strengths/weaknesses): The report presents a concise and clear analysis of the project's financial management practices across the three parameters.	5
Quality of 'Efficiency' Section <u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under efficiency (i.e. the primary categories of cost-effectiveness and timeliness). To include:	Final report (coverage/omissions): The report includes a section on efficiency as expected. Final report (strengths/weaknesses):	5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Review Report Rating
- 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. - implications of any delays and no cost extensions - the extent to which the management of the project minimised UNEP's environmental footprint.	The analysis presented in the report on efficiency tackles both dimensions of cost-effectiveness and timeliness and measure put in place by the project to building on pre-existing institutions. The report also analyses the impact of delays and no cost extensions on project performance. The report however doesn't discuss any measures put in place by the project to minimise UNEP's carbon footprint.	
Quality of 'Monitoring and Reporting' Section <u>Purpose:</u> to present well-reasoned, complete and evidence-based assessment of the evaluand's monitoring and reporting. Consider how well the report addresses the following: - quality of the monitoring design and budgeting (including SMART results with measurable indicators, resources for MTE/R etc.) - quality of monitoring of project implementation (including use of monitoring data for adaptive management) - quality of project reporting (e.g. PIMS and donor reports)	Final report (coverage/omissions): The report covers all the three sub criteria under Monitoring and Reporting. Final report (strengths/weaknesses): The report analyses the budget available for project monitoring and evaluation, project supervision mechanisms established and their adequacy and quality of project reporting. However, the report doesn't include a discussion on the quality of the results statements, suitability of project indicators and data collection among others.	4
Quality of 'Sustainability' Section <u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under sustainability (i.e. the endurance of benefits achieved at outcome level). Consider how well the report addresses the following: - socio-political sustainability - financial sustainability - institutional sustainability	Final report (strengths/weaknesses): The report presents a well reason analysis of the likelihood of sustainability covering the three dimension of socio-political, financial and institutional sustainability.	6
Quality of Factors Affecting Performance Section <u>Purpose:</u> These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed and that entry must be sufficient to justify the performance rating for these factors. Consider how well the review report, either in this section or in cross-referenced sections, covers the following cross-cutting themes: - preparation and readiness - quality of project management and supervision¹⁷ - stakeholder participation and co-operation - responsiveness to human rights and gender equality	Final report (coverage/omissions): All 'factors affecting performance' are covered in adequate detail. Final report (strengths/weaknesses): The report presents a balanced analysis of the factors affecting performance.	5

¹⁷ 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 technical backstopping provided by UNEP. This includes providing the answers to the questions on Core Indicator Targets, stakeholder engagement, gender responsiveness, safeguards and knowledge management, required for the GEF portal.

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- environmental and social safeguards - country ownership and driven-ness - communication and public awareness		
Quality of the Conclusions Section (i) Conclusions Narrative: <u>Purpose:</u> to present summative statements reflecting on prominent aspects of the <u>performance of the evaluand as a whole</u>, they should be derived from the synthesized analysis of evidence gathered during the review process. To include: - compelling narrative providing an integrated summary of the strengths and weakness in overall performance (achievements and limitations) of the project - clear and succinct response to the key strategic questions - human rights and gender dimensions of the intervention should be discussed explicitly (e.g. how these dimensions were considered, addressed or impacted on)	Final report (strengths/weaknesses): The report presents a balanced summary of the prominent aspects of the performance of the evaluand. However, human rights and gender dimensions of the evaluand aren't included in the conclusions section.	5
ii) Utility of the Lessons: <u>Purpose:</u> to present both positive and negative lessons that have potential for wider application and use (replication and generalization) Consider how well the lessons achieve the following: - are rooted in real project experiences (i.e. derived from explicit review findings or from problems encountered and mistakes made that should be avoided in the future) - briefly describe the context from which they are derived and those contexts in which they may be useful - do not duplicate recommendations	Final report (strengths/weaknesses): The lessons learned are written in a language that mirrors and/or duplicates the evaluation findings.	3
(iii) Utility and Actionability of the Recommendations: <u>Purpose:</u> to present 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. Consider how well the lessons achieve the following: - are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when - include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions - represent a measurable performance target in order that the UNEP Unit/Branch can monitor and assess compliance with the recommendations. NOTES: (i) 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	Final report (strengths/weaknesses): The report includes recommendations that seek to solve or cure identified problems in project implementation. The recommendations also include one the seek to strengthen the human rights and gender dimensions of UNEP interventions. However, the proposed timelines for the recommendations are not specific enough to enable follow-up and monitoring.	5

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transmission by UNEP of the recommendation will then be monitored for compliance. (ii) 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.		
Quality of Report Structure and Presentation (i) Structure and completeness of the report: To what extent does the report follow the UNEP Evaluation Office structure and formatting guidelines? Are all requested Annexes included and complete?	Final report (strengths/weaknesses): The report largely follows the UNEP Evaluation Office structure and includes all expected annexes.	5
(ii) 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?	Final report (strengths/weaknesses): The report is written in clear and English language and grammar. However, the language used in some instances is present tense (Para 75, 76, 77) instead of past tense for a completed intervention. The document was also not well formatted and required formatting before publication.	4
OVERALL REPORT QUALITY RATING	Satisfactory	4.5

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.