Evaluation Office of UN Environment

Terminal Evaluation of the UN Environment Project "Support for the Implementation of the National Biosafety Framework of Nigeria"

March 2018

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Study-visit of the Management Staff of the Nat. Biosafety Management Agency (NBMA) to a Field Trial (NBMA website)

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Support for the Implementation of the National Biosafety Framework of Nigeria
GEF ID 3655
March 2018

ACKNOWLEDGEMENTS

This Terminal Evaluation was prepared for the Evaluation Office of UN Environment by Camillo Risoli. The report benefits from a peer review conducted within Evaluation Office of UN Environment.

The Evaluation Office of UN Environment would like to thank the “Support for the Implementation of the National Biosafety Framework of Nigeria” project team and in particular Alex Owusu-Biney (UN Environment Task Manager responsible for the project) for their contribution and collaboration throughout the Evaluation process. Sincere appreciation is also expressed to the National Biosafety Management Agency, particularly to the CEO, Dr. Rufus Ebegba.

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ABOUT THE EVALUATION

Joint Evaluation: No

Report Language(s): English

Evaluation Type: Terminal Project Evaluations

Brief Description: This report is a terminal evaluation of a UN Environment-GEF project implemented between 2012 and 2017. The project's overall development goal [“to facilitate compliance with and the implementation of the Cartagena Protocol through the establishment of a National biosafety system”]. The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation 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 UN Environment, the GEF and their executing partner Ministry of Environment and National Biosafety Management Agency (NBMA), and the relevant stakeholders of the project participating countries.

Key words: [Biosafety, Genetically Modified Organisms (GMOs), National Biosafety Management Agency (NBMA), Cartagena Protocol on Biosafety (CPB), Competent National Authority (CNA), National Biosafety Committee, Regulatory regime, Administrative System, Risk Assessment and Management, Awareness and Participation, Socio-political and Institutional Sustainability, Project Evaluation, GEF] [1]

[1] This data is used to aid the internet search of this report on the Evaluation Office of UN Environment Website

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"Support for the Implementation of the National Biosafety Framework of Nigeria"

Project Identification Table

Sub-programme:	Environmental Governance	**Expected Accomplishment(s)/ Programme of Work Output(s):**	(MTS 2010-2013) Governance EA(b): States increasingly implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions. (MTS 2014-2017) Environmental Governance EA2: 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.
UN Environment approval date:	09/06/2011		
GEF project ID:	3655	**Project type:**	Medium Size Project
GEF OP #:		**Focal Area(s):**	Biodiversity
GEF approval date:	31/03/2011	**GEF Strategic Priority/Objective:**	Strategic Programme 6: Biosafety (SO3/SP6)
***Expected* start date:**	June 2011	**Actual start date:**	29/06/2011
***Planned* completion date:**	08/06/2015	**Actual completion date:**	08/08/2017
***Planned* project budget at approval:**	USD 2,011,000	**Actual total expenditures reported as of [date]: June 2017**	USD 1,729,909
GEF Allocation:	USD 965,000	**GEF grant expenditures reported as of [date]: June 2017**	USD 871,998.61
***Expected* Medium-Size Project co-financing:**	USD 1,046,000	**Secured Medium-Size Project/Full-Size Project co-financing: June 2017**	USD 857,910.00
First disbursement:	13/06/2011	**Date of financial closure:**	Not closed
No. of revisions:	7	**Date of last revision:**	01/01/2017
No. of Steering Committee meetings:	7	**Date of last/next Steering Committee meeting:**	27/07/2016
Mid-term Review/ Evaluation *(planned date):*	June 2012	**Mid-term Review/ Evaluation (actual date):**	November 2013
Terminal Evaluation *(planned date):*	May 2017	**Terminal Evaluation (actual date):**	May – November 2017 (Country Visit 02-08/11/2017)
Coverage (Countries):	Nigeria	**Coverage - Region(s):**	Western Africa

List of Acronyms and Abbreviations

ANUBIS	A New UNEP Biosafety Information System
BCH	Biosafety Clearing House
CBD	Convention on Biological Diversity
CPB	Cartagena Protocol on Biosafety
GEF	Global Environment Facility
GMO	Genetically Modified Organism
LMO	Living Modified Organism
NBC	National Biosafety Committee
NBF	National Biosafety Framework
NBMA	National Biosafety Management Authority
NEA	National Executing Agency
NGO	Non-Governmental Organisation
NPC	National Project Coordinator
ProDoc	Project Document
TOC	Theory of Change
TOR	Terms of Reference
UNDP	United Nations Development Programme

Executive Summary

1 The Project "Support for the Implementation of the National Biosafety Framework of Nigeria" (GFL/2328-2716-4B98) was approved in 2011 for a duration of 4 years (2011-15) and a total budget of 2.011.000 USD, the 48% of which represents the GEF allocation (USD 965.000) and the remaining 52% (1.046.000 USD) to be provided in kind by the Government of Nigeria.

2 The Project has been granted 2 no-cost extensions for a total of 26 months, shifting its Official End date to 08/08/2017, and this is the final report of the Terminal Evaluation that took place in the period between May to December 2017, including a mission to Nigeria from 03/11/2017 to 08/11/2017. Under the same Evaluation, a cluster of three similar Projects was assessed (Ghana, Liberia and Nigeria) and a Comparative Analysis was also produced (see Annex 6), as well as a joint Evaluation Bulletin (Annex 5).

3 Interest and support for Biotechnologies applied to agriculture, and for Genetically Modified Organisms (GMOs) in particular, is high in Nigeria, which established the National Biotechnology Development Agency since 2001, under the aegis of the Federal Ministry of Science and Technology. In fact, the country, despite its rich endowment of natural resources and the high percentage of population engaged in Agriculture (70%), is highly dependent from food import to respond to the fast-growing internal demand of food, due to its high-rate demographic growth (Nigeria is the most populous country of Africa, with more than 180M people in 2015).

4 Health, environmental and socio-economic concerns have grown in the country regarding the release of GMOs crops for large-scale production. In this context, Nigeria ratified the Cartagena Protocol on Biosafety (CPB) in 2003 and developed its National Biosafety Framework (NBF) with GEF/UN Environment support (2002-06). The Framework included the outline of a Biosafety Policy and a draft Biosafety Bill and prepared the ground for the setting and implementation of Biosafety Regulatory, Administrative and Monitoring Systems, which represented the rationale for the preparation and approval of the project "Support for the Implementation of the National Biosafety Framework of Nigeria", under current evaluation. The overall objective of Project was "to assist Nigeria through capacity building activities to address identified gaps in legal, technical and administrative measures in ensuring compliance to the Cartagena Protocol on Biosafety".

5 At the time of Project formulation and approval, the National Executing Agency (NEA) was the Federal Ministry of Environment. In 2015, the National Biosafety Management Agency (NBMA) was created by Law (the National Biosafety Management Agency Act) becoming the key-player for Biosafety in Nigeria and the new National Executing Agency of the Project, as well. Subsequently, the Project staff and the Project management have been transferred to the NBMA and the Director General/Chief Executive Officer of the Agency has become the National Project Coordinator.

6 The Project has, therefore, been implemented during a delicate, transitional phase coinciding with the establishment of the new Agency and has been highly instrumental to the smooth evolution and progressive consolidation of the new Biosafety Framework. As a matter of fact, the newly created (2015) National Biosafety Management Agency (NBMA) has rapidly and firmly assumed all responsibilities related to Biosafety in the country, including the assessment of requested authorizations for introducing Genetically Modified Organisms (GMOs) in the country for different purposes, Risk assessment and Risk Management, Biosafety Monitoring and Enforcement.

7 The Project has successfully delivered virtually all the expected Outputs, remarkably all those regarding the whole Regulatory system (Law, Regulations and several Guidelines).

Relevant Outputs have also been produced both in the Administrative System for Application / Authorization and in the Monitoring and Enforcement system. Many activities of capacity building have also been implemented. Communication and fine-tuning activities have been developed with the stakeholders, mainly of the public sector (Ministries and other Agencies), while initiatives for the large public and Civil Society sector are still in in need of a comprehensive Public Awareness and Participation Strategy and related Plan of Action. Overall, Outputs delivery has been rated Highly Satisfactory (see Summary Table with ratings here below).

8 Outcomes achievement related to the five components of the National Biosafety Framework (see Immediate Outcomes in Diagram 2) has been uneven, though overall satisfactory. Actually, the Regulatory Regime is in place and operational through the enactment of the Law (2015), of the subsequent Regulations (approved in 2017) and the full empowerment of the Competent National Authority (the NBMA) that, after only two years of life, is already well established with a clear organogram and more than 200 staff members.

9 The Administrative System for handling applications and decision-making is also in place, as well as the System for Monitoring and Enforcement. They are both clearly rooted in the regulatory regime and complemented by relevant guidelines, some of them already applicable, while others are under final revision. Five Field Trials have been approved and are on-going (cassava, cow-pea, sorghum, rice and maize), as well as the Commercial Release of Genetically Modified Cotton approved in 2016, which is undergoing "on-farm demonstrations" before being fully released, probably in 2019. The authorisation has generated controversy and polemics among 17 groups of the Civil Society that have, in fact, taken legal action against the Agency. The issue is raising concerns regarding the Socio-political Sustainability of the Framework and is discussed in chapter 5.8.1.

10 The Biosafety Policy component of the Framework is still in need of a specific Action Plan and the National Biodiversity Strategy and Action Plan 2016-2020 (NBSAP) is under review and contemplates Biosafety among its targets.

11 The setting of a functional System for Public awareness and participation, despite some relevant and promising outputs produced so far (for instance four National Biosafety Conferences), needs more decisive and concrete actions to fully comply with the Law that requires "to provide measures for effective public participation, public awareness and access to information". In fact, in this component, too, there is the need to put in place a comprehensive strategy and a plan of action for enhancing the capacity of different societal groups and relevant stakeholders (e.g. the University, Consumers and Farmers) to approach and discuss Biosafety issues, to have an informed opinion and to meaningfully participate in the decision-making process.

12 The Evaluation has found that the new National Biosafety Management Agency (NBMA) is well integrated within the Governance system of the country and its Financial and Institutional Sustainability are being strengthened (see chapter 5.8.2 and 5.8.3). The political will of policy and decision-makers at the highest level in supporting Biosafety agenda is clear and can be considered, in fact, as a key-driver for the attainment of the Project Results.

13 On the other hand, however, the Law and Regulations leave room to the discretionary role of the Agency in decision-making for authorization (Risk Assessment). Some mechanisms for risk assessment and decision-making are optional, rather than mandatory, which makes the Law and the Regulations not fully "predictable". This may eventually turn to be a weakness for the Agency, rather than a strong point, as discussed under Socio-political Sustainability (chapter 5.8.1). In this context, the new Agency is deploying efforts to gain credibility and acceptance from a larger audience, which is, in fact, an on-going endeavour to which the NBMA is giving all priority (see chapters 5.4.1, 5.4.2 and 5.8.1).

14 Based on all the above, the answer to the first strategic question specified in the Terms of Reference of the Evaluation (see Annex 2) regarding the implementation of a "fully functional and responsive regulatory regime that responds to the obligations under the Cartagena Protocol on Biosafety" is largely positive. All main regulatory and administrative instruments (Law, Regulations, Guidelines, Institutional Agreements) are in place and operational.

15 The development of "institutional and technical capacity, awareness and participation amongst the key actors" (as asked in the second question) has surely been addressed by the new National Biosafety Management Agency (NBMA) and is an on-going process, due to the short lifetime of the Agency and the novelty of Biosafety in the country. Given the size of the Agency and its large and delicate mandate, there is surely the need to reinforce the capacities of its Human Resources. At the same time, there is the need to consolidate a larger "Biosafety knowledge community", by enhancing the partnership with other governmental and public partners and by setting appropriate instruments to foster communication and participation among a wide range of actors (Private sector, Civil Society, Academic and research Institutions, the large Public).

16 The third question, concerning the "consolidation of a functional national system that can monitor Biotechnology and follow up the releases of Living Modified Organisms (LMOs) and their possible effects on the environment" is particularly relevant in the case of Nigeria, since the country is willing to make safe use of GMOs crops and has already authorized the commercial use of GMO cotton. Therefore, although a functional system is indeed in place, it will be progressively challenged. Technical capacities and socio-political sustainability seems to be the two main factors for the progress of Biosafety in Nigeria and its contribution to the Sustainable Development of the country.

17 The Evaluation has also concluded that the overall Monitoring and Reporting System of UN Environment / GEF Projects shows, as largely discussed in chapter 5.7, some positive elements, such as the setting and effective use of a regular Reporting system and the constant proximity monitoring by the Project Team, the Project Steering Committee and the UN Environment Task Manager. Nevertheless, relevant weaknesses have also been detected within the whole chain of the GEF / UN Environment Monitoring and Reporting System, resulting in the inadequate use of the Planning, Monitoring and Evaluation tools foreseen in the Project Document, the lack of a comprehensive and effective Project Monitoring System in place and a low capacity of the Project Team to grasp principles and methods of a "Result-based approach" to the Project (a common finding / conclusion in all three Projects under evaluation, i.e. Ghana, Liberia and Nigeria projects).

18 The following Table provides the summarized rating of the different criteria established for the Evaluation.

Summary of Evaluation Criteria and Ratings Table

Criterion	Summary Assessment	Rating
A. Strategic Relevance	Very satisfactory in all aspects	**HS**
B. Quality of Project Design	Project Design Quality assessed in Inception Report was considered weak in some relevant criteria	**MU**
C. Nature of External Context	Internal conflicts represented exceptional challenges that, though not directly affecting the Project, may have altered Government's priorities, plans and programs.	**Moderately Unfavourable**
D. Effectiveness		**HS**
1. Achievement of outputs	The Project has successfully delivered most of its expected Outputs, including the whole Regulatory system	HS
2. Achievement of direct outcomes	Regulatory, Administrative and Follow-up/Monitoring Systems in place. Public participation in need of more decisive actions.	S

Criterion	Summary Assessment	Rating
3. Likelihood of impact	Outcomes have been achieved, roles and responsibilities are clear and the framework is progressing towards long term impact.	HL
E. Financial Management		**S**
F. Efficiency	Time-efficiency has been challenged (26 months of extension) but the Project was very cost-effective in achieving expected results.	**S**
G. Monitoring and Reporting	Uneven quality in its components.	**MS**
H. Sustainability		**L**
1. Socio-political sustainability	Highly depending on the overall socio-political context of the country. Efforts on-going to gain wider public acceptance and stakeholders' inclusion	L
2. Financial sustainability	Foreseen by the Law (2015)	HL
3. Institutional sustainability	Roles and responsibilities very clearly assigned to the National Biosafety Management Agency (NBMA), Stakeholders involvement on-going	HL
Overall project rating		**S**

19 The Terminal Evaluation has formulated three Recommendations (chapter 6.3), summarised as follows:

Recommendation 1:
The Evaluation strongly recommends to keep-on and increase Capacity Building activities through:

a) the formulation and adoption of a comprehensive short/medium-term Capacity Building Plan (2-3 years) for the Agency's staff and other key-stakeholders, including a diversified range of training options at national and international level, with particular attention to the following areas:
- Risk Assessment
- Food Safety
- Biosafety Communication, including Risk Communication
- Biosafety Administration

b) The setting of a resources mobilization strategy for Capacity Building at National, Regional and International level for the implementation of the Plan in the most cost-effective way.

Recommendation 2:
The Evaluation recommends giving effective steps for the formulation, adoption and implementation of Education Curricula on Biosafety, both at Secondary and University level. Appropriate existing know-how and experience in other countries should be exchanged, analysed and discussed, to create adapted Curricula for the country.

Recommendation 3:
The Evaluation recommends giving effective steps for the revision and improvement of the whole Monitoring and Reporting System of the Projects, particularly addressing:

- Awareness raising and capacity building of Projects' Teams on the relevance and implementation of effective Project Monitoring and Reporting Systems, based on a sound "Project Management by Results";
- Putting in value, review and improve the existing Monitoring and Reporting tools (particularly the "Costed M&E Plan", the "GEF Tracking Tools" and the "Project Implementation Review" / PIR), as living instruments for the setting of appropriate Project Monitoring Systems at Project level.

1 Introduction

1. In its capacity as an Implementing Agency of the Global Environmental Facility (GEF), UNEP has been providing administrative and technical assistance to countries participating in the Cartagena Protocol on Biosafety (CPB) for the development and implementation of National Biosafety Frameworks (NBF). The frameworks are a combination of policy, legal, administrative and technical instruments enabling the countries to manage the safe transfer, handling and use of living modified organisms (LMOs) from modern biotechnology2.

2. This is the final report of the Project "Support for the Implementation of the National Biosafety Framework of Nigeria" (GFL/2328-2716-4B98) that was approved by GEF the 31/03/2011 and by UN Environment the 09/06/2011 for a duration of 4 years (2011-15) and a total budget of 2.011.000 USD, the 48% of which represents the GEF allocation (USD 965.000) and the remaining 52% (1.046.000 USD) to be provided in kind by the Government of Nigeria. The Project has been granted 2 no-cost extensions for a total of 26 months, shifting its Official End date to 08/08/2017.

3. The project is a Medium Size Project (MSP) financed through GEF-4 mechanism and belongs to GEF Biodiversity Focal Area. It is relevant to GEF Strategic Programme 6 Biodiversity(BD-SP6): Building Capacity for the Implementation of the Cartagena Protocol on Biosafety. The Project makes part of UN Environment Biennial Programme of Work (MTS 2010-2013 and MTS 2014-2017), as discussed in chapter 5.1.1.

4. The National Executing Agency (NEA) was the Federal Ministry of Environment up to 2015, when the new National Biosafety Management Agency (NBMA) was created by Law becoming the Competent National Authority for Biosafety in Nigeria and assuming also the function of NEA of the Project.

5. The Evaluation took place in the period between May to December 2017 and included a mission to Nigeria from 03/11/2017 to 08/11/2017. The Evaluation Team consisted of one consultant specialist of projects evaluation in the environmental sector (See Annex 8) working under the methodological guidance of the Evaluation Office (EO) of UNEP.

2 The Evaluation

2.1 Overall approach of the Evaluation

6. In line with the UN Environment Evaluation Policy and Evaluation Manual and following the Guidelines for GEF Agencies on Conducting Terminal Evaluations, the Terminal Evaluation has been undertaken upon 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 evaluation had two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing

[2] In this Report, the terms LMO (Living Modified Organism) and GMO (Genetically Modified Organism) are considered synonymous and indifferently used.

through results and lessons learned among UN Environment, the GEF, the National Executing Agency and the national partners.

7. The report follows the format for Terminal Evaluations provided by the UN Environment Evaluation Office. According to the UN Environment evaluation methodology, most criteria have been rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU). Ratings are provided at the end of the assessment of each evaluation criterion (Chapter 5: Findings) and the complete ratings table is included under the Conclusions section (6.1).

8. As requested by the UN Environment methodology for Terminal Evaluations, an Inception Report was produced at the beginning of the mission, containing a review of the project context, of the quality of project design, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule. The Inception Report underwent a Peer Review at the UN Environment Evaluation Office and has been shared with the Biosafety Task Manager at UN Environment.

9. The Evaluation has fostered a participatory approach with key stakeholders at national level. During the preparation of the field visit, the consultant, through the support of Biosafety Task Manager at UN Environment, has come to contact with the national Executing Agency and the National Biosafety Authority and has shared with them some preliminary tools to systematise and discuss main achievements (see following section 2.2).

10. Considering that the Project was expected to mostly deliver institutional and capacity building outputs and outcomes, quantitative outputs have been assessed against their quality and effectiveness, hence their capacity to drive and sustain changes at higher level of objectives. The process for the attainment of Project’s results has also been assessed, to capture the level of participation and ownership of the different stakeholders involved, as well as to better understand the reasons for successes or failures.

11. Whenever possible, the information received during the visit or acquired through the desk review (reports, etc.) has been triangulated through personal interviews with project stakeholders. Divergent views have also been captured during the field mission and through the review of existing local media (e.g. newspapers, websites, etc.).

2.2 Methods and tools for data collection and analysis

12. Overall, the Terms of Reference (TOR) of the Evaluation and the methodological tools and formats provided by the UN Environment Evaluation Office have proved to be a robust methodological framework for the Evaluation exercise, facilitating the systematisation and presentation of the evaluation findings.

13. The Desk Review of all project documents and reports filed in the e-platform ANUBIS (A New UNEP Biosafety Information System) has been most helpful to gather relevant information regarding the technical and financial performance of the Project.

14. The Inception phase of the Evaluation has permitted a preliminary approach to the Project and the delivery of the Inception Report, which laid the foundation for the main report in some essential aspects, by including:

- The thorough Review of the Project Design Quality (PDQ) that has highlighted strong and weak points of Project Design (see section 5.2), particularly of the Logical Framework (Logframe);
- The construction of the Theory of Change of the project (see chapter 4);
- The Stakeholders analysis, which has put in evidence the expected roles and responsibilities of the main key-players of the Project, laying the ground for the assessment of the effective institutional framework of the Project and of its institutional sustainability (see chapter 3.3);
- The integration of supplementary and specific questions to the evaluation key-questions defined in the evaluation framework of the Terms of Reference.

15. Exchanges with one of the Evaluation Managers of UN Environment Evaluation Office and with the UN Environment Task Manager / Biosafety have been constant and most useful to clarify issues of methodological and technical nature regarding the evaluation development and the project implementation.

16. Some tools prepared in advance by the Consultant have been shared with the Project team before the fielding of the mission, notably a revised matrix of Project Outputs integrated by consultant's questions and comments and the Financial Tables. All of them have been discussed with the Project Team and relevant stakeholders during the country visit.

17. The main methods and tools used in the Evaluation can be summarised as follows:

- A Desk Review of all project documents and tools the consultant had access to (see Annex 5), including the ANUBIS e-platform;
- Exchanges with the Project Management Team at UN Environment, namely the Task Manager;
- Revision of the Final Project Outputs and Project Final Report (posted in ANUBIS) and elaboration of comments and questions, shared with the National Project Coordinator before fielding the mission and extensively discussed with him during the visit;
- A Country Visit (5 days), which included:
    - Meetings and continuous exchange with the Chief Executing Officer / Director General of the National Biosafety Management Agency (NBMA), also National Project Coordinator and National Focal Point for the Cartagena Protocol on Biosafety;
    - Joint meeting with the Head of Departments and Units of NBMA (14 staff members);
    - Meetings with member of the National Biosafety Committee;

- Visit to the GMO Laboratory;
- Drafting of preliminary Conclusions and Recommendations and discussion with the National Project Coordinator in the final de-briefing.

18. This Terminal Evaluation is part of a cluster of three Evaluations that included two other similar Projects of Implementation of the National Biosafety Frameworks in Ghana and Liberia. Actually, the field missions in the three countries were carried out back to back and a Comparative Analysis has also been produced (Annex 7), as requested by the Terms of Reference of the Evaluation (Annex 2).

3 The Project

3.1 Context

19. Nigeria occupies a vast area in the Gulf of Guinea, West Africa and includes different ecosystems from semi-arid savanna to mountain forests, rain forest, freshwater swamp forests and large wet areas with diverse coastal vegetation floodplains. For this reason, it is largely endowed with biodiversity (IUCN Red List of Threatened Species includes 148 animals and 146 plants that are found in Nigeria).

20. Despite its rich endowment of natural resources and with around 70% of the population engaged in agriculture, the country has hugely increased its food import along the last decades, in order to respond to the fast-growing internal demand of food due to its high-rate demographic growth (Nigeria is the most populous country of Africa, with more than 180M people in 2015).

21. The size of the economic context of the country has also to be considered for its implications in terms of Biotechnology and Biosafety sectors. Nigeria was the 26th world economy in terms of GDP and the first in Africa[3] in 2016.

22. Interest and support for Biotechnologies applied to agriculture, and to GMOs in particular is high and since 2001, Nigeria established the National Biotechnology Development Agency (NABDA) under the aegis of the Federal Ministry of Science and Technology. As a consequence, health, environmental and socio-economic concerns have grown in the country regarding the release of GMOs crops for large-scale production.

23. Actually, Nigeria adhered to the Convention on Biological Diversity in 1994 and ratified the CPB in 2003. The country, with GEF/UN Environment support, developed its National Biosafety Framework (2002-06) including the outline of a Biosafety Policy and a draft Biosafety Bill, hence preparing the ground for more substantive achievements in setting a full Regulatory, Administrative and Monitoring Systems. For that reason, a renewed support from GEF/UN Environment was required, leading to the formulation and implementation of the Project "Support for the Implementation of the National Biosafety Framework of Nigeria", under current evaluation.

[3] Source: World Bank

3.2 Objectives and components

24. According to the Project Document, the overall project objective is **"to assist Nigeria through capacity building activities to address identified gaps in legal, technical and administrative measures in ensuring compliance to the Cartagena Protocol on Biosafety".** The Project comprises 5 main Components, each of them with one expected Outcome, as outlined in following Table 1.

Table 1: Components and Outcomes of the Project (according to the Logical Framework of the Project)

Project component	Expected Outcomes
1) Baseline established for information on the safe use of biotechnology in Nigeria through a stocktaking analysis.	1) Gaps and areas of intervention in the National Biosafety Framework identified to facilitate final project design
2) System for handling LMO issues	2) A functional national system for handling request and decision-making as well as performing risk assessment and management associated to LMOs established
3) Establishment of a regulatory regime consistent with CPB and national obligations	3) A fully functional and responsive regulatory regime in line with CPB and national needs established
4) Strengthening systems for monitoring and enforcement	4) A functional national system for "follow-up" activities, namely monitoring of environmental effects and enforcement established
5) System for public education, awareness and participation	5) A functional national system for public awareness, education, participation and access to information established

3.3 Stakeholders

25. At the time of Project formulation and approval, the National Executing Agency (NEA) was the Federal Ministry of Environment. In 2015, the National Biosafety Management Agency (NBMA) has been created by Law (the National Biosafety Management Agency Act 2015) becoming the Competent National Authority for Biosafety in Nigeria and the new National Executing Agency of the Project. As outlined in Table 2 here below, the Agency has the overall responsibility on all issues regarding Biosafety Management in the country and is directed by a Chief Executive Officer / Director General of the Agency (appointed by the President of the Republic), while the Board of the Agency has an advisory role on the functioning of the Agency.

26. The main characteristics of the Agency, as established by the Act of 2015, are summarised in the following table:

Table 2: Role and responsibility of the National Biosafety Management Agency (NBMA)

Main functions and responsibilities	Structure of the Agency	Functions of the Board
Stakeholder: National Biosafety Management Agency (NBMA)		
• It is the Competent Nat. Authority (CNA) for Biosafety and ensures the effective management of all component of the Nation's Biosafety; • accepts and verifies applications in respect of GMOs; and grant biosafety permits or rejects; • develops measures, requirements and criteria for risk assessment and decision making; • develops risk management plan and strategy; • take samples and carries out laboratory analysis of crops, products or materials for GMOs detection; • carries out actions to ensure compliance with all legal obligations set out by the Law; • monitor the activities of institutional committees and Biosafety officers.	• A Director General / CEO appointed by the President; • A Secretary / Legal Adviser • A **Board,** comprising: • A Chairman • The Director General • Representatives of the Federal Ministries of: - Environment; - Agriculture; - Science and Technology; - Trade and Investment; - Health; • The Nigeria Customs Service; • The National Agency for Food and Drug Administration and Control (NAFDAC); • The National Biotechnology Development Agency (NABDA); • one representative each of conservation Non-Governmental Organizations (NGOs) and organized private sector; • one representative of the Biotechnology Society of Nigeria.	• advise on the overall policy formulation of the Agency regarding financial, operational and administrative matters; • establish committees charged with specific functions; • encourage and promote activities related to the functions of the Agency.

27. The Regulations of the Act (2017) have further specified the role of the two advisory mechanisms foreseen by the Law, i.e. the National Biosafety Committee (NBC) and the National Biosafety Technical (Sub) Committee (NBTS), two "ad hoc" advisory mechanisms (external to the NBMA), composed by technical experts to support the Agency in the process of decision-making on authorisations. Moreover, Institutional Biosafety Committees (IBC) are mandatory by Law to be set in all the institutions that carry out Contained or Confined use of GMOs. Table 2A, below, summarised the main functions of these Committees. The issue is discussed more in detail in chapters 5.4.2 (Achievement of Outcomes).

Table 2A: Functions of Biosafety Committees

Biosafety Committees	Functions
a) National Biosafety Committee (NBC)	According to the Law, the NBMA "may constitute a National Biosafety Committee (NBC) to carry out risk assessment of any genetically modified organism under this Act". As specified in the Regulations, the NBC is an "Ad-hoc expert advisory committee to address technical issues relating to applications submitted to the Agency". The NBC has basically the functions to

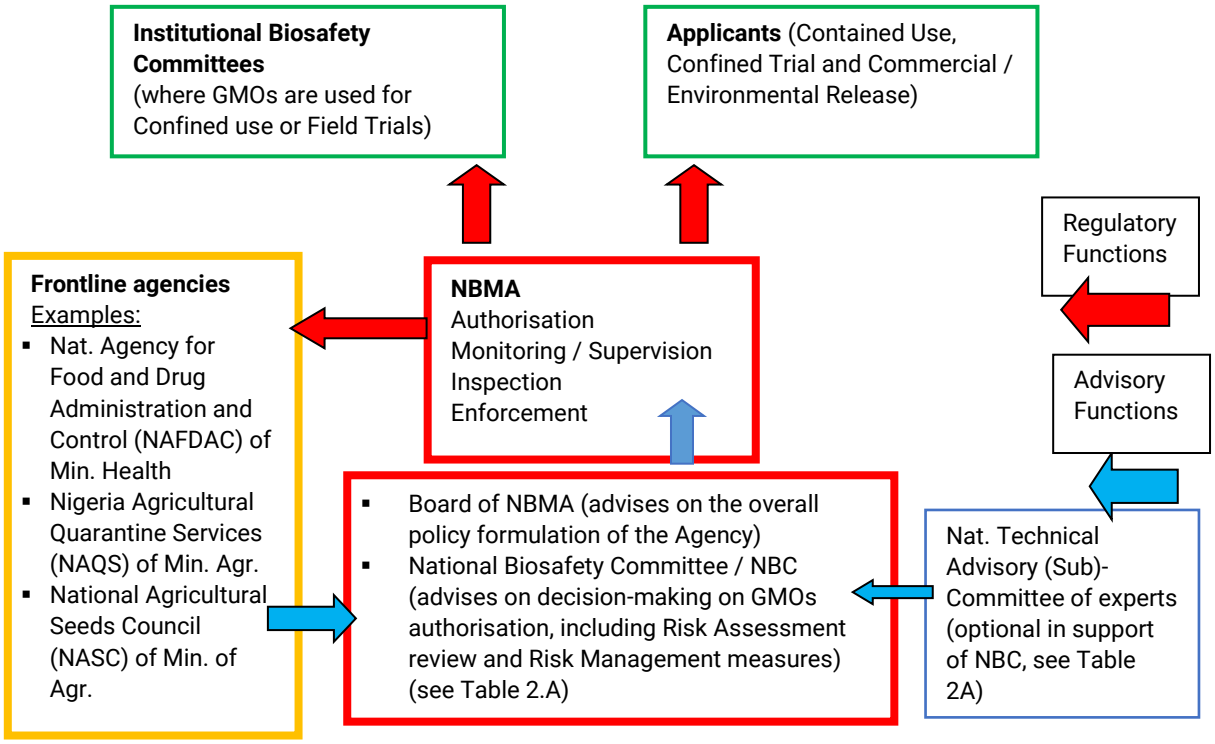
	"review proposals for contained use, confined field trials and commercial release of GMOs, review risk assessment and propose risk management measures". The membership of the National Biosafety Committee (NBC) is not regulated by Law, therefore assigning to the Agency this responsibility.
b) National Biosafety Technical Sub-Committee (NBTS)	According to the Regulations, the Director General of the NBMA "may appoint scientific experts" and "may set up a National Biosafety Technical Sub-Committee" (NBTS to provide technical advice to the Director General".
c) Institutional Biosafety Committees (IBC)	Mandatory by Law to be set in all the institutions that carry out Contained or Confined use of GMOs. Among other functions, they "…Receive and review applications for contain Research and Confined Field Trials and approve or reject at the Institutional Level… inspect and monitor Confined Field Trials… review and monitor all modern biotechnology research conducted and sponsored by the Applicant institution..".

28. Notwithstanding the pivotal role of the National Biosafety Management Agency (NBMA) in regulating and ensuring compliance to the Law according to its overall monitoring, supervision, inspection and enforcement responsibilities, other institutions are relevant players. The role of the Stakeholders can be outlined as follows:

- Stakeholders may be part of the bodies that support the NBMA in fulfilling its functions, like the Board (see Table 2 above) and/or provide "ad hoc" requested expertise for decision-making and risk assessment, through their participation in the National Biosafety Committee (NBC);
- Stakeholders can be frontline institutions in their specific area of intervention, such as the Nat. Agency for Food and Drug Administration and Control (NAFDAC) of Min. Health, the Nigeria Agricultural Quarantine Services (NAQS) and the National Agricultural Seeds Council (NASC) of Min. of Agriculture and the Customs Service. As far as GMOs are concerned, they work under the coordination and supervision of the NBMA;
- Stakeholders may directly implement GMOs related activities through the Contained (Laboratory) or Confined (Field Trials) in which case they must be authorised by the NBMA and to establish Institutional Biosafety Committees (IBC) that work under the coordination and supervision of the NBMA;
- Stakeholders that want to carry out the commercial (environmental) release of the GMOs have, as well, to be authorised by the Agency and, if authorised, to comply with the requirements of the Law and with the prescriptions of the permits issued by the Agency.

29. All the above can be summarily visualised in the following Diagram.

Diagram 1: Regulatory and advisory flows between NBMA and Stakeholders



3.4 Project implementation structure and partners

30. As mentioned before, at the time of Project formulation and approval, the National Executing Agency of the Project was the Federal Ministry of Environment. A National Coordinating Committee was already in charge since the formulation of the National Biosafety Framework (2006), which acted also as a Steering Committee of the Project.

31. With the enactment of the National Biosafety Management Agency Act of 2015, the newly created National Biosafety Management Agency (NBMA) of Nigeria has become the National Executing Agency of the Project and the change was officially notified to UN Environment the 22/03/2016. Subsequently, the Project staff and the Project management have been transferred to the NBMA and the Director General/Chief Executive Officer of the Agency has become the National Project Coordinator.

32. The National Coordinating Committee, has met seven times from 2011 to 2016. The last meeting, held in July 2016 (21 participants), has been the first after the setting of the new National Biosafety Management Agency and is reported and filed in the platform ANUBIS (A New UN Environment Biosafety Information System).

3.5 Changes in design during implementation

33. During its lifetime, the Project has been granted 7 budget revisions, mainly for re-allocating unspent money, that have not substantially changed the project design. Two no-cost extensions (total 26 months) were also granted, the first of which was accorded in 2015 when approaching the planned completion date and the second in 2016, due to further delays in project execution.

34. As a matter of fact, the approval of the National Biosafety Management Agency Act of 2015 and the subsequent establishment of the National Biosafety Management Agency (NBMA) have brought about a change of the institutional framework of the Project (see above) with an inevitable period of adaptation and readjustment that has caused technical and administrative delays. Despite the above, no major substantive changes in the project design have been registered, well on the contrary, since the new Agency has been highly instrumental to the achievement of the results initially designed.

3.6 Project financing

Table 3: Budget (GEF) at design and expenditures by components (June 2017)

Component/sub-component	Estimated cost at design (USD)	Actual Cost (USD)	Expenditure ratio (actual/ planned)
1. Stocktaking	16.000	Not available (n/a)	
2. Systems for handling LMOs issues	230.000	n/a	
3. Establishment of the Regulatory regime	130.000	n/a	
4. Strengthening systems for Monitoring and Enforcement	352.500	n/a	
5. Systems for Public education, awareness & participation	100.000	n/a	
6. Project management, monitoring and evaluation	136.500	n/a	
Total	**965.000**	871.999	90%

Table 4: Co-financing Table (GEF Projects only) (updated June 2017)

Co-financing (Type/Source)	UNEP own Financing (US$1,000)		Government (US$1,000)		Other* (US$1,000)		Total (US$1,000)		Total Disbursed (US$1,000)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants									
– Loans									
– Credits									
– Equity investments									
– In-kind support			1.046	857,9			1.046	857,9	857,9
– Other (*)									
Totals			1.046	857,9			1.046	857,9	857,9

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

4 Theory of Change (TOC) of the project

4.1 The reconstructed TOC of the project: overview

35. The Project Document did not include any Theory of Change (TOC)[4] and the Logframe was flawed, since it only provided Outcomes, without the corresponding activities and outputs having been clearly defined. Though the clear identification of the Project's Outputs was not explicitly required at the time of Project's formulation[5], their absence is a major shortcoming: the concrete products to be delivered by the Project are not clearly specified and the logical sequence of Activities-Outputs-Outcomes is not made explicit in the Project Document. It was equally lacking the description of the intervention logic from the Outcomes to the long-term Impact.

36. The Table here below compares the project's results (as stated in the ProDoc, the Logical Framework and other Appendices to the ProDoc) and as formulated in the Theory of Change (TOC) at Evaluation.

Table 5: Comparison of Results Framework

Results as stated in the ProDoc Logframe	**Results as stated in the TOC at Evaluation**
	Impact
	Enhanced conservation and sustainable use of biological diversity in Nigeria
	Intermediate States to Impact
	1) Safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements, as requested under art. 1 of Cartagena Protocol (CPB); 2) National Biodiversity Strategy and Action Plan (NBSAP) fully operational
Goal of the Project (in the ProDoc)	**Main Project Outcome**
The goal of this Project is to facilitate compliance with and the implementation of the Cartagena Protocol through the establishment of a National biosafety system. Specifically, its main objective is to assist Nigeria to put in place a well-articulated, effective and transparent national biosafety system through the development of the necessary policies, regulatory and technical	A fully operational National Biosafety Framework in Nigeria

[4] Not requested at the time of Project's formulation

[5] Information supplied by the UN Environment Task Manager for Biosafety

instruments, and local capabilities in order to meet national development needs.	
Objective (in the ProDoc)	**Intermediate States to Main Project Outcome**
To assist Nigeria through capacity building activities to address identified gaps in legal, technical and administrative measures in ensuring compliance to the Cartagena Protocol on Biosafety.	1) Improved Decision-making processes for LMOs approval, effective implementation mechanisms and enhanced quality information and transparency 2) Improved Governance of National Biosafety systems based upon: Rule of Law and Compliance, Accountability and Liability, Equity, Transparency and Citizens' Participation
Outcomes (in the Logframe)	**Immediate Outcomes**
1) Gaps and areas of intervention in the National Biosafety Framework identified to facilitate final project design	**Reformulated as a Preliminary Output (see under 'Outputs' below)**
2) A functional national system for handling request and decision-making as well as performing risk assessment and management associated to LMOs established 3) A fully functional and responsive regulatory regime in line with CPB and national needs established 4) A functional national system for "follow-up" activities, namely monitoring of environmental effects and enforcement established 5) A functional national system for public awareness, education, participation and access to information established	1) Biosafety policy in place with specific action plans (not present in the Logframe) 2) A fully functional and responsive regulatory regime 3) An administrative system for handling applications, decision-making, risk assessment and risk management 4) A follow-up system in place to monitor environmental effects and enforcement 5) A functional system for access to information, public awareness, education and participation
Outputs based on data in the ProDoc, Logframe, Monitoring and Evaluation Plan (Appendix 7 of the ProDoc) and from Appendix 6 Key Deliverables and Benchmark) [6]	**Outputs**
1) National Biosafety Policy approved by Government 2) Biosafety Bill promulgated as an Act of Parliament by year 2 3) Implementing regulations/guidelines gazetted 4) Staff involved in enforcing the regulatory regime trained 5) Clearly defined entity for decision making with clearly defined roles and responsibilities	*(Preliminary Output)* A baseline is established with clearly identified gaps and areas of intervention 1) Biosafety Policy reviewed and approved by the line-Ministry with Action Plan 2) Biosafety Bill promulgated as an Act of Parliament; 3) Implementing regulations and guidelines gazetted; 4) Staff involved in enforcing the regulatory

[6] The Logframe did not include Outputs

6) Administrative manual with operational guidelines on handling of LMOs developed and in use by year 2 7) Agreed procedures for carrying out risk assessment established 8) National roster of risk assessment experts established 9) Designated staff of NBF trained and capacitated in procedures for handling LMOs with clearly outlines roles and responsibilities 10) Procedures for monitoring of environmental effects and enforcement actions are defined, published and in place 11) Emergency response procedures established and relevant national institutions designated and capacitated 12) 100 Biosafety Inspectors (designated) from different relevant government Agencies and NBA trained in monitoring and enforcement procedures 13) 40 Custom officers trained in review of documentation and post management of LMOs 14) 20 Judiciary officials trained in dispute settlement, handling of court cases and enforcement) 15) Four Reference laboratories selected and upgraded with equipment for LMO detection 16) A plan for public education, awareness and participation and access to information is formulated and implemented 17) Awareness seminars, workshops, debates and meetings for specific target groups, such as farmers and consumers on importance of biosafety held. 18) Outreach materials is prepared and disseminated for different target groups; 19) National BCH established	regime trained 5) Clearly defined entity for decision making with clear roles and responsibilities; 6) Administrative manual with operational guidelines on GMOs handling developed; 7) Agreed procedures (guidelines) for risk assessment established; 8) National roster of risk assessment experts established 9) Designated staff trained in procedures for handling LMOs 10) Monitoring and enforcement procedure (guidelines) established, including Emergency responses; 11) Relevant institutions designated and capacitated; 12) 100 Biosafety Inspectors, 40 Custom officers, 20 Judiciary officials trained in their specific areas of responsibility; 13) Four Reference laboratories selected and upgraded 14) A plan for public education, awareness and participation formulated and implemented 15) Seminars, workshops, debates and meetings for specific target groups held (e.g. farmers and consumers); 16) Outreach materials prepared and disseminated for different target groups; 17) National BCH established

37. The comparative table above shows correspondence at Immediate Outcomes and Outputs levels in both the Logical Framework of the Project (first column) and the reconstructed Theory of Change (TOC) developed during the Evaluation (second column). However, the TOC has considered the first Outcome in the Logframe (i.e. "Gaps and areas of intervention in the National Biosafety Framework identified to facilitate final project design") as a preliminary Output and has also inverted the order of Immediate Outcomes 2 and 3 to

emphasise the hierarchical and logical sequence of outcomes (the regulatory regime defines and legitimates the administrative modus operandi of the system).

38. The Goal of the Project stated in the ProDoc has been streamlined and, in fact, corresponds to the Main Project Outcome in the TOC. The Project Objective in the ProDoc has specified the "identified gaps" by defining two crucial Intermediate States to the Project Outcome. The expected Impact, i.e. the Global Environmental Benefit (GEB) to which the Project contributes, not defined in the ProDoc, has been added in the Theory of Change (TOC).

4.2 The causal logic from Outputs to Immediate Outcomes

39. Although National Biosafety Frameworks (NBF) may vary from country to country, they usually contain five common components:

i. A Government policy on biosafety;

ii. A regulatory regime for biosafety;

iii. An administrative system to handle notifications or requests for authorisations;

iv. Systems for 'follow up' such as enforcement and monitoring for environmental effects;

v. Mechanisms for public awareness, education and participation.

40. In the reconstructed Theory of Change, the five Immediate Outcomes of the Project actually refer to the implementation of the five components of the NBF outlined here above. Seventeen Outputs have been clustered accordingly (one Cluster/Outcome), in such a way that a coherent logic does exist between the Project's results and the NBF structure (see diagram 2).

41. The setting and implementation of a National Biosafety Framework (NBF) involves complex institutional changes and this complexity reflects into the expected results of the Project, where not only the Outcomes, but also many Outputs are of institutional nature and entail regulatory measures, processes and mechanisms of participation, negotiation, coordination and institutional uptake (see, for instance, Outputs 1, 2, 3, 5, 7, 10 and 14).

42. The achievement of two key-outputs (Outputs 2 and 3), i.e. the Act of 2015 that created the National Biosafety Management Agency (NBMA) and the subsequent Regulations of 2017, has represented a key-change that has strongly shaped a new institutional framework. As a result, Output 5 has been produced, i.e. a new entity (the Agency) with clear roles and responsibilities (see Chapters 5.4.1 and 5.4.2). In that context, also other relevant Outputs regarding risk assessment, monitoring and enforcement (Outputs 6, 7 and 10) have been achieved through specific Guidelines and Capacity Building.

43. As visualised in Diagram 2, Political will has not failed in supporting the implementation of the Framework and it appears to be a crucial key-driver, along with the championing role of the Agency and of its Chief Executive Officer. The enactment of the Biosafety Law and its Regulations has permitted a clear definition of roles and

responsibilities and has, therefore, represented another relevant key-driver by setting an institutional framework that has showed effective and consensual so far. There are no evident assumptions to be fulfilled at this stage.

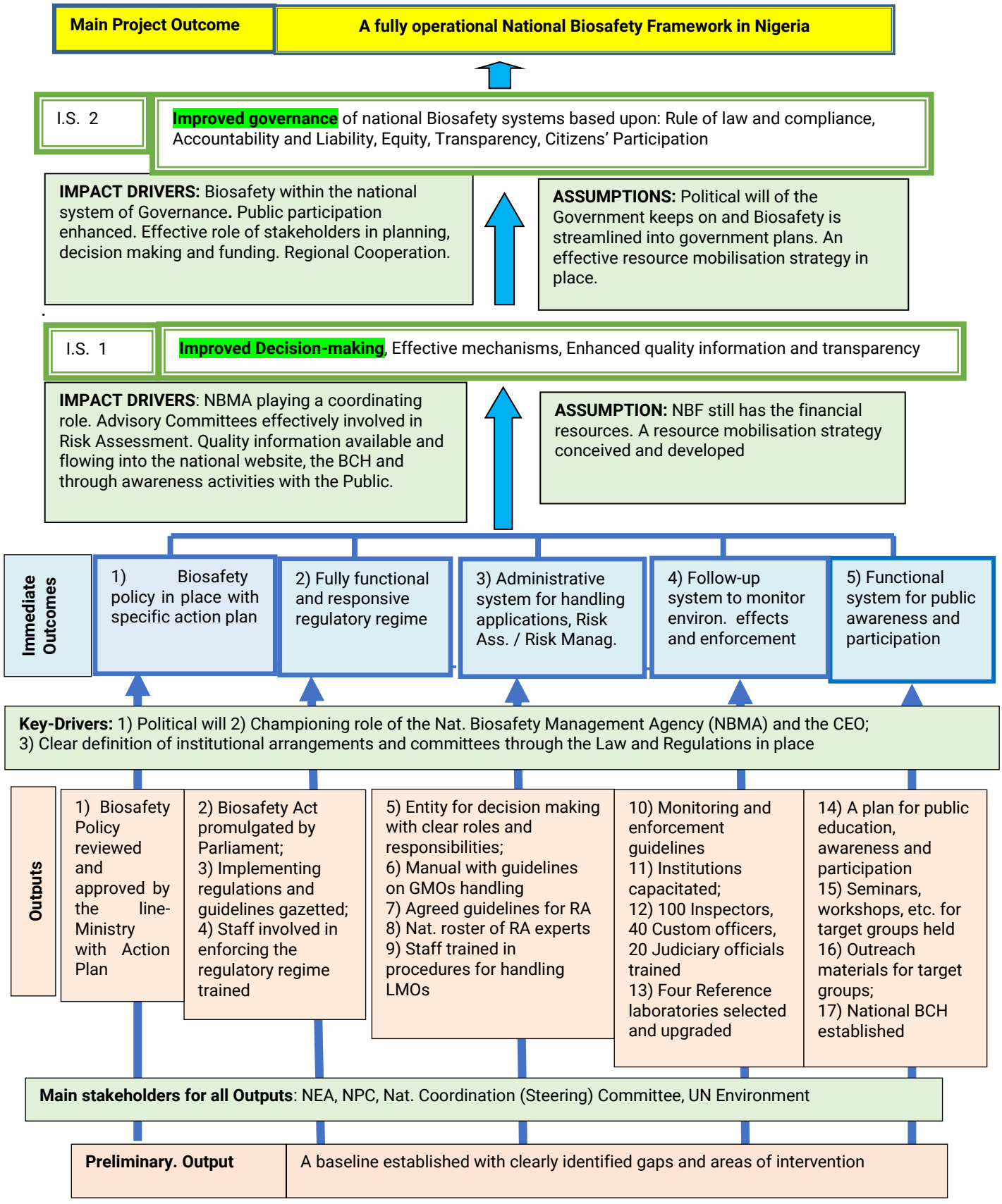
44. UN Environment has been a relevant stakeholder supporting the smooth progression of the Framework. Despite the institutional changes which occurred during the Project life (change of the National Executing Agency, as described in chapter 3.4), UN Environment has been constantly and meaningfully supporting the process, helping to create a balanced and steady environment for the implementation of the Framework, since the Project of Development of the National Biosafety Framework (2002-2006).

4.3 The causal logic from Immediate to Main Project Outcome

45. **Intermediate State 1 (IS 1) "Improved decision-making processes for GMOs approval, through effective implementation mechanisms and enhanced quality information and transparency"** is a crucial step for the progress of the Framework in Nigeria and the process is surely on-going, as discussed in chapter 5.4.2. Key-drivers are in place for the implementation of the Framework. They are: the on-going consolidation of the Agency, the advising role of the National Biosafety Committee (NBC) and of the National Biosafety Technical Sub-committee (NBTS), the formal agreements with key-stakeholders and the instruments established so far (and to improved) for enhancing Public Information and Participation (see also Chapter 5.8, Sustainability). Main assumptions, at this level, are that financial resources do exist to effectively implement all the systems established and that a medium-long term resource mobilisation strategy is conceived and developed to reinforce the implementation of the Framework.

46. Improved decision-making can lead to **Intermediate State 2 (IS 2): "Improved Governance of National/International Biosafety systems based upon: Rule of Law and Compliance, Accountability and Liability, Equity, Transparency and Citizens' Participation".** As a matter of fact, as discussed under Socio-political Sustainability (chapter 5.8.1), Biosafety has gained its place in the national Governance system and that is a major driver at this stage. Improved forms of Public and Stakeholders participation will also be key-drivers, as well as the already on-going Sub-regional and Regional cooperation, due to the relevance of coordinated Biosafety policies among the countries for the Regional (West Africa) Biosafety Governance. The political will of the Government and the streamline of Biosafety into government plans remain always a strong assumption, as well as an effective resource mobilisation strategy put in place.

Diagram 2: Reconstructed TOC from Project Outputs to Immediate and Main Project Outcomes



4.4 The pathway from Outcome to Impact

47. The **intended impact** of the project is the Global Environmental Benefit (GEB)[7] to which it contributes: **the enhanced conservation and sustainable use of biological diversity in Nigeria**. The pathway from Outcome to Impact also contemplates Intermediate States (IS).

48. The full operationalisation of the National Biosafety Framework (Main Project Outcome) will allow the country to fulfil its obligations pursuant to the Cartagena Protocol on Biosafety (CPB), as expressed in Art. 1 of the Protocol (see diagram 3), which has been identified as the Intermediate State 3 (IS 3). This step implies that the country has the capacity to sustain and gradually upgrade its operational National Biosafety Framework (NBF) as a response to new challenges and priorities emerged at country level, and in accordance with COP-MOP[8] decisions and recommendations regarding any specific subject contemplated in the Protocol. Regional and International cooperation may play a relevant role at this level.

49. Admitting that a Biosafety policy is in place with specific action plans (Immediate Outcome 1) and that the Assumptions identified in the pathway to IS 1 and IS 2 regarding the availability of financial resources are fulfilled (see Diagram 2), Biosafety has to be meaningfully integrated in the strategy and plans that the country has identified for the sustainable use of its natural resources, including Biodiversity. The National Biodiversity Strategy and Action Plan (NBSAP) is currently the main strategic instrument for the purpose. This is reflected in the Intermediate State 4 (IS 4) of Diagram 3 here below. Intermediate States 3 and 4 are not sequentially linked, but jointly contributing to Impact.

50. Biodiversity conservation depends also on the impact that other actors / sectors have on the Environment, such as, among others, Agriculture/Rural Development policies, Energy and Industry sectors and Tourism development, as well as on Citizens' foot-print caused by their behaviour. This aspect is also reflected in Diagram 3.

51. It is rightly argued that a fully operational National Biosafety Framework (NBF) is a valuable instrument to fulfil Biosafety requirements, as stated in Art.1 of the Protocol, and this is the foundation of GEF/UN Environment "NBF Implementation Projects" that are expected to establish a virtuous pathway to the intended Impact (Global Environmental Benefit), as visualised in Diagram 3.

52. Countries with a fully operational National Biosafety Framework (NBF) can be increasingly attractive for the Biotechnology sector and GMOs industry that can operate

[7] The primary aim of the GEF, and of GEF projects, is to achieve a specific category of impacts that are often referred to as —Global Environmental Benefits (GEB). GEB can be defined as the "Lasting improvements in the status of an aspect of the global environment that safeguards environmental functioning and integrity as well as benefiting human society" (GEF Eval. Office, 2009).

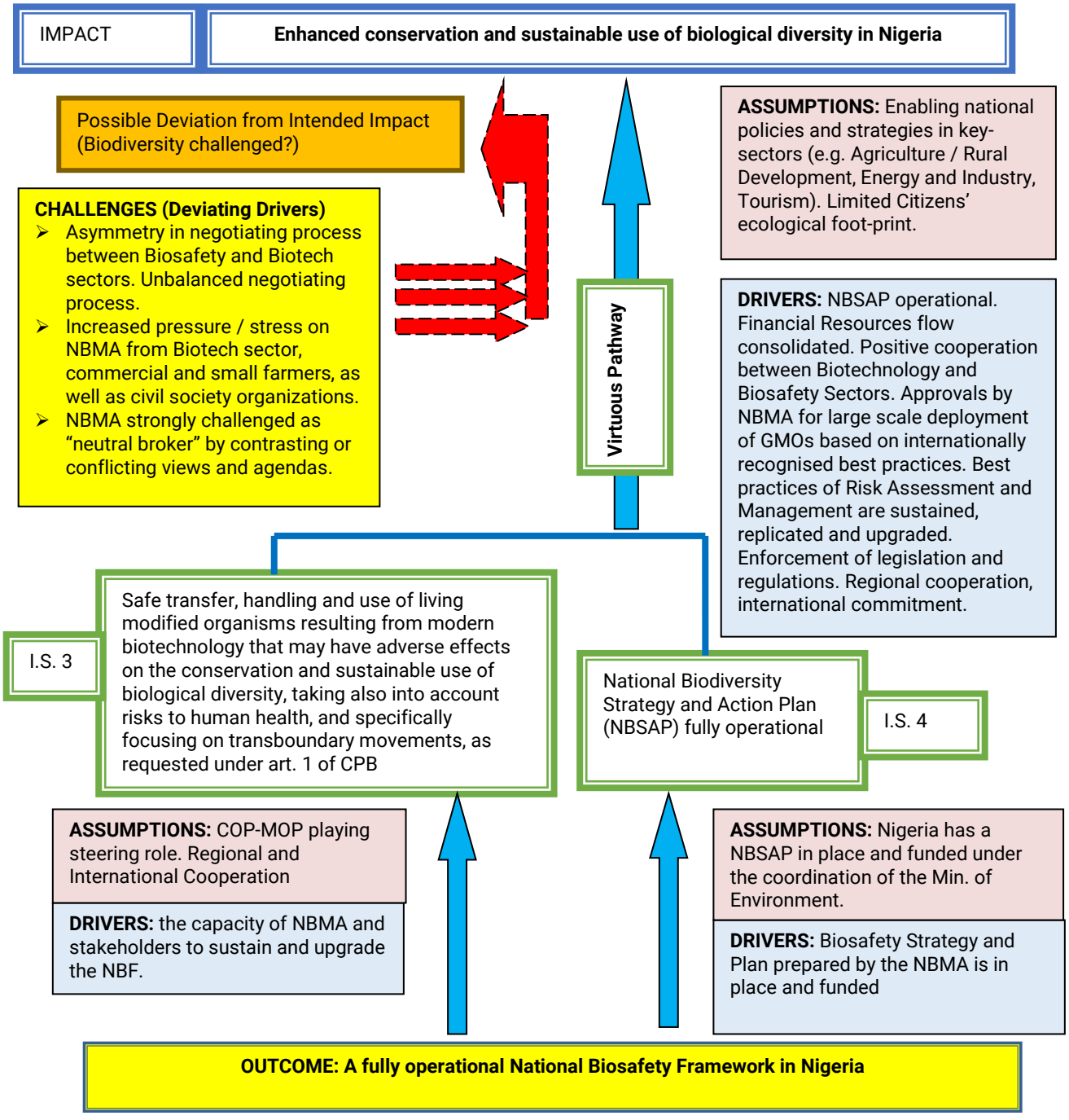
[8] Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety

within a clear legal and administrative framework, enhancing the economic foreseeability and viability of their business. This is usually the driving force that nurtures or may nurture the dialogue and cooperation between Biotechnology and Biosafety sectors. This driving force, however, is the result of a negotiating process between the stakeholders from both sectors, based on their negotiating willingness and capacity, but also their specific interests, power and agenda.

53. There is no reason, a priori, to doubt that this driving force could hinder the virtuous pathway to Impact mentioned above. It has, nevertheless, to be recognised that “asymmetry” may exist in this negotiating process, particularly where the Biosafety sector is at initial stage, as far as the environmental release of GMOs is concerned. Moreover, relevant sectors, besides Biotechnology, like commercial and small farmers, as well as civil society organisations can put a strong pressure on the Government and the National Biosafety Authority to accelerate or to deny the approval of GMOs in the country at a large scale.

54. It is undeniable that the challenge for the Biosafety sector may be very high and the legal controversy surged in the country, following the first permit released for the commercial use of GMOs, is a proof of that. As far as the pathway to Impact is concerned, the key-question is: “how likely is the possibility that the virtuous pathway is somewhat deviated from the expected Impact and that other unintended impacts on Biodiversity conservation may occur?”. This possibility is captured in Diagram 3 below.

Diagram 3: Reconstructed TOC from Project Outcome to Impact



5 Evaluation Findings

5.1 Strategic relevance

5.1.1 Alignment to the UN Environment Medium Term Strategy (MTS) and Programme of Work (POW)

55. The Project spans over two UN Environment Medium-Term Strategy documents (2010-2013 and 2014-2017) and three Biennial PoWs (Programme of Work), i.e. 2012-2013, 2014-2015 and 2016-2017. The project falls under the Environmental Governance Sub-Programme. Table 6 here below provides a summarised outline of the contribution of the Project to the Expected Accomplishments (EA) of the Environmental Governance Sub-programme in the two Medium-term Strategies.

Table 6: Contribution of the Project to the Medium-Term Strategy (MTS)

Expected Accomplishment (EA)	Contribution of the Project
MTS 2010-2013, Sub-programme Environmental Governance, **EA(b)**: States increasingly implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions	• Overall support to the implementation of the NBF • Biosafety Policy • Biosafety Law and Regulations, Guidelines • Establishment of the National Biosafety Management Agency (NBMA)
MTS 2014-2017, Sub-programme Environmental Governance, **EA2**: 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;	• Overall support to the implementation of the NBF • Biosafety Policy • Biosafety Law and Regulations, Guidelines • Establishment of the National Biosafety Management Agency (NBMA) • Capacity Building in Risk Assessment and Management • Capacity building and outreach activities of Public Awareness and Information • National website linked to BCH

5.1.2 Alignment to UN Environment /GEF Strategic Priorities

56. The project is a Medium Size Project (MSP) financed through GEF-4 mechanism and belongs to GEF Biodiversity Focal Area. It is relevant to GEF Strategic Programme 6 (BD-SP6): Building Capacity for the Implementation of the Cartagena Protocol on Biosafety.

57. Given its focus on Capacity Building and, to some extent, on Technology Support (for instance training in Risk Assessment, Risk Monitoring, Laboratory setting) the Project is surely aligned with Bali Strategic Plan (BSP). Actually, the project has been active in addressing many of the cross-cutting issues listed in Section D of the Plan, such as the strengthening of national institutions, the development of national law and regulations and the Compliance with obligations under multilateral environmental agreements. Gender issues were not specifically addressed by the Project.

58. The Project has also promoted South-South Cooperation on Biosafety at regional and sub-regional level (West Africa Region) through different joint initiatives with African and Regional key-partners (see chapter 5.1.4).

5.1.3 Relevance to Regional, Sub-regional and National Environmental Priorities

59. Biotechnologies and Biosafety are surely gaining interest and relevance in Nigeria, as well as throughout the whole of the West Africa Region, where fast-growing agricultural production for food security and/or for market purposes is one of the main development objectives. Introducing biotechnologies can become an inescapable aspect of Sustainable Development and Biosafety measures are particularly relevant for protecting the environment and its biodiversity, as well as for taking on board socio-economic considerations particularly addressing the context of the widespread, traditional agriculture, as mentioned in chapter 3.1 (Project Context).

60. The West Africa Region is promoting a regional agenda of development and cooperation, mainly in Biotechnologies and Biosafety. The sub-region is currently in the process of developing a common Biosafety regulation. In this context, the project has been instrumental to the promotion of forms of regional and sub-regional cooperation, particularly in the area of Capacity Building.

5.1.4 Complementarity with Existing Interventions

61. The Project was conceived to implement the NBF formulated through the support of the previous GEF/UNEP Project "Development of the NBF" (2002-2006) and actually built upon the achievements and the institutional network created in the context of the previous project. The country has also benefited from the Biosafety Clearing-House Projects (phase I and II) supported by GEF / UN Environment.

62. Some relevant African and International institutions have supported, at a variable extent, the National Biosafety Management Agency (NBMA), such as the ECOWAS (Economic Community of the West Africa States), the African Union, the New Partnership for Africa Development (NEPAD) and the African Biosafety Network Experts (ABNE), USAID through its Programme for Biosafety Systems (PBS), the International Center for Genetic Engineering and Biotechnology (ICGEB) and the Embassy of Argentina. Their support has been effective in different areas such as training and capacity building, equipment, regional trainings and master courses, drafting of national and regional regulations and awareness raising.

63. As a whole, the strategic Relevance of the Project can be rated as **HS (Highly Satisfactory**).

5.2 Quality of Project Design

64. The Project Design Quality (PDQ) has been assessed in the Inception phase of the Evaluation, through the detailed "Template for the assessment of the Project Design Quality (PDQ)" prepared by UNEP Evaluation Office, which contemplates a rating system, based on a 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 evaluation.

65. The Project Design was found fairly satisfactory in some aspects, such as Governance and Supervision, Learning, Communication and Outreach components (though a structured and comprehensive approach is lacking), Financial Planning / Budgeting (with a well-structured and detailed budget) and Efficiency (building upon previous GEF/UNEP Project “Development of the NBF”).

66. However, the ProDoc was poor of adequate elements of insight and analysis and the design of many relevant sections was found weak or confusingly developed. The overall rate of Project Design is Moderately Unsatisfactory. Main weaknesses are summarized as follows: Chapter 3.4 (Intervention logic) is focused on Activities rather than Results and is muddling up, for instance, Training activities and Law promulgation without a clear logic. A clear pathway from Activities to Outputs, Outcomes and eventually to Impact is missing.

67. The Project Framework of Results (Logframe) is incomplete in that only Outcomes are contemplated and most of the “indicators targets” are, in fact, Outputs, rather than Outcome indicators. Moreover, many of them are not quantified and vaguely expressed (e.g. “staff involved”). The Costed M&E Plan (App. 7 to the ProDoc) presents baseline, mid-term and final targets, but the design does not contemplate the setting of a Monitoring and Evaluation system to track progress on a more regular basis, particularly considering the expected duration of the Project (four years). The workplan is not clear, too.

68. Partnership and Stakeholders’ participation were also poorly discussed in the ProDoc. Although the insufficient national capacity to adequately manage Biosafety is one of the rationale of the Project, the ProDoc did not minimally discuss the existing capacities of each partner and the reason for their participation in Biosafety activities. Partners are just listed, without specifying the reason for their involvement, their specific role and responsibility.

69. GEF Secretariat had also raised a number of weak points to be addressed and improved in the ProDoc, regarding, for instance, unclear Objectives, missing definition of Outputs, the lack of a training strategy, the integration of Biosafety into the national policies and the Risks definition, among others.

70. The quality of Project Design is, in fact, generally weak in all the three projects evaluated in the current evaluation (Ghana, Liberia, Nigeria), which show similar, recurrent shortcomings.

5.3 Nature of the External Context

71. The External Context of the Project has been assessed in the Inception report and rated “Moderately Unfavourable”). In fact, internal conflicts during the project lifetime (Boko Haram insurgency, Niger Delta Region conflicts) have represented exceptional challenges for the country (at least 2M internally displaced people in Nigeria, according to UN Office for the Coordination of Humanitarian Affairs / OCHA), which, though not directly affecting the Project, may have altered Government’s priorities, plans and programs.

5.4 Effectiveness

5.4.1 Delivery of outputs

72. As discussed in Chapter 4.1, the Project Document and its Logical Framework did not define Project's Outputs, which have, therefore, been re-formulated through the Theory of Change of the Project (see diagram 1). Their assessment has been discussed with the Project Coordinator based on the Table "Final Project Outputs Summary" and the Project's Final Report posted in ANUBIS. Main findings are summarised here below.

Outputs related to the Immediate Outcome 1 (Biosafety policy in place with specific action plans) (Diagram 2, Theory of Change)

73. Nigeria prepared a Biosafety Policy in 2006, in the sequence of the previous GEF/UN Environment Biosafety Project. The Policy has been posteriorly reviewed and adopted by the Federal Ministry of Environment of Nigeria and is considered as a main tool "to give guidance for the protection and conservation of Biodiversity in the Country"[9]. The Policy does not include a specific Action Plan.

74. Biosafety has been included in the reviewed Biodiversity Strategy and Action Plan (NBSAP) 2016-20.

Outputs 2 to 4 (Diagram 2, Theory of Change) related to the Immediate Outcome 2 (Fully functional and responsive regulatory regime):

75. The Project has successfully supported Nigeria in setting its Regulatory regime. The National Biosafety Management Agency Act, which creates the National Biosafety Management Agency (NBMA), has been promulgated in 2015 and translated, so far, in three national languages: Yoruba, Housa and Igbo. The main role and responsibilities of the new Agency, as specified in the law, are outlined in Table 2 of Chapter 3.3.

76. As described in Chapter 3.4, the new Agency has been very quickly operational and in March 2016 it has become the new National Executing Agency of the Project. The Agency is directed by a Chief Executive Officer / Director General and presently includes five Departments: a) Environmental Biosafety and Commercial Release, b) Biosafety Enforcement and Operations, d) Socio-Economic and Food Safety, e) Planning, Research and Statistics and f) Administration and Finance.

77. The Agency is integrated by six supporting Units in place (among them a Legal Unit and an Internal Audit Unit) and three decentralised Zonal Offices still to be opened. Current

[9] National Biodiversity Strategy and Action Plan 2016-20, Federal Min. of Environment of Nigeria, 2015

staff is composed by 207 people, which shows the significance of the Biosafety Sector and the high pace of development of the NBMA, created only two years ago (2015).

78. The Agency is currently located within the National Park Service complex and conveys the image of a well-structured and organised institution, with a clear leadership in place and a motivated staff. The Heads of Departments and Units have received training through the Project and other programmes (see chapter 5.1.4) and the Agency needs to further improve their capacities, since many of them have only been recently involved in Biosafety.

79. The National Biosafety Management Agency is advised by a Board, whose membership, "functions and powers" are defined by the Law and are summarised in Table 2 (Chapter 3.3, Stakeholders).

80. Subsequent Regulations to the Act have also been recently (2017) approved. They "provide details of regulatory and supervisory requirements necessary to promote and aid the efficient and profitable implementation of the provisions of the Act". They specify the role of the National Biosafety Committee (NBC), of the National Technical Advisory Sub-Committee (NTBS) and of the Institutional Committees (IBC), as discussed in chapter 3.3 (Stakeholders). The approach and design of the whole regulatory "package" and institutions involved, as well as the decision-making process on Applications, is discussed in the follow section 5.4.2 (Outcomes achievement), as well as under Sustainability (5.8.1).

Outputs 5 to 9 (Diagram 2, Theory of Change) related to the Immediate Outcome 3 (Administrative system for handling applications, Risk Assessment and Risk Management)

81. Procedures for application have been reviewed and guidelines have been prepared and in use. Relevant existing tools include Guidelines for the overall Administration of the Applications, for the Certification of Containment Facilities (Level 2), for the Confined Field Trial and for Socio-economic Considerations in decision-making. Other existing administrative instruments include the National Biosafety Risk Analysis Framework, different Application Forms and Check-lists for assessing Applications.

82. Agreements (Memorandum of Understanding) have been signed between the National Biosafety Management Agency and two agencies of the Ministry of Agriculture, the Nigeria Agricultural Quarantine Service (NAQS) and the National Agricultural Seed Council (NASC), as well as with the National Agency for Food and Drug Administration and Control (NAFDAC) regarding Food Safety and with the Standards Organisation for Nigeria (SON). Partnership has also been put in place and a Memorandum will be signed with the Nigeria Customs Service (NCS) for regulating the importation of GM foods.

83. Several workshops have been organized addressing public officers, national experts, academic, private sector and media representatives on different issues related to Biosafety Management, Risk Assessment and Risk Management. Subjects of these workshops include, among others, the definition of roles and responsibilities of partner institutions, the review of the overall process of decision-making for authorizations, Risk Assessment and the review of the guidelines and tools. Training Manuals have been produced on Risk Assessment and Risk Management, on GMOs Detection, on Biosafety Administration and on Inspection.

Outputs from 10 to 13 (Diagram 2, Theory of Change) related to the Immediate Outcome 4 (Follow-up system in place to monitor environmental effects and enforcement)

84. Inspection Guidelines have been produced, as well as Guidelines for the Institutional Biosafety Committees. A National Biosafety Emergency Response Strategy has also been prepared, including Remediation.

85. Several trainings were delivered in the above area, benefiting 50 Inspectors, five staff of Customs, five Judicial Officers and the personnel of the National Emergency Management Agency (17 people). Study-tours to the sites of the Field Trials have also been organized for the new staff of the Authority, as a part of their training.

86. One Laboratory for detection and analysis of GMOs has been established temporarily in a separate building of the complex where the Agency is located and two basic trainings of three days have been provided to the staff of the Laboratory that is obviously in need of supplementary capacity building.

Outputs from 14 to 17 (Diagram 2, Theory of Change) related to the Immediate Outcome 5 (Functional system for public awareness and participation)

87. The Project has supported several Awareness and Communication activities addressed to the national stakeholders, such as, among others, two workshops of sensitization on the Law in 2015, a specific workshop for lawyers and a workshop on Public Participation. The translation of the Law in three national languages is a remarkable output for Public Awareness and Information. Three national Biosafety Conference have been organized, the last in 2016 with around 150 participants from Public and Private sectors, National and International Partners, Civil Society organizations, Universities and the media. A fourth Conference is being organized, to be held still in 2017.

88. The global Biosafety Clearing-House has been partially updated and the last two decisions of 2016 regarding the authorization of Genetically Modified Organisms' introduction (one for field trial and one for deliberate release into the environment) are posted, including the Risk Assessment. Two of the Guidelines recently produced are also posted in the BCH. The new National Biosafety Management Agency has created its own institutional website, which is not yet, however, completely organized and user-friendly. It also needs updating (for instance, the authorizations of deliberate release of GMOs cotton of 2016 is not presented and discussed in the website). The location of the Field Trials is also missing. While the Law has been uploaded into the website, the Regulations and the Guidelines are not available in it.

89. The Agency has created a Facebook page, which has almost 800 followers (November 2017). A Memorandum of Understanding has been signed between the Agency and the Voice of Nigeria (the official international broadcasting station), to set more

effective channels of communication with the public. A National Biosafety Communication strategy has also been developed in 2014 by the Federal Ministry of Environment (former National Executing Agency of the Project) and is under current review.

Final remarks on Outputs delivered

90. Overall, the Project has successfully delivered virtually all the expected Outputs, remarkably all those regarding the whole Regulatory system (Law, Regulations and several Guidelines). Relevant Outputs have also been produced both in the Administrative System for Application / Authorization and in the Monitoring and Enforcement system.

91. Many activities in capacity building have been implemented, though below the expected target, due the recent establishment of the Agency (2015). Capacity building is, in fact, still an area in need of improvement and consolidation, since most of the trainings implemented were mainly introductory. Communication and fine-tuning activities have been developed with the stakeholders, mainly of the public sector (Ministries and other Agencies), while initiatives for the large public and Civil Society sector are still in in need of a comprehensive Public Awareness and Participation Strategy and related Plan of Action.

92. Everything considered, the overall delivery of Project's Outputs is rated **Highly Satisfactory (HS).**

5.4.2 Achievement of Outcomes

93. The Evaluation has assessed to what extent the actual, satisfactory delivery of the Outputs outlined in chapter 5.4.1 has produced, or have the potential to produce in the short-medium term, the institutional changes and systemic effects (Immediate Outcomes) resulting in a fully operational National Biosafety Framework (Main Outcome). On this basis, this chapter presents a qualitative analysis and interpretation of the Outcomes achieved in the light of the reconstructed Theory of Change (TOC) from Outputs to Outcomes, depicted in Diagram 2 (chapter 4.2).

94. Immediate Outcome 1 (Biosafety policy in place with specific action plans) has been partially achieved, since the Policy has been approved by the Federal Executive Council but does not include a specific Action Plan. The reviewed National Biodiversity Strategy and Action Plan 2016-2020 (NBSAP) contemplates Biosafety among its targets.

95. Immediate Outcome 2 (Fully functional and responsive regulatory regime) has been fully achieved. The Act of 2015 that creates the National Biosafety Management Agency (NBMA) and the Regulations of 2017 are coherently linked to one another and complemented by relevant Guidelines, some of them already applicable, while others are under final revision.

96. The law clearly defines the pivotal role of the Agency, which is fully and exclusively mandated by the Law for GMOs Authorisation, Risk Assessment and Management, Monitoring and Enforcement. The Act has also established the "Governing Board" of the Agency, whose functions are, in fact, mainly of consultative, advising nature regarding "financial, operational and administrative matters" (see table 2 in chapter 3.3).

97. Regarding the decision-making process on applications, the Regulations of the Act specify that the Director General of the Agency "shall, from time to time, constitute a National Biosafety Committee (NBC), an ad-hoc expert advisory committee to address technical issues relating to applications submitted to the Agency". The NBC has basically the functions to "review proposals for contained use, confined field trials and commercial release of GMOs, review risk assessment and propose risk management measures". Being an "ad hoc" committee, the membership of the National Biosafety Committee (NBC) is not regulated by Law, therefore assigning to the Agency this responsibility. According to the Regulations, the Director General also "may appoint scientific experts" and "may set up a National Biosafety Technical Committee" (NTBC) to provide technical advice to the General Director".

98. The overall discretionary, non-mandatory institutional design of the Committees enhances the decisive, almost exclusive role of the Agency in decision-making. This is also confirmed by one of the articles of the Act, which specifies that "the Agency may, from time to time determine to enable the general public and relevant government ministries and agencies study and make comments on the application". While this approach may prove efficient and effective in practical terms, its socio-political sustainability can be arguable, as discussed further in chapter 5.8.1.

99. Immediate Outcome 3 (Administrative system for handling applications, Risk Assessment and Risk Management) and Immediate Outcome 4 (Follow-up system in place to monitor environmental effects and enforcement) are in place through specific guidelines, some of them meticulously specified even in the schedules of the Act. Substantive agreements have been signed with relevant partner public institutions.

100. Actually, five applications have been so far processed in Nigeria for Field Trials[10], three of them posted in the Biosafety Clearing-House (BCH), which are currently on-going. The National Biosafety Management Agency (NBMA) has also authorised in 2016 the Commercial Release of GMO Cotton, which is undergoing "on-farm demonstrations" before being fully released, probably in 2019. The authorisation has generated controversy and polemics among 17 groups of the Civil Society that have, in fact, taken legal action against the Agency.

101. Regarding Immediate Outcome 5 (Functional system for public awareness and participation), despite some relevant and promising outputs produced so far, the Project has not yet succeeded in implementing a fully functional system able "to provide measures for effective public participation, public awareness and access to information", which is, in fact, one of the objectives of the new Biosafety Management Agency, according to the Law.

102. The Agency is actually complying with the requirements of the Law in terms of public disclosure of the Applications received and authorised (diffusion through the media) and of possibility of feed-back from the Public (so-called "public hearing" in the Law). That notwithstanding, the Agency so far has not put in place a comprehensive strategy and plan of action for overall promoting and improving the capacity of different societal groups to approach and discuss Biosafety issues, to have an informed opinion and to meaningfully

[10] The Field Trials regard: Cassava (Nat. Root Crops Research Institute), Sorghum and Cowpea (Institute of Agriculture Research of the A. Bello University), Rice (National Cereals Research Institute) and Maize (Monsanto Nigeria).

participate in the decision-making process (see drivers in chapter 4.3 and Diagram 2). Despite some promising initiatives (for instance through the National Biosafety Conferences), there is still large room for enhancing the communication and participation of some relevant stakeholders, such as Schools and the University, Consumers and Farmers.

103. The National Biosafety Communication Strategy, currently under its final review, may help the Agency to find the appropriate way to address the issue and a two-year plan of action for Communication is being prepared with the support of the Programme for Biosafety System (see chapter 5.1.4). The draft Strategy is mainly focussing on improving the effectiveness of NBMA's communication, which is a necessary but not sufficient condition to establish a real, two-way communication and to foster the meaningful participation of the Institutions, the Private Sector, the Civil Society and the Public in general. This issue has relevance in terms of Biosafety Governance (see chapter 4.3), Impact (chapter 4.4) and of Socio-political Sustainability (chapter 5.8.1).

Final remarks on Outcomes achievement

104. The Project has been overall successful in achieving most of its Immediate Outcomes. Regulatory, Administrative and Follow-up/Monitoring Systems are fully in place, though in need of improvement and consolidation, given the short lifetime of the Agency. More specifically, a functional system for public awareness and participation is not yet fully in place and this is an area of concern, when considering that the country has decidedly moved towards the commercial use of GMOs in agriculture.

105. Areas of improvement may include the formulation of a Plan of Action for Biosafety derived from the Biosafety Policy, the full integration of Biosafety within the national strategy and action plan on Biodiversity, the identification of "entry points" for Public Participation and a comprehensive short-medium term Capacity Building Plan addressing the Human Resources of the Agency and of the other Institutions involved.

106. When considering the remarkable development of Biotechnologies in Nigeria and the existence of academic courses up to Master level on Biotechnology in Nigerian Universities[11], it is evident that there is a large opportunity for including Biosafety in the Education Curricula of the country, which has not been so far adequately explored.

107. As discussed in the Theory of Change (chapter 4.2), Political will has surely been strong and has turned to be a key-driver in the process, along with the clear definition of roles and responsibilities and its acceptance by all stakeholders, as well as the championing role of the Agency and of the Chief Executive Officer (see chapter 4.2 and Diagram 2). Everything considered, the achievement of Project Outcomes has been considered **Satisfactory (S).**

5.4.3 Likelihood of impact

108. The possible pathway from the Project Outcome to the intended Impact of the Project has been visualised in Diagram 3 (chapter 4.4). According to the TOR of the Evaluation, the likelihood of the Project to achieve the expected Impact should be assessed by using the rating scales of Tables 7 and 8 that follow.

[11] Some Curricula include, for instance, Genetic Engineering, Plant Biotechnology and Crop Improvement, Biodiversity and Technologies.

109. Based on the Outcomes obtained by the Project and on the evidence of the on-going process towards their consolidation within a clear institutional framework, the Evaluation considers that the Outcome Rating is "A". Regarding the "Progress towards Intermediate States" (Diagram 3), the formulation that seems the most appropriate is the one of rating "B". Actually, the process of decision-making and of Biosafety governance (Intermediate States 1 and 2, see chapter 4.3) has undoubtedly been put in place and dramatically improved when compared to the situation existing before the enactment of the Law and the creation of the Agency. The process, however, is still young and, of course, needs to gain more technical and methodological strength in its decision-making process, in Risk Assessment and in Stakeholders and Public Participation, as discussed in previous chapter 5.4.2 and in Chapter 5.8 (Sustainability). As a result, the aggregate rating is AB, which, according to Table 8, would indicate that the Project is **Highly Likely to achieve the intended Impact**.

Table 7: Rating scale for outcomes and progress towards 'intermediate states'

Outcome Rating	Rating on progress toward Intermediate States
D: The project's intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long-term impact.
A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long-term impact.

Table 8. 'Overall likelihood of impact achievement' on a six-point scale.

Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely
AA AB BA CA BB+ CB+ DA+ DB+	BB CB DA DB AC+ BC+	AC BC CC+ DC+	CC DC AD+ BD+	AD BD CD+ DD+	CD DD

5.5 Financial management

110. After the first year of implementation and mainly due to the impossibility for the National Executing Agency (at the time the Federal Ministry of Environment) to open a dedicated Project Account, the transfer of funds to the Project has been done through UNDP Nigeria Office. The Project has overall complied with the financial requirements and procedures of UN Environment and Financial reports have been produced quite regularly and are posted in ANUBIS. Some significant budget revisions implying transfers between budget lines are, however, not adequately explained and justified in the revision sheets.

111. In the last two years, the Project Coordinator (also Director General of the National Biosafety Management Agency) has done his best to cope with the Administrative requirements of ANUBIS, though the presence of a Financial Assistant of the Project (not in place) would have helped the Project to have a more efficient administrative performance.

112. The Project was not able to produce the up-to-date "Co-financing and Project Cost's table" by component (see chapter 3.6) and the Evaluation has deduced the total from the last Financial Reports submitted (June 2017). In fact, the Project has not yet submitted its Final Financial Report (despite having been granted a six-month extension for administrative closure). Overall, Financial Management has been rated **Moderately Satisfactory (MS).**

Table 9: Financial Management Table

Financial management components:		Rating*	Evidence/ Comments
1. Questions relating to financial management across the life of the project:			
Compliance with financial requirements and procedures of UN Environment and all funding partners (including procurement rules, financial reporting and audit reports etc)		MS	- The lack of a dedicated bank account for the Project, and some administrative shortcomings detected in the Auditing of 2012 led to the decision of transferring the funds through UNDP/Nigeria. - Over-spending in some budget-lines requiring frequent budget revisions - Reasons for budget revisions (changing budget line) not explained (e.g. revision #5, #7) - The contractual agreements with national consultants include a package of services, which are not well specified and not accounted for (sub-contracting?)
Timeliness of project financial reports and audits		MS	- Financial reports have been provided, though not always on schedule.
Quality of project financial reports and audits			Audits at UNDP level
Contact/communication between the PM/TM & FMO		S	Through Periodic Progress Reports, field visit of the UNEP Task Manager and constant communication (email, etc.)
PM/TM & FMO responsiveness to addressing and resolving financial issues		S	
2. Questions relating to financial information provided during the evaluation:			
Provision of key documents to the evaluator (based on the provision of A-F below)		MS	
A.	An up-to-date 'Co-financing and Project Cost's table	No	Only available through the Financial Report of 06/2017 and not by Component.
B.	A summary report on the project's annual financial expenditures during the life of the project.	Yes	In ANUBIS
C.	Financial documents from Mid-Term Evaluation/Review (where appropriate)	Not applicable	
D.	All relevant project legal agreements (e.g. SSFA, PCA, ICA) – where appropriate		
E.	Associated financial reports for legal agreements (where applicable)	Not applicable	
F.	Copies of any completed audits	No	

Financial management components:	Rating*	Evidence/ Comments
Demonstrated knowledge by the PM/TM & FMO of partner financial expenditure	S	
PM/TM & FMO responsiveness to financial requests during the evaluation process	MS	
Overall rating	**MS**	

* Ratings given on a 6-point satisfactory scale from 'Highly satisfactory' (HS) to Highly Unsatisfactory.
PM/TM Project Manager/Task Manager
FMO Financial Management Officer

5.6 Efficiency

113. The Project has surely built upon the previous achievements of the project "Development of the National Biosafety Framework" and has also benefited from extra international support that has created synergies and increased efficiency.

114. The Project has coincided with a deep institutional change leading to the creation in 2015 of the new National Biosafety Management Authority (NBMA) that also became the new National Executing Agency of the Project. The late establishment of the Agency (NBMA) in 2015, when the expected completion date of the Project was already approaching, led to the request and granting of two no-cost extensions for a total of 26 months (among them, two 6-month extensions for administrative closure, one in 2015 and one in 2016).

115. As a matter of fact, the supplementary time accorded was instrumental to the satisfactory delivery of key outputs and outcomes, as described in chapter 5.4 (Effectiveness). The rate of expenditures was 90% in June 2017 and will probably approach 100% in the Final Financial Statement. Overall, Project Efficiency has been rated **Satisfactory.**

5.7 Monitoring and Reporting

116. The Project Document included (as in all GEF /UN Environment Projects) a costed Monitoring and Evaluation (M&E) Plan (Appendix 7 to the ProDoc), with a budget of 40,000 USD, including a Mid-term Review (carried out at the end of 2013, the report of which, however, is not available in the document repository), the Final Evaluation (the current one), annual Audits and "Capturing Lessons Learned".

117. The Costed M&E Plan presented some useful elements (baseline situation, mid-term and final targets) that could have actually helped to design and implement a Project Monitoring System to track progress on a more regular basis (for instance quarterly or every six months, in concomitance with the Progress Reports). That was not the case, in Nigeria and elsewhere. In fact, usually, Project Teams do not know about the existence of the tool or do not consider it significant. The same applies to another tool, "Key Deliverables and Benchmark" (Appendix 6 to the ProDoc). As already mentioned, instead, the Framework Results (Logframe) only presented Outcomes.

118. The Project Document did not clearly identify and foresee the setting of a comprehensive Monitoring System, except: a) the Mid-term Review carried out by the Task Manager (TM); b) the follow-up and supervision of the TM, which was actually very assiduous, and c) the setting of a stakeholders' Steering Committee that was conceived as, and indeed was, a relevant instrument for the overall, strategic steering of the Project and for providing support, guidance and oversight of project progress (not of project management). The annual regional meeting organised by UN Environment Task Manager for the Project Teams of a group of countries has also been recognised by the Teams as a very useful instrument of exchange, mutual learning and joint self-evaluation of projects' progress and problems.

119. The National Project Coordinator (NPC) made a constant, proximity-monitoring of Project's Activities, through the Annual Workplan, which basically comprised a Calendar of Activities that represents the most used instrument to steer and monitor the Project. This is also a common finding in all the three Projects evaluated (Ghana, Liberia and Nigeria).

120. The usual GEF/UN Environment tools for Reporting on Project's Progress have been implemented, transmitted and filed in ANUBIS. There is no evidence of the GEF Tracking Tools (Initial, Mid Term and Final) on record. Overall, the Reporting system above did not fully succeed in being an effective Monitoring System (a common situation in the three countries involved in the current Evaluation), for two main inter-related reasons:

- In the evaluator's opinion, the Project Teams look at the Progress Reports as a bureaucratic / administrative requirement for the Information Management System (ANUBIS), rather than an effective monitoring and steering tool for the efficient and effective implementation of the Project. Admittedly, the format of the Progress Reports does not help the users in considering it as a "living" and useful instrument, too. Usually, the Progress Reports are a "copy and paste", from one semester to another, with just few lines of updating activities (e.g. workshops, training, a new document produced). Feed-backs from UN Environment are also insufficient, just few comments in track-changing mode by the Task Manager that cannot, obviously, cope alone with a bulk of progress reports coming from all over the world, all at the same deadline. No follow-up has been registered also by the Evaluation Office and the Sub-programme coordinator (Environmental Governance) on the annual Project Implementation Reviews (PIR).

- Emphasis is given, at all levels, on Activities rather than Outputs delivery and, even less, on Outcomes achievement. The only reporting instrument that has a valuable approach focussed on Outcomes (and specific to Biosafety Projects) is the so-called "GEF Tracking tool" that is, or should be, prepared at the beginning, at mid-term and at the end of the Project. In the case of Nigeria, it looks like the tool has not been implemented. The problem of the lack of a proper system of monitoring by results (not by activities) is complex and probably generated by an insufficient awareness and comprehension of what a "Result-based approach" of a Project is, at all levels, and by a common under-estimation of the relevance of the "basics" of Project Management (including Planning, Monitoring and Evaluation) for appropriately running a Project.

121. From all the above, it seems clear that the effectiveness of Monitoring and Reporting should be assessed against a number of causal and complex problems that could not be

addressed and worked out solely by the Project Team, the Task Manager and the Steering Committee. As a matter of fact, the Reporting System was implemented and the value of the information management system platform has to be objectively emphasised. For instance, most of the information, evidences and facts made available to the Evaluation have only been possible thanks to data posted in this system. This is a relevant finding that cannot be undervalued.

122. The Evaluation, therefore, believes that the assessment and rating of Monitoring and Reporting has to be regarded as a value judgement not specifically addressing Project's performance, but, rather, the overall Monitoring and Reporting System put in place by the Implementing Agency (UN Environment) and the Global Environment Facility (GEF). As visualised in the Rating Table in Chapter 6.1.1, the rating of the components of the System is uneven, and the overall rating is, everything considered, **Moderately Satisfactory (MS).**

5.8 Sustainability

123. The evaluation has analysed to what extent 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, c) Institutional sustainability

5.8.1 Socio-political sustainability

124. As visualised in Diagrams 2 and 3 and discussed in chapters 5.4.2 and 5.4.3, improved Decision-making and Biosafety Governance are essential conditions to steadily and sustainably implement the National Biosafety Framework in Nigeria.

125. The country is strongly committed to enhance the Biotechnology sector and in the last few years the interest for improving Biosafety has dramatically and genuinely increased. A lot of debate around Biosafety has taken place before and after the enactment of the Biosafety Law and the creation of the National Biosafety Management Agency (NBMA).

126. In fact, like elsewhere, the debate around the introduction of Genetically Modified Organisms (GMOs) is polarized also in Nigeria, as demonstrated by the recent legal action undertaken by a group of NGOs against the Agency for the authorisation given to the environmental release of GMO cotton and to a GMO Maize Field Trial.

127. The GMOs debate is nurtured by a bunch of arguments, whose complexity goes well beyond the mere Biosafety agenda. In fact, when discussing GMOs and Biosafety in Nigeria, several aspects come to play, such as the social and economic unbalanced development of the country, cultural and ethnic differences, religious and ethical values, as well as political purposes, including those of organised groups of civil society claiming for larger people participation and the promotion of civil, social, economic and environmental rights. The socio-political sustainability of Biosafety agenda will, therefore, inevitably depend on how the country is shaping its overall socio-political agenda.

128. As discussed in chapter 5.4.2 (Achievement of Outcomes), the National Biosafety Committee has an advisory and non-mandatory role and its membership is not defined by the Law (the Committee is "ad hoc", hence set up by the Agency on a "case by case" basis). That deprives the decision-making process of a stable "check-and-balance" mechanism and

assigns to the Agency a powerful role in decision-making, which may excessively expose the Agency to criticism and undermine the socio-political sustainability of the Biosafety Framework.

129. As a matter of fact, the National Biosafety Management Agency (NBMA) is well aware of the challenges ahead for gaining Biosafety socio-political sustainability. In this context, the attempts of the Agency to attenuate the debate, by highlighting its impartial, regulatory role for safeguarding public health and environmental protection, looks genuine, reasonable and wise. The NBMA top-management, on his side, is convinced that the overall confidence towards the Agency is being steadily built. For doing so, however, the Agency should, on the one hand, reinforce enlarged, participatory mechanisms of technically-sound decision-making and, on the other hand, foster dialogue and cooperation with several stakeholders (State and Non-state actors) through diversified instruments.

130. Actually, there is the need to enhance partnership with other public institutions through formal agreements (see later, chapter 5.8.3, Institutional Sustainability) and to promote “public hearing” fora for setting a two-way communication with other substantive decision and opinion-makers, such as consumers, commercial and traditional farmers, environmental associations, religious groups, the media, the youth and Academic institutions, among others.

131. When considering the high development of the Biotechnology sector in the country and the quite large offer of Academic courses on Biotechnology in several Nigerian Universities, there is surely room and opportunity for enhancing the overall national knowledge on Biosafety through Education programmes at Secondary and University level (up to Post-graduate level), which could substantively strengthen Public Education and Participation on Biosafety in the country, as well as increasing National Human Resources for Biosafety sector and contributing to the socio-political and institutional sustainability of Biosafety agenda.

132. Everything considered, **Socio-political sustainability is rated Likely (L).**

5.8.2 Financial sustainability

133. Several, significant elements currently point out that Financial Sustainability of Biosafety in the country is being strengthened. The budget of the Agency is included in the National Budget with a specific accounting code, and the Annual Budget is in place, allowing the Agency to directly interact with the National Accounting System (Min. of Finance). The salaries of the staff are approved and paid by the Government and the Agency is submitted to the annual auditing of the Auditing National Agency.

134. The Agency has also the possibility to autonomously interact and negotiate with external donors for financing specific actions to be funded and channelled through the National Budget system for the purpose.

135. Though depending on the overall economic situation of the country, from which the national budget depends, **Financial sustainability is rated Highly Likely (HL).**

5.8.3 Institutional sustainability

136. As discussed in chapter 5.4.1 and 5.4.2, Biosafety institutional sustainability has gained strength through the setting of the National Biosafety Management Agency and its bodies (the Director General / CEO and the Board). While many of the Directors of Department and Heads of Units have been previously involved with Biosafety through the Federal Ministry of Environment or other institutions, the bulk of the staff, according to the Director General, is new staff that strongly needs specific training in areas such as Risk Assessment, Food Safety, Biosafety Communication / Risk Communication and Biosafety Administration System (process of applications, etc.).

137. The enacting of transparent cooperative mechanisms with other public institutions is an on-going process that has already substantive results, as discussed in chapter 5.4.1. Overall, **Institutional sustainability is rated Highly Likely (HL**).

6 Conclusions and Recommendations

6.1 Conclusions

138. Nigeria has been willing to develop and make safe use of Biotechnology in the last twenty years. The country has created the National Biotechnology Development Agency in 2001 under the aegis of the Federal Ministry of Science and Technology and signed and ratified the Cartagena Protocol on Biosafety in 2000 and 2003, respectively. A national Biosafety Framework was prepared with the support of GEF/UN Environment Project “Development of National Biosafety Framework” (2002-2006).

139. The country has subsequently requested further support from GEF and UN Environment to implement the Framework prepared in 2006, which eventually brought to the formulation of the Project under current evaluation “Support for the implementation of the National Biosafety Framework of Nigeria”, approved in 2011 with a planned duration of four years (2011-2015).

140. The Project has experienced delays, mainly due to the overall socio-political context of the country in the last decade and the controversial nature of the subject, but, eventually, in 2015 a Law that created the National Biosafety Management Agency (NBMA) was promulgated. With the shifting of responsibilities from the Federal Ministry of Environment to the new Agency (NBMA), the National Executing Agency of the Project also changed, which justified a significant no-cost extension of the Project until July 2017, through two successive extensions (one accorded in 2015 and the second in 2016), for a total of 26 months.

141. The National Biosafety Management Agency (NBMA) has rapidly and firmly assumed all responsibilities related to Biosafety in the country, including the assessment of requested authorizations for introducing Genetically Modified Organisms (GMOs) in the country for different purposes, Risk assessment and Risk Management, Biosafety Monitoring and Enforcement. The Agency is fully integrated within the Governance system of the country and its Financial and Institutional Sustainability are being strengthened. The political will of policy and decision-makers at the highest level in supporting Biosafety agenda is clear and

has been, in fact, considered as a key-driver for the attainment of the Project Results (see chapter 4.2 and Diagram 2, Theory of Change).

142. The Project has very satisfactorily delivered most of the planned Outputs and Outcomes, as discussed in chapters 5.4.1 and 5.4.2. Room for improvement obviously exists, due to the short time of existence of the Agency (two years), but it is equally evident the steady attempt to progress for making the NBMA achieve higher standards of efficiency and effectiveness. For that purpose, the staff of the Agency, most of it with limited previous exposure to Biosafety, needs to be matched by a comprehensive Plan of Capacity Building in strategic areas for the Agency, as argued in chapter 5.8.3 (Institutional Sustainability).

143. As discussed in chapter 5.4.2 (Achievement of Outcomes, namely Immediate Outcome 2), the Biosafety Law and successive Regulations are fully operational, though both the NBMA and main stakeholders believe that they require a review for better Biosafety Management.

144. The regulatory regime defines the large, nearly exclusive mandate of the Agency on all Biosafety issues, hence making clear the procedures and mechanisms to be followed for any introduction and management of Genetically Modified Organisms (GMOs) in the country, which is a strong point.

145. On the other hand, however, the Law and Regulations leave room to the discretionary role of the Agency in decision-making for authorization (Risk Assessment). Some mechanisms for risk assessment and decision-making are optional, rather than mandatory, which makes the Law and the Regulations not fully “predictable”. This may eventually turn to be a weakness for the Agency, rather than a strong point, as discussed under Socio-political Sustainability (chapter 5.8.1).

146. In this context, the new Agency is deploying efforts to gain credibility and acceptance from a larger audience, which is, in fact, an on-going endeavor to which the NBMA is giving all priority. The Agency is addressing the issue through two main kind of actions. On one side, it is enhancing stakeholders’ participation (see for instance the Memorandum of Understanding signed with other agencies, described in chapter 5.4.1), hence fostering partners’ inclusion in Biosafety Management. On the other side, it is trying to convey “reassuring” messages to the public, through information campaigns, as described in chapter 5.4.1 and 5.4.2 (Achievement of Outputs and Outcomes, namely Outcome 5).

147. Public Awareness and Participation can become crucial for the socio-political sustainability of Biosafety agenda in the country. The on-going effort to set and implement a Biosafety Communication Strategy surely responds to this challenge and is regarded by the Agency as the main measure to mitigate the risks of scarce acceptance and consensus around the Agency and Biosafety. Whether the Strategy will set a real, two-way communication and promote the meaningful participation of the Institutions, the Private Sector, the Civil Society and the Public in general, is still too early to be assessed.

148. The Evaluation has also concluded that the overall Monitoring and Reporting System of UN Environment / GEF Projects shows, as largely discussed in chapter 5.7, some positive elements (the setting and effective use of a regular Reporting system and of the ANUBIS platform, and the constant proximity monitoring by the Project Team, the Project Steering Committee and the UN Environment Task Manager). Nevertheless, relevant weaknesses

have also been detected within the whole chain of the GEF / UN Environment Monitoring and Reporting System, resulting in the inadequate use of the Planning, Monitoring and Evaluation tools foreseen in the Project Document, the lack of a comprehensive and effective Project Monitoring System in place and a low capacity of the Project Team to grasp principles and methods of a "Result-based approach" to the Project, of which the Monitoring system is an essential component. A Recommendation (chapter 6.3) has been formulated on this respect.

149. Based on all the above, the answer to the first strategic question specified in the Terms of Reference of the Evaluation (see Annex 2) regarding the implementation of a "fully functional and responsive regulatory regime that responds to the obligations under the Cartagena Protocol on Biosafety" is largely positive. All main regulatory and administrative instruments (Law, Regulations, Guidelines, Institutional Agreements) are in place and fully operational.

150. The development of "institutional and technical capacity, awareness and participation amongst the key actors" (as asked in the second question) has surely been addressed by the new National Biosafety Management Agency (NBMA) and is an on-going process, due to the short lifetime of the Agency and the novelty of Biosafety in the country. Given the size of the Agency and its large and delicate mandate, there is surely the need to reinforce the capacities of its Human Resources. At the same time, there is the need to consolidate a larger "Biosafety knowledge community", by enhancing the partnership with other governmental and public partners and by setting appropriate instruments to foster communication and participation among a wide range of actors (Private sector, Civil Society, Academic and research Institutions, the large Public).

151. The third question, concerning the "consolidation of a functional national system that can monitor Biotechnology and follow up the releases of Living Modified Organisms (LMOs) and their possible effects on the environment" is particularly relevant in the case of Nigeria, since the country is willing to make safe use of GMOs crops and has already authorized the commercial use of GMO cotton. Therefore, although a functional system is indeed in place, it will be progressively challenged. Technical capacities and socio-political sustainability seems to be the two main factors for the progress of Biosafety in Nigeria and its contribution to the Sustainable Development of the country. The following Table provides the summarized rating of the different criteria established by UN Environment Evaluation Office (EO) that have been assessed all along the Report.

6.1.1 Evaluation Criteria and Ratings Table

Table 9: Evaluation Criteria and Ratings Table

Criterion *(section ratings A-I are formed by aggregating the ratings of their respective sub-categories, unless otherwise marked)*	**Summary Assessment**	**Rating**
A. Strategic Relevance	Very satisfactory in all aspects, except in Complementarity (see below)	**HS**
1. Alignment to MTS and POW	Well aligned with PoW 2010-11, Sub-Programme Environmental Governance, Expected Accomplishment (EA) B.	HS

Criterion *(section ratings A-I are formed by aggregating the ratings of their respective sub-categories, unless otherwise marked)*	**Summary Assessment**	**Rating**
2. Alignment to UNEP/GEF/Donor strategic priorities	Project belongs to GEF Biodiversity Focal Area, Strategic Programme 6 (BD-SP6): "Building Capacity for the Implementation of the Cartagena Protocol on Biosafety".	HS
3. Relevance to regional, sub-regional and national environmental priorities	Relevant for the management and safe use of GMOs in the context of Sustainable Development at national and West-Africa level	HS
4. Complementarity with existing interventions	Builds upon GEF/UN Environment Project "Development of the National Biosafety Framework" (2002-2005) and is complementary to other stakeholders' projects.	HS
B. Quality of Project Design	Project Design Quality was assessed in Inception Report. Overall, design is weak and scores poorly in many relevant criteria.	**MU**
C. Nature of External Context	Internal conflicts represented exceptional challenges that, though not directly affecting the Project, may have altered Government's priorities, plans and programs.	**Moderately Unfavourable**
D. Effectiveness[12]		**HS**
1. Achievement of outputs	The Project has successfully delivered most of its expected Outputs, including the whole Regulatory system	HS
2. Achievement of direct outcomes	Regulatory, Administrative and Follow-up/Monitoring Systems in place. Public participation in need of more decisive actions.	S
3. Likelihood of impact	Outcomes have been achieved, roles and responsibilities are clear and the framework is progressing towards long term impact.	HL
E. Financial Management		**S**
1.Completeness of project financial information	Financial reports not always timely delivered. Budget revisions not always clearly motivated	MU
2.Communication between finance and project management staff	In place throughout project life	S
3.Compliance with UNEP standards and procedures	Overall compliant but with delays and inaccuracies	MS
F. Efficiency	Time-efficiency has been challenged (26 months of extension) but very cost-effective in achieving expected results.	**S**
G. Monitoring and Reporting		**MS**
1. Monitoring design and budgeting	The Monitoring Plan is quite complete and the Project had an allocation for Monitoring and Evaluation (M&E).	S
2. Monitoring of project implementation	Mainly through the monitoring of activities, not by results. Tracking Tools not implemented.	MU
3.Project reporting	Progress Reports produced and filed in ANUBIS.	MS
H. Sustainability *(the overall rating for Sustainability will be the lowest rating among the three sub-categories)*		**L**
1. Socio-political sustainability	Highly depending on the overall socio-political context of the country. Efforts on-going to gain wider public acceptance and stakeholders' inclusion	L
2. Financial sustainability	Foreseen by the Law (2015)	HL
3. Institutional sustainability	Roles and responsibilities very clearly assigned to the	HL

[12] Where a project is rated, through the assessment of Project Design Quality template during the evaluation inception stage, as facing either an Unfavourable or Highly Unfavourable external operating context, the overall rating for Effectiveness may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together.

Criterion *(section ratings A-I are formed by aggregating the ratings of their respective sub-categories, unless otherwise marked)*	**Summary Assessment**	**Rating**
	National Biosafety Management Agency (NBMA), Stakeholders involvement on-going	
I. Factors Affecting Performance		**S**
1. Preparation and readiness	Project design weak, particularly in stakeholders' participation and partnership	S
2. Quality of project management and supervision	Overall satisfactory, though some procedures not always up to the standards. Change of NEA during the Project	S
3. Stakeholders participation and cooperation	Pivotal role of the new National Biosafety Management Agency. Stakeholders participation is being built. Still weaknesses in public participation.	S
4. Responsiveness to human rights and gender equity	Not explicitly implemented, not referred to in any Project document / report produced by the Project. No disaggregated data by gender on participants in project's activities (e.g. training)	MU
5. Country ownership and driven-ness	Grounded on the National Law of 2015 and demonstrated by the setting of the new Biosafety Agency (NBMA)	HS
6. Communication and public awareness	Still to be clearly set-up and consolidated	MS
Overall project rating		**S**

6.2 Lessons Learned

Lesson 1. *Nigeria shows how Political Will can be a strong driving force. The fast and steady implementation of the Regulatory and Administrative Biosafety System in Nigeria, from 2015 on, is rooted in the Political Will of the country to effectively progress in the area of Biotechnology while complying with international standards of Biosafety.*

Lesson 2. *It is important that the Project Document and the Logical Framework define a clear logical pathway linking Activities-Outputs-Outcome. Weaknesses in the pathway have particularly affected the achievement of Immediate Outcome 5, regarding the component "Public Awareness and Participation". The definition, in the Project Logframe, of clear and measurable Outputs, specific to different target groups (e.g. Politicians, Government, Lawyers, Media, Consumers, Farmers, Environmental groups, the Youth, etc.), would have helped the Project Team in focussing its activities and being more effective in that component.*

6.3 Recommendations

Recommendation 1: to the National Biosafety Management Agency (NBMA) and UN Environment (regarding the strengthening and consolidation of Biosafety Human Resources)

Recommendation 1:
The Evaluation strongly recommends to keep-on and increase Capacity Building activities through:

a) the formulation and adoption of a comprehensive short/medium-term Capacity

Building Plan (2-3 years) for the Agency's staff and other key-stakeholders, including a diversified range of training options at national and international level, with particular attention to the following areas: - Risk Assessment - Food Safety - Biosafety Communication, including Risk Communication - Biosafety Administration b) The setting of a resources mobilization strategy for Capacity Building at National, Regional and International level for the implementation of the Plan in the most cost-effective way.
Summary of Findings and Conclusions supporting the Recommendation The NBMA has been firmly growing from 2015 on and much of the staff (207 people) has only been recently involved in Biosafety, therefore in need of strengthening their technical, methodological and administrative capacities (Ref. Findings § 77, 78, 85, 91, 102, Likelihood of Impact § 109, Sustainability § 136, Conclusions § 142, 150, 151).

Recommendation 2: to the National Biosafety Management Agency (NBMA) and UN Environment (regarding the formulation and implementation of Education Biosafety Curricula in Nigeria)

Recommendation 2: The Evaluation recommends giving effective steps for the formulation, adoption and implementation of Education Curricula on Biosafety, both at Secondary and University level. Appropriate existing know-how and experience in other countries should be exchanged, analysed and discussed, to create adapted Curricula for the country.
Summary of Findings and Conclusions supporting the Recommendation Country's progress in Biotechnologies' Education at academic level did not adequately included Biosafety as a subject, so far. Education on Biosafety needs to be improved at national level to overall raise the level of Biosafety knowledge among the citizens, particularly the young generations, and to enhance national know-how and expertise on Biosafety among the scientific community. (Ref. Findings § 102, 106, Sustainability § 131, Conclusions § 150)

Recommendation 3: to GEF and UN Environment, particularly UN Environment Evaluation Office (EO) (regarding the implementation of the Monitoring and Reporting System in all Projects)

Recommendation 3: The Evaluation recommends giving effective steps for the revision and improvement of the whole Monitoring and Reporting System of the Projects, particularly addressing: - Awareness raising and capacity building of Projects' Teams on the relevance and

implementation of effective Project Monitoring and Reporting Systems, based on a sound “Project Management by Results”; - Putting in value, review and improve the existing Monitoring and Reporting tools (particularly the “Costed M&E Plan”, the “GEF Tracking Tools” and the “Project Implementation Review” / PIR), as living instruments for the setting of appropriate Project Monitoring Systems at Project level.
Summary of Findings and Conclusions supporting the Recommendation Relevant weaknesses have been detected within the whole chain of the GEF / UN Environment Monitoring and Reporting System, resulting in the inadequate use of the Planning, Monitoring and Evaluation tools foreseen in the Project Document, the lack of a comprehensive and effective Project Monitoring System in place and a low capacity of the Project Team to grasp principles and methods of a “Result-based approach” to the Project. (ref. whole Chapter 5.7, Conclusion § 148)

Annexes

1) Response to stakeholder comments received but not (fully) accepted by the evaluators
2) Evaluation ToR (without annexes)
3) List of people met
4) Summary co-finance information and a statement of project expenditure by activity
5) Evaluation Bulletin
6) Comparative analysis of Ghana, Liberia and Nigeria Projects of National Biosafety Framework Implementation
7) List of documents consulted
8) Brief CV of the consultant
9) Quality Assessment of the Evaluation Report

ANNEX 1: RESPONSE TO STAKEHOLDER COMMENTS RECEIVED BUT NOT (FULLY) ACCEPTED BY THE EVALUATOR

Stakeholder comments	Evaluator response
From the National Project Coordinator / Chief Executive Officer (CEO) of the National Biosafety Management Agency (NBMA)	Note: All comments of the CEO have been taken into due account and relative amendments and revisions have been integrated in the final text. Regarding Comment on chapter 5.2, see below.
Chapter 5.2 (Project Design)	
CEO comment: *"I disagree with the assessment from 5.2 to 73. The assessment needs to be reviewed"*.	Though the comment is clear, it does not bring counter-factual elements or specific opinions on the issue. Chapter 5.2 highlights strong and weak points of the Project Design and, in the Evaluator's opinion, underpins a Moderately Unsatisfactory (MU) rating. Therefore, partially accepting that, as requested, the assessment should be reviewed, the rating has been upgraded from U to MU.

ANNEX 2: TERMS OF REFERENCE FOR THE EVALUATION

TERMS OF REFERENCE

Terminal Evaluation of the UN Environment/Global Environment Facility projects:

A: "Implementation of National Biosafety Framework for Nigeria"
B: "Implementation of National Biosafety Framework for Ghana"
C: "Implementation of National Biosafety Framework for Liberia"

Section 1: PROJECT BACKGROUND AND OVERVIEW

Project rationale

17. **Nigeria**: Nigeria as a nation is highly endowed with enormous biodiversity which requires conservation and sustainable utilization of these natural resources. With the advent of modern Biotechnology, Living Modified Organisms (LMOs) and their products have received a lot of international attention as well as their perceived adverse impacts on the environment and on human health. Nigeria joined the confederation of nations in taking precautionary safety measures by signing the Cartagena Protocol on Biosafety (CPB) in 2000 and ratified in 2003. Nigeria has also developed a National Biosafety Frame and is currently developing its Biosafety Clearing House. Genetically engineered/modified (GE/GM) crops in agriculture are increasingly becoming available on the market, especially in agricultural development. To apply GM technology to solve such problems requires capacity building in the field of risk assessment and risk management, detection of LMOs as well as socio-economic and ethical aspects associated with adoption of the GM technology. It is therefore, important to strengthen the national capacity in all subjects related to safe application of modern biotechnology. It is very crucial now for the country to collaborate with development partners to build a functional National Biosafety Framework that would facilitate the safe application of modern biotechnology in the country and the implementation of the Cartagena Protocol on Biosafety.

18. **Ghana:** Ghana developed its National Biosafety Framework in 2004 which addresses a biosafety policy, regulatory regime, systems for handling, monitoring and enforcement and public participation with related institutional arrangements. Biotechnology in Ghana has been highlighted as one of the strategic tools to modernize agriculture, assist in increased agricultural productivity, increased agro-processing and industrial delivery. Nevertheless, some gaps and weak points still exist in the national biosafety system and, taking into account the rapid developments in modern biotechnology, new requirements resulting from development at global and regional levels are to be implemented and reflected at national level as required by treaty and constitutional obligations. The project stands to help Ghana develop capacity to gain information and technical capacity in risk assessment among others as tools to ensuring environmental and food safety especially of LMOs in field trials and as food for feed and/or for processing. In the absence of the project, the competent authorities would be lacking the necessary capacities, both technical and material, and the necessary information sources to cover sufficiently all aspects and new developments connected with the environmental safe management of modern biotechnology.

19. **Liberia:** Liberia is endowed with rich biological diversity as well as other natural resources; its flora and fauna include plethora of plant and animal species of which a total of 110 are endemic (103 plants and 7 animals species) and of high conservation significance. Unfortunately, there is a steady decline in the country's biological diversity owing to a number of anthropogenic factors, a few of which include: unregulated logging, shifting cultivation, monoculture plantations, charcoal production, poaching and hunting, as well as the abandonment of crop landraces in favour of exotic crop varieties that have been introduced into the country for relief purposes. This latter threat is of particular significance to biosafety because it could lead to loss of valuable genes. Cognizant of the threats to the environment and particularly biodiversity, Liberia acceded to Cartagena Protocol on 15 February 2002 and completed its National Biosafety Framework (NBF) in 2004. However, there are serious capacity needs in terms of skilled human resources and adequate infrastructure. The project is therefore vital to address the capacity building needs

of Liberia with respect to the final target of a fully operational NBF, and thus enable Liberia to integrate biosafety into its sustainable management plan for biodiversity and to meet its obligation as a Party to the Cartagena Protocol on Biosafety. Additionally, a functional biosafety system will also safeguard against genetic erosion of the country's valuable crop landraces that are being used as the genetic reservoir for crop improvement, e.g. local rice varieties in breeding programs both regionally and globally to ensure food security.

Project objectives and components

20. These projects are part of the GEF's wider efforts in assisting countries to implement a biosafety regulatory regime in accordance with Agenda 21 and CBD. The global project will assist Parties to the Protocol to meet their obligations by building or strengthening the capacity needed to have an operative NBF in their respective countries including Biosafety Clearing House and enabling activities such as training in risk assessment and risk management of GMOs. This will be done in collaboration with other relevant government sectors, NGOs, private sector, academic and research institutions and CBOs.

21. **Nigeria**: The goal of this Project is to facilitate compliance with and the implementation of the Cartagena Protocol through the establishment of a National biosafety system. Specifically, its main objective is ***to assist Nigeria to put in place a well-articulated, effective and transparent national biosafety system through the development of the necessary policies, regulatory and technical instruments, and local capabilities in order to meet national development needs***.

22. The project components and expected results for Nigeria are as summarised in the table below:

Table 2. Projects components and outcomes – Nigeria

Project component	Expected Outcomes
Baseline established for information on the safe use of biotechnology in Nigeria through a stocktaking analysis.	• Gaps and areas of intervention in the National Biosafety Framework identified to facilitate final project design
System for handling LMO issues	• A fully functional national systems for handling requests with fully functional risk assessment and risk management system
Establishment of a regulatory regime consistent with CPB and national obligations	• A fully functional and responsive regulatory regime in line with CPB and national needs
Strengthening systems for monitoring and enforcement Strengthening systems for monitoring and enforcement	• Full Systems for monitoring of environmental effects and enforcement are in place.
System for public education, awareness and participation	• A plan for public education, awareness and participation and access to information is formulated and implemented

23. Ghana: The overall goal of the project is to assist Ghana to put in place a functional, transparent and robust national biosafety framework, in accordance with national development priorities, and to fulfil its obligations as a Party to the Cartagena Protocol, Agenda 21 and other related international instruments. The objective of the project is to ***"strengthen and evolve the institutional and human capacity needed to meet the critical challenges in the operationalisation of the NBF and the obligations under the Cartagena Protocol on Biosafety".*** The specific objectives include the following:

- To integrate and incorporate Biosafety issues into the National Development Planning agenda as spelt out in the Ghana Poverty Reduction Strategy, the National Biodiversity Strategy, the National Science, Technology and Innovation Policy and related sectoral policies on sustainable and environmental safe use of Biological Diversity and the proposed Biotechnology and Biosafety Policy.
- To review, consolidate and establish a fully functional and responsive regulatory regime, in line with the Cartagena Protocol on Biosafety (CPB), as well as its national needs and priorities.

- To establish and consolidate a transparent, functional and predictable process related to administration of requests including risk assessment and decision-making in the management of modern biotechnology activities.
- To establish and operationalise a coordinated and collaborative monitoring and enforcement system with delegated responsibilities as spelt out in the National Biosafety Framework and the Biosafety Bill.
- To establish and consolidate a functional national system for public awareness, education, participation, and access to information.

24. The project components and expected results for Ghana are as summarised in the table below:

Table 3. Projects components and outcomes – Ghana

Project component	Expected Outcomes
Stocktaking and Biosafety Policy Integration	• Stocking document used as a baseline for the design of the implementation project. • By 2011, Biosafety is integrated and incorporated into the biotechnology and biosafety policy with specific action plans and related sustainable development plans
Strengthening the Biosafety Regulatory and Administrative System	• Ghana has a fully functional and responsive regulatory and administrative system with implementation regulations/guidelines/operational procedures in line with CP and other relevant international agreements and national needs in relation to the management of modern biotechnology
Monitoring and Enforcement	• Ghana has a functional national system for "follow-up" activities, namely monitoring of environmental effects and enforcement
Public Awareness and Participation	• Ghana has a functional national system for public awareness, education, participation, access to information

25. **Liberia**: The overall goal of the project is ***to assist Liberia to have a workable and transparent NBF in line with its national development priorities and international obligations relative to Agenda 21, the CBD, and the Cartagena Protocol on Biosafety***. Specifically, the Project aims to assist Liberia to put in place a well-articulated and effective national biosafety system through the development of necessary policy, regulatory and technical tools as well as capacity building interventions. Its specific objectives are:

- To integrate and incorporate Biosafety into the national sustainable development plan and/or strategies of Liberia.
- To assist in the establishment and consolidation of a fully functional and responsive regulatory regime in line with Cartagena Protocol and also Liberia's needs and priorities.
- To assist Liberia to establish and consolidate a functional national system for handling requests, perform risk assessment, make decisions on requests, and perform administrative tasks.
- To assist in the establishment and consolidation of a functional system for "follow-up", namely monitoring of environmental effects and enforcement in Liberia.
- To establish and consolidate a functional national system for public awareness, education, participation and access to information.

26. The project components and expected results for Liberia are as summarised in the table below:

Table 4. Projects components and outcomes – Liberia

Project component	Outcomes
Development of a comprehensive national biosafety policy	• Biosafety recognized and Mainstreamed as a sustainable development issue in the national development
Strengthening the administrative and regulatory framework on biosafety	• A functional regulatory and administrative system for biosafety established in line with obligations to the

	Cartagena Protocol on Biosafety
Creating the necessary institutional capacity and human resources for effective decision making and compliance in biosafety	• A functional national system for monitoring and enforcement established
Generating and managing biosafety information and public sensitization strategies	• A functional national system for public awareness, education and Public participation established

Executing Arrangements

27. The GEF **Implementing Agency** for the three projects was UN Environment acting as intermediary between the GEF and the executing agencies in both countries. In this capacity, UN Environment had overall responsibility for the implementation of the projects, project oversight, technical support and co-ordination with other GEF projects.
In **Nigeria**, the **National Executing Agency** (NEA) was the Federal Ministry of Environment - which is also the CPB National Focal point. This was later changed to the National Biosafety Management Agency established by the Biosafety Act (2015) which transferred the focal Point and all administrative matters on Biosafety.[13] The NEA was responsible for the sustainability of national biosafety activities on completion of the national project, and providing the necessary scientific, technical, financial and administrative support to the work of the **National Coordinating Committee** (NCC)[14], working in close co-operation with relevant government agencies, the scientific community, the public and private sectors. The NCC provided policy oversight to the execution of the national project and cross sectoral inputs, and it gave recommendations to facilitate the mainstreaming of biosafety activities in the national sustainable development agenda. A **National Project Coordinator** (NPC) appointed by the NEA coordinated the execution of the national project, and was the liaison officer for relevant stakeholders. The NPC was assisted by technical, admnistrative and financial support staff in the project.

28. In **Ghana**, the **National Executing Agency** was the Ministry of Environment, Science and Technology (MEST), also designated as the National Competent Authority by the Government of Ghana under the NBF, whose functions were executed through the Biotechnology and Nuclear Agriculture Research Institute (BNARI) of the Ghana Atomic Energy Commission, an agency under MEST. . BNARI[15] worked on behalf of the Government of Ghana to manage the project and ensure that its objectives are met by the end of the project. MEST through its technical agencies provided the necessary scientific, technical, financial and administrative support to the project, working in close co-operation with the relevant government agencies, the scientific community and the public and private sectors. The **National Biosafety Committee, with** representation from universities, research institutes, regulatory institutions, private sector and civil society, as well as various line Ministries and agencies, provided advice and guidance for the implementation of the National Biosafety Framework. A **National Project Coordinator** appointed by NEA, with assistance from a full-time project administrative/financial assistant, was responsible for the overall co-ordination, management and supervision of all aspects of the national project.

[13] Change of NEA in Nigeria was communicated to UNEP per later dated 22/03/2016 which was uploaded in ANUBIS under "other documents"

[14] In Liberia and Ghana, the NCC functions were absorbed into the functions of the already established statutory bodies – the National Biosafety Committee. The National Biosafety Committee is envisaged to evolve into the Technical Advisory Committee under the Biosafety Act in Ghana.

[15] With the passage of the National Biosafety Act of Ghana, a National Biosafety Authority (NBA) has been established and is currently the National Focal Point and also Competent Authority on Biosafety. However, it was agreed that BNARI will still host the Project Secretariat and closely work with the NBA till end of the current project.

29. In **Liberia**, the Environmental Protection of Liberia (EPA) was the **National Executing Agency** of the project, working in close collaboration with relevant agencies and ministries of government, as well as other stakeholders who participated in the NBF. The NEA used a multi-disciplinary and multi-sectoral **National Biosafety Committee** to advise and guide the implementation of the National Biosafety Framework. The NBC therefore functioned as the **project's steering committee**. The NEA may also establish **sub-working groups**. A **National Project Coordinator** appointed by NEA, with assistance from a full-time project administrative/financial assistant, was responsible for the overall co-ordination, management and supervision of all aspects of the national project. The NPC provided overall supervision for any staff in the NBF Team as well as guiding and supervising all other staff appointed for the execution of the various national project components.

Project Cost and Financing

30. The three projects fall into the medium-size project (MSP) category. In **Nigeria** the overall project budget was US$ 2,011,000 comprising of a GEF allocation of US$ 965,000 and US$ 1,046,000 in-kind co-financing support from the Government of Nigeria. For **Ghana**, the overall project budget was US$ 1,436,364 of which US$ 636,364 was received from the GEF financing whereas US$ 800,000 was to be provided through co-financing. As for the project in **Liberia**, the overall budget was US$ 1,107,679 comprising US$ 577,679 from GEF and US$530,000 from co-financing from the Government of Liberia.

Table 5. Estimated project cost in Nigeria (USD)

Financing source	Amount (USD)
GEF Trust Fund	965,000
Co-financing (National counterpart funding)	1,046,000
Total	**2,011,000**

Table 6. Estimated project cost in Nigeria (USD)

Financing source	Amount (USD)
GEF Trust Fund	636,364
Co-financing (National counterpart funding)	800,000
Total	**1,436,364**

Table 7. Estimated project cost in Nigeria (USD)

Financing source	Amount (USD)
GEF Trust Fund	577,679
Co-financing (National counterpart funding)	530,000
Total	1,107,679

Implementation Issues

31. The UNEP-GEF Biosafety Unit supports several projects funded through the GEF that enable countries to fulfill their obligations as parties to the Cartagena Protocol on Biosafety (CPB) or enable countries to become Parties to the CPB. The specific project interventions include development and implementation of biosafety frameworks at national and regional levels. In addition to achieving the evaluation objectives described in section 2 below, the evaluation should endeavour to capture a comparative analysis of the three countries - Nigeria, Ghana and Liberia, as they are from the same sub region and there is a potential for the harmonization of their national biosafety systems, as most of the regulatory systems in these three countries are similar and there is a lot of trade between them.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

Key Evaluation principles

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

33. **The "Why?" Question.** As this is a terminal evaluation and similar interventions are envisaged for the future, particular attention should be given to learning from the experience. Therefore, the "*Why?*" question should be at the front of the consultant's mind all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultant need to go beyond the assessment of "*what*" the project performance was, and make a serious effort to provide a deeper understanding of "*why*" the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.

34. **Baselines and counterfactuals**. In attempting to attribute any outcomes and impacts to the project intervention, the evaluator should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

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

Objective of the Evaluation

36. In line with the UN Environment Evaluation Policy[16] and the UN Environment Programme Manual[17], the Terminal Evaluation (TE) 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 evaluation 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 UN Environment and the main project partners in each country. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation, especially for the additional phases of the biosafety projects, if applicable.

[16] http://www.UN Environment.org/eou/StandardsPolicyandPractices/UN ENVIRONMENTEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

[17] http://www.UN Environment.org/QAS/Documents/UN ENVIRONMENT_Programme_Manual_May_2013.pdf . *This manual is under revision.*

Key Strategic Questions

37. In addition to the evaluation criteria outlined below, the evaluation will address the **strategic questions** listed below. These are questions of interest to UN Environment and to which the project is believed to be able to make a substantive contribution:

- To what extent were the projects able to assist Nigeria, Ghana and Liberia to establish and consolidate a fully **functional and responsive regulatory regime** that responds to their obligations under the Cartagena Protocol on Biodiversity, as well as their national needs for a viable and profitable National Biosafety Framework?
- To what extent were the projects able to develop **institutional and technical capacity, awareness and participation** amongst the key actors in Nigeria, Ghana and Liberia to ensure that biosafety becomes part of their permanent action?
- To what extent were the projects able to assist Nigeria, Ghana and Liberia to establish and consolidate a functional **national system that can monitor Biotechnology and follow up the releases of** Living Modified Organisms (LMOs) and their possible effects on the environment?
- To what extent are **outcome indicators verifiable**, and record progresses towards their target values?

Evaluation Criteria

38. All evaluation criteria will be rated on a six-point scale. **Sections A-I** below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the achievement 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. The evaluation consultant can propose other evaluation criteria as deemed appropriate.

Strategic Relevance

39. The evaluation will assess, in line with the OECD/DAC definition of relevance, 'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'. The evaluation will include an assessment of the projects' relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

i. Alignment to the UN Environment Medium Term Strategy[18] (MTS) and Programme of Work (POW)

40. The evaluation should assess the projects' alignment with the MTS and POW under which each project was approved and include reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.

ii. Alignment to UN Environment /GEF Strategic Priorities

41. GEF strategic priorities will vary across interventions. UN Environment strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building[19] (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the

[18] UN Environment's Medium Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

[19] http://www.UN Environment.org/GC/GC23/documents/GC23-6-add-1.pdf

exchange of resources, technology and knowledge between developing countries. GEF priorities are specified in published programming priorities and focal area strategies.

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

42. The evaluation will assess the extent to which the interventions are suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where they are being implemented. Examples may include: national or sub-national development plans, strategies or Nationally Appropriate Mitigation Action (NAMA) plans, or regional agreements etc.

iv. Complementarity with Existing Interventions

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

Factors affecting this criterion may include: stakeholders' participation and cooperation*;* responsiveness to **human rights and gender equity and country ownership and driven-ness.**

Quality of Project Design

44. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria, and an overall Project Design Quality rating is established. This overall Project Design Quality rating is entered in the final evaluation ratings table as item B. In the Main Evaluation Report, a summary of the projects' strengths and weaknesses at design stage are included.

Factors affecting this criterion may include (at the design stage): stakeholders participation and cooperation and responsiveness to human rights and gender equity, including the extent to which relevant actions are adequately budgeted for.

C. Nature of External Context

45. At evaluation inception stage a rating is established for the projects' external operating context (considering the prevalence of conflict, natural disasters and political upheaval). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable and unexpected external operating context, the overall rating for Effectiveness may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together. A justification for such an increase must be given.

D. Effectiveness

46. The evaluation will assess effectiveness across three dimensions: achievement of outputs, achievement of direct outcomes and likelihood of impact.

Achievement of Outputs

47. The evaluation will assess the projects' success in producing the programmed outputs (products and services delivered by the project itself) and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, a table should be provided showing the original formulation and the amended version for transparency. The achievement of outputs will be assessed in terms of both quantity and quality, and the assessment will

consider their usefulness and the timeliness of their delivery. The evaluation will briefly explain the reasons behind the success or shortcomings of each project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include: preparation and readiness, and quality of project management and supervision[20].

i. Achievement of Direct Outcomes

48. The achievement of direct outcomes is assessed as performance against the direct outcomes as defined in the reconstructed[21] Theory of Change. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. As in (i) above, a table can be used where substantive amendments to the formulation of direct outcomes are necessary. The evaluation should report evidence of attribution between UN Environment's intervention and the direct outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UN Environment's contribution should be included.

Factors affecting this criterion may include: quality of project management and supervision; stakeholders' participation and cooperation; responsiveness to human rights and gender equity and communication and public awareness.

ii. Likelihood of Impact

49. Based on the articulation of longer term effects in the reconstructed TOC (i.e. from direct outcomes, via intermediate states, to impact), the evaluation will assess the likelihood of the intended, positive impacts becoming a reality. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the EOU website (http://web.unep.org/evaluation/working-us/theory-change) and is supported by an excel-based flow chart called, Likelihood of Impact Assessment (see Annex 1). Essentially the approach follows a 'likelihood tree' from direct outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

50. The evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.[22]

51. The evaluation will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication[23] as part of its Theory of Change and as factors that are likely to contribute to longer term impact.

[20] In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment 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 UN Environment.

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

[22] Further information on Environmental, Social and Economic Safeguards (ESES) can be found at http://www.UN Environment.org/about/eses/

52. Ultimately UN Environment and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the evaluation will assess the likelihood of the project to make a substantive contribution to the high level changes represented by UN Environment's Expected Accomplishments, the Sustainable Development Goals[24] and/or the high level results prioritised by the funding partner.

Factors affecting this criterion may include: quality of project management and supervision, including adaptive project management; stakeholders' participation and cooperation; responsiveness to human rights and gender equity; country ownership and driven-ness and communication and public awareness.

E. Financial Management

53. Financial management will be assessed under three broad themes: *completeness* of financial information, *communication* between financial and project management staff and *compliance* with relevant UN financial management standards and procedures. The evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The evaluation will assess the level of communication between the Task Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach. The evaluation will verify the application of proper financial management standards and adherence to UN Environment's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted.

Factors affecting this criterion may include: preparation and readiness and quality of project management and supervision.

F. Efficiency

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

55. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. The evaluation will also consider the extent to which the management of the project minimised UN Environment's environmental footprint.

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[23] *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

[24] A list of relevant SDGs is available on the EO website www.UN Environment.org/evaluation

Factors affecting this criterion may include: preparation and readiness (e.ge. timeliness); quality of project management and supervision and stakeholders participation and cooperation.

G. Monitoring and Reporting

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

i. Monitoring Design and Budgeting

57. Each project should be supported by a sound monitoring plan that is designed to track progress against SMART[25] indicators towards the achievement of the projects outputs and direct outcomes, including at a level disaggregated by gender or groups with low representation. The evaluation will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation/review should be discussed if applicable.

Monitoring Implementation

58. The evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The evaluation should confirm that funds allocated for monitoring were used to support this activity.

ii. Project Reporting

59. UN Environment through its GEF Biosafety projects has a centralised Project Management Reporting Information System – ANUBIS, through the projects upload reports (quarterly, half yearly and annual) against agreed project milestones. This information will be provided to the Evaluation Consultant by the Evaluation Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team (specifically the Project Implementation Reviews and Tracking Tool). The evaluation will assess the extent to which both UN Environment and donor reporting commitments have been fulfilled.

Factors affecting this criterion may include: quality of project management and supervision and responsiveness to human rights and gender equity (e.g. disaggregated indicators and data).

H. Sustainability

60. Sustainability is understood as the probability of direct outcomes being maintained and developed after the close of the intervention. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes. Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included.

i. Socio-political Sustainability

61. The evaluation will assess the extent to which social or political factors support the continuation and further development of project direct outcomes. It will consider the level of ownership, interest and

[25] SMART refers to indicators that are specific, measurable, assignable, realistic and time-specific.

commitment among government and other stakeholders to take the project achievements forwards. In particular the evaluation will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

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

iii. Institutional Sustainability

63. The evaluation will assess the extent to which the sustainability of project outcomes is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure.

Factors affecting these criteria may include: stakeholders' participation and cooperation; responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined); communication and public awareness and country ownership and driven-ness.

Factors and Processes Affecting Project Performance

64. (These factors are rated in the ratings table, but are discussed as cross-cutting themes as appropriate under the other evaluation criteria, above).

i. Preparation and Readiness

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

ii. Quality of Project Management and Supervision

66. In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment 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 and supervision provided by UN Environment.

67. The evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with UN Environment colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive project management should be highlighted.

iii. Stakeholder Participation and Cooperation

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

iv. Responsiveness to Human Rights and Gender Equity

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

70. The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account. In particular, the evaluation will consider to what extent project design (section B), the implementation that underpins effectiveness (section D), and monitoring (section G) have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

v. Country Ownership and Driven-ness

71. The evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. The evaluation will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices. This factor is concerned with 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 should adequately represent the needs and interests of all gender and marginalised groups.

vi. Communication and Public Awareness

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

Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

73. The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings.

74. The findings of the evaluation will be based on the following:

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

- Relevant background documentation, inter alia UNEP, SCBD and GEF-4 policies, strategies and programmes pertaining to biosafety at the time of the project's approval;
- Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
- Project reports such as six-monthly progress/technical and quarterly financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews and Tracking Tool etc.;
- Project outputs/outcome reports, if available

(b) **Interviews** (individual or in group) with:
- UN Environment Task Manager (TM);
- Project management team;
- UN Environment Fund Management Officer (FMO);
- Project partners in each country, including national executing agencies, project coordinators, members of the national coordinating committees and advisory group/steering committee;
- Other relevant resource persons.

(c) **Field visits** of approximately 4-5 days in each country to be scheduled in consultation with the project team and the Evaluation Office of UN Environment;
(d) **Other data collection tools** as may be deemed useful.

Evaluation Deliverables and Review Procedures

75. The consultant will prepare and submit the following deliverables for **each project**:

- **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.
- **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a standalone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.
- **Evaluation Bulletin:** a 2-page summary of key evaluation findings for wider dissemination through the EOU website.

76. **Review of the draft evaluation report**. The consultant will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Project Manager, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the consultant where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the consultant for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

77. Based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

78. The Evaluation Manager will prepare a **quality assessment** of the first and final drafts of the main evaluation reports, which acts as a tool for providing structured feedback to the evaluation consultant. The quality of the reports will be assessed and rated against the criteria specified in template listed in Annex 1.

79. At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** for each project, in the format of a table, to be completed and updated at regular intervals by the Task Manager. The Evaluation Office will track compliance against this plan on a six monthly basis.

The Consultant

80. For this evaluation, one consultant will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager (Pauline Marima), in consultation with the UN Environment Task Manager (Alex Owusu-Biney), Fund Management Officer (Paul Vrontamitis[26]) and the Sub-programme Coordinator of the Environmental Governance Sub-programme (Cristina Zucca). The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, the consultant's individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UN Environment Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultant to conduct the evaluation as efficiently and independently as possible.

81. The consultant will be hired the over the period May/2017 to December/2017 during which time the evaluation deliverables listed in Section 11 'Evaluation Deliverables' above should be submitted. S/he should have: an advanced university degree in sciences, evaluation experience preferably using a Theory of Change approach, at least 15 years' experience in environmental management or a related field, with a preference for specific expertise in the area of biosafety and biodiversity is required. Knowledge of English language along with excellent writing skills in English is required. Experience in managing partnerships, knowledge management and communication is desirable for all evaluation consultants.

82. The consultant will be responsible, in close consultation with the Evaluation Office of UN Environment, for overall management of the evaluation and timely delivery of its outputs, described above in Section 11 Evaluation Deliverables, above. The consultant will ensure that all evaluation criteria and questions are adequately covered. Detailed guidelines for the Evaluation Consultant can be found on the Evaluation Office of UN Environment website: (http://web.unep.org/evaluation/working-us/working-us).

Schedule of the evaluation

83. The table below presents the tentative schedule for the evaluation.

Table 3. Tentative schedule for the evaluation

Milestone	Tentative timeline
Kick-off meeting	May 2017
Inception Report	June 2017
Data collection and analysis, desk-based interviews and surveys	June - September 2017
Field Mission – 4-5 days in each country (based on meeting arrangements and available budget)	October 2017
Draft report to Evaluation Manager (and Peer Reviewer)	November 2017
Draft Report shared with UN Environment Project Manager and team	November 2017
Draft Report shared with wider group of stakeholders	December 2017
Final Report	December 2017

[26] Ruth Irungu supports Paul Vrontamitis in the fund management of the projects

Contractual Arrangements

84. Evaluation Consultant are selected and recruited by the Evaluation Office of UN Environment under an individual Special Service Agreement (SSA) on a "fees only" basis (see below). By signing the service contract with UN Environment/UNON, the consultant certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the projects' executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Office of expected key deliverables. The schedule of payment is as follows:

85. Schedule of Payment for the Consultant:

Nigeria NBF

Deliverable	Percentage Payment
Approved Inception Report	30%
Approved Draft Main Evaluation Report	40%
Approved Final Main Evaluation Report	30%

Ghana

Deliverable	Percentage Payment
Approved Inception Report	30%
Approved Draft Main Evaluation Report	40%
Approved Final Main Evaluation Report	30%

Liberia

Deliverable	Percentage Payment
Approved Inception Report	30%
Approved Draft Main Evaluation Report	40%
Approved Final Main Evaluation Report	30%

86. **Fees only contracts:** Air tickets will be purchased by UN Environment and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Office and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

87. The consultant may be provided with access to UN Environment's Programme Information Management System (PIMS) or to ANUBIS, and if such access is granted, the consultant agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.

88. In case the consultant is not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UN Environment Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultant have improved the deliverables to meet UN Environment's quality standards.

89. If the consultant fails to submit a satisfactory final product to UN Environment in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultant's fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

ANNEX 3: LIST OF PEOPLE MET

NIGERIA– LIST of PEOPLE MET (03 – 08/2011)

NAME	POSITION & INSTITUTION
Mr Rufus Ebegba	CEO / Director General of NBMA / Nat. Project Coordinator / Nat. Focal Point for CPB rebegba@hotmail.com
Mr A. Benserra	Head of Dept. Socio-economic and Food Safety (NBMA)
Heads of Depts. and Units of NBMA	Joint meeting (14 staff members)
Mrs. C. Ezejiofor	Member of the Nat. Biosafety Committee (Nigeria Agricultural Quarantine Services / NAQS) of the Min. of Agriculture
Team of the Press and Protocol Unit of the NBMA (in charge of Communication)	Joint meeting with the team (six staff members)
	Not met: Mr. Raheef Ademola Usman, former head of the Biosafety Unit under the Ministry of Environment (currently retired). rusmanson@yahoo.com

ANNEX 4: SUMMARY CO-FINANCE INFORMATION AND STATEMENT OF PROJECT EXPENDITURE BY ACTIVITY

Table 3: Budget (GEF) at design and expenditures by components (June 2017)

Component/sub-component	Estimated cost at design (USD)	Actual Cost (USD)	Expenditure ratio (actual/planned)
1. Stocktaking	16.000	na	
2. Systems for handling LMOs issues	230.000	na	
3. Establishment of the Regulatory regime	130.000	na	
4. Strengthening systems for Monitoring and Enforcement	352.500	na	
5. Systems for Public education, awareness & participation	100.000	na	
6. Project management, monitoring and evaluation	136.500	na	
Total	**965.000**	**871.999**	**90%**

Table 4: Co-financing Table (GEF Projects only) (updated June 2017)

Co-financing (Type/Source)	UNEP own Financing (US$1,000)		Government (US$1,000)		Other* (US$1,000)		Total (US$1,000)		Total Disbursed (US$1,000)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants									
– Loans									
– Credits									
– Equity investments									
– In-kind support			1.046	857,9			1.046	857,9	857,9
– Other (*)									
Totals			**1.046**	**857,9**			**1.046**	**857,9**	**857,9**

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

ANNEX 5: EVALUATION BULLETIN

Terminal Evaluation of GEF/UN Environment Projects supporting the
National Biosafety Frameworks Implementation in Ghana, Liberia and Nigeria
(2011-2017)

The new GMO lab in Nigeria

National Biosafety Frameworks (NBF) Implementation

The common overall objective of the Projects was to assist the countries in achieving an operational National Biosafety Framework (NBF) including:

- A Government policy on biosafety
- A regulatory regime for biosafety
- An administrative system to handle notifications or requests for GMOs authorisations
- Systems for 'follow up' such as enforcement and monitoring for environmental effects
- Mechanisms for public awareness, education and participation.

Ghana, Liberia and Nigeria show a similar pathway in the development and implementation of their NBF. They all ratified the Protocol in 2003, developed a NBF with the support of GEF/UN Environment in the same years (from 2002 to 2004/2006) and moved to NBF implementation within the same financial frame (GEF-4), being granted an Implementation Project virtually in the same period (from 2011/12 to 2017).

GEF budget allocation for the three Projects was:

Ghana	USD 636.364
Liberia	USD 577.679
Nigeria	USD 965.000

Relevance

The Projects have played a key-role in the progress of the NBF in the three countries.

- In ***Ghana and Nigeria,*** the Project time-frame has coincided with the implementation of a new Regulatory regime and subsequent establishment of two new Competent Authorities: the National Biosafety Authority (NBA) in Ghana and the National Biosafety Management Agency (NBMA) in Nigeria, both operational since 2015. In both cases, therefore, the Projects have been highly instrumental to the progress of the NBF in a delicate phase of change and evolution.

- Biosafety baseline was less developed in ***Liberia*** and the overall socio-political and economic context far more challenging. The Project has strategically supported the Environmental Protection Agency (EPA) in integrating Biosafety among its priorities and in supporting a proactive group of stakeholders in the formulation and drafting of all regulatory and administrative tools of the Biosafety Framework.

- The three projects have been actively cooperating with Regional, African and International partners (e.g. ECOWAS, African Biosafety Network of Expertise / NEPAD, USAID, among others).

Preparing a GMO Confined Field Trial in Ghana

Performance

- Biosafety Regulatory regimes responding to the obligations of the Cartagena Protocol are operational in Ghana and Nigeria (Biosafety Laws, Regulations, Guidelines), whereas Liberia did not succeed so far to approve the draft Law and Regulations.

- The pivotal role of the National Biosafety Authority (Ghana) and of the National Biosafety Management Agency (Nigeria) is clear, as well as the mechanisms and procedures for processing requests of GMOs Authorizations, for Decision-making and for implementing Risk Assessment and Risk Management measures.

- Liberia has set a Biosafety Unit within the Dept. of Multilateral Environmental Agreements of the EPA and a National Biosafety Committee is actively in place to support awareness, education, lobby and advocacy activities at different levels.

- Nigeria and Liberia have put in place their first laboratory for GMO detection.

- Mechanisms for Public Awareness, Education and Participation have been put in place at a variable extent. Nigeria has translated the Biosafety Law in three national languages and so far organized four National Conferences with a very large participation of different societal groups. Liberia has started a first University course on Biosafety (Dept. of Biological Sciences) with 32 enrolled students.

Outreach activities at Schools in Liberia

Factors affecting projects' performance

- Projects are bound by timeframes (3-4 years) that are usually inconsistent with the dynamics and the timing of governance processes. This is a major constrain that has made very difficult (Ghana and Nigeria) or impossible (Liberia) to achieve the expected institutional results (e.g. approval of Laws and Regulations, setting of new Biosafety Authority or Agency) within the planned project's schedule.

- National Biosafety Stakeholders of the three countries usually point out similar reasons that (at a variable extent depending on the country) have brought about hindrances and delays, such as:
  - Change of Government
  - Change of Parliamentarians
  - Change of line-Ministries
  - Multi-sectoral nature of Biosafety
  - Poor knowledge / awareness on Biosafety
  - Controversial nature of GMOs debate
  - Administrative / bureaucratic inertia
  - Institutional indifference
  - Other national priorities.

- Capacity Building remains a limiting factor for progressing Biosafety agenda in the three countries. Even though Biotechnology is a well-developed sector in Ghana and Nigeria, Biosafety is still in need of a consistent critical mass of experts to support Risk Analysis in its different perspectives: impact on Biodiversity and Human Health, socio-economic implications of GMOs introduction, linkage with other national, regional and international norms (capacity building of the Judiciary).

The way forward: challenges and perspectives

- ***Ghana and Nigeria*** have given steady and significant steps to implement their NBF. Nigeria has recently authorized the environmental release of GMO Cotton and Ghana has been for years developing Confined Field Trials in different crops, with the perspective of their possible commercial use.

- The two countries need to enhance and consolidate their ***new Competent Authorities (NBA and NBMA)*** through focused capacity building plans in the short and medium term. Both institutions also need to gain wider acceptance among different societal sectors and to consolidate their impartial role of neutral brokers.

National Conference of Biosafety Stakeholders in Nigeria

- Biosafety programs are still at an early stage in ***Liberia***, despite significant advances in the last few years. The possibility of focused training and internships of Liberian technicians and experts to Ghana and Nigeria should be be effectively explored and implemented.

- ***Regional*** (West Africa through ECOWAS) and ***African cooperation*** (e.g. NEPAD) is an on-going and promising factor of development of Biosafety agenda to be fostered through common capacity building actions and exchanges. ***UN Country Teams*** (UNCT) could also play an active role on Biosafety by promoting a common agenda on Biotechnologies and Biosafety among the line-agencies (e.g. UN Environment, FAO, WHO).

ANNEX 6: COMPARATIVE ANALYSIS OF GHANA, LIBERIA AND NIGERIA PROJECTS OF NATIONAL BIOSAFETY FRAMEWORK IMPLEMENTATION

Comparative analysis of Ghana, Liberia and Nigeria NBF Implementation Projects

(November 2017)

A) Overview

Ghana, Liberia and Nigeria share a geographical (West Africa) and institutional context (e.g. the ECOWAS / Economic Community of West African States). The three countries are also linked by their common language (English), whereas most of the countries in the Region is Francophone.

At the same time, as schematised in the following table, key socio-economic and demographic indicators of the three countries are very dissimilar.

Table 1: some key socio-economic indicators

	Area 000 Km²	Population 2016 Million people [27]	Pop. Density (p/ Km²)	GDP 2016 Million USD [28] (world ranking)	GDP per capita USD (2016)[29]	Economy classification (World Bank)	HDI 2016 [30] (ranking)	HDI classification[31]
Ghana	238,5	28,2	118	42.690 (85)	1.513,46	Lower-Middle Income	0,579 (139)	Medium Hum. Dev.
Liberia	111,3	4,6	41	2,101 (167)	455,37	Low-Income	0,427 (177)	Low Human Dev.
Nigeria	923,7	185,9	201	405.083 (26)	2.177,99	Lower-Middle Income	0,527 (152)	Low Human Dev.

B) The progress of the National Biosafety Framework in Ghana, Liberia and Nigeria

- The three countries show a similar pathway in the development and implementation of their National Biosafety Framework (NBF). They all ratified the Protocol in 2003, developed a NBF with the support of GEF/UN Environment in the same years (Ghana and Liberia from 2002 to 2004 and Nigeria from 2002 to 2006) and moved to NBF implementation within the same financial frame (GEF-4), being granted an Implementation Project (under current evaluation) virtually in the same period (from 2011-12 to 2017, including extensions).

[27] Source: World Bank
[28] Source: World Bank
[29] Source: World Bank
[30] Human Development Report, UNDP, 2017
[31] Human Development Report, UNDP, 2107

- In absence of a full regulatory regime in place (which only happened in Ghana and Nigeria in 2011 and 2015, respectively), the three countries have been promoting and implementing the Biosafety agenda for years mainly through collaborative mechanisms, so-called National Biosafety Committees (NBC) or National Coordinating Committees. Though at a variable extent and with different institutional roles, the Committees have played a key, driving role in the definition, discussion and revision of the Biosafety Regulatory regime, have carried out incessant lobbying and advocacy actions towards policy and decision-makers and have represented a highly significant opportunity for stakeholders' meaningful participation in the shaping of the National Biosafety Framework and, as in the case of Ghana, in decision-making on GMOs application.

- The evolution of the NBCs has been different in the three countries:

  - Liberia does not have so far approved any Law regarding Biosafety and the National Biosafety Committee is still in place as a collaborative mechanism supporting the Biosafety Unit of the Competent National Authority (the Environmental Protection Agency, NPA), yet, with no formal, statutory role.

  - Ghana has recognised, through its Regulations of 2007, the National Biosafety Committee (NBC) as the Competent National Authority and National Focal Point for Biosafety. Later, following the approval of the Biosafety Act in 2011, this role has been transferred to the newly created National Biosafety Authority (NBA), namely to its Governing Board (where some of the institutions members of the previous NBC are present). A Technical Advisory Committee (TAC) has also been created by the Biosafety Law of 2011 for technically supporting the Board in decision-making, particularly in risk assessment. Ghana has four on-going field trials and, so far, no application received for GMOs deliberate release into the environment.

  - In Nigeria, the National Biosafety Management Agency (NBMA) has been created by Law in 2015 and has, in fact, become the new Competent National Authority and Focal Point for Biosafety, assuming the full responsibility on Biosafety in the country, including decision-making and risk assessment. According to the Law (2015) and subsequent Regulations (2017) the Agency may set an "ad hoc" National Biosafety Committee for advising on risk assessment and decision-making. Nigeria has five on-going field-trials and has also authorised in 2016 the commercial use (deliberate release) of GMO cotton.

C) The Competent National Authorities (CNA) in the three countries

- In Liberia the Environmental Protection Agency is the Governmental Agency responsible for the sustainable management of the environment and its natural resources and for the implementation of the Multilateral Environmental Agreements ratified by the country, including the Cartagena Protocol.

- Ghana and Nigeria have opted for the creation, by Law, of a specific institution (the National Biosafety Authority in Ghana and the National Biosafety Management Agency in Nigeria) responsible for the overall Biosafety Management in the country (decision-making on

applications, risk assessment and management, coordination and supervision, monitoring and enforcement, public information and participation).

Ghana	Liberia	Nigeria
The NCA was the National Biosafety Committee until the approval of the Biosafety Law in 2011. The Law of 2011 established the National Biosafety Authority (NBA) that is the current Competent National Authority for the Cartagena Protocol.	The Environmental Protection Agency (EPA) is the Competent National Authority for the Cartagena Protocol since the country's ratification of the Protocol in 2003.	The Federal Ministry of Environment was the CNA until the approval, in 2015, of the Law that established the new National Biosafety Management Agency (NBMA) and transferred to the new Agency all competencies regarding the Protocol.

D) Approach to the Regulatory Framework and Decision-making process

- Liberia has not yet approved a Biosafety Law and Regulations, which, nonetheless, have been discussed and prepared since 2014. At the current stage, therefore, the country does not have a legally approved regulatory regime in place.

- Ghana and Nigeria have approved, respectively in 2011 and 2015, a national Law on Biosafety[32]. As mentioned above, the two Laws have established and fully empowered a new "ad hoc" national Authority / Agency for Biosafety. Both institutions are managed by a Chief Executing Officer (CEO) appointed by the President.

- There are substantive differences in the form of management and of decision-making among the two countries:

  - Ghana has opted for a "light" institutional model of its National Biosafety Authority, with a strong collegiality in decision-making and a significant devolution of powers to external, frontline "Regulatory Agencies". Decision-making power on Applications lies on the Board of the Authority, whose membership is established by Law and whose members (13 members) are appointed by the President for a duration of three years. Consequently, the staff of the Authority (a total of 25 members foreseen in the organogram) is supposed to function as a sort of Secretariat in support of the Governing Body of the Authority and to liaise with the sectoral Regulatory Agencies. A Technical Advisory Committee (TAC), also foreseen by the Law, is nominated by the Board for a period of three years to advise the Board on different technical issues.

[32] The Biosafety Act 831 / 2011 in Ghana, the National Biosafety Management Act of 2015 in Nigeria

- Nigeria has opted for the creation of a centralised, self-contained and robust National Biosafety Management Agency (NBMA), which currently includes more than 200 staff members. The Agency has full responsibility and power on all aspects of Biosafety Management in the country, including Risk Assessment and Risk Management, Decision-making on Applications, Monitoring and Supervision, Inspection and Enforcement. The Board of the Agency only has advisory functions regarding the functioning of the Agency (not on Biosafety Management issues). Non-mandatory, "ad hoc" Committees (a National Biosafety Committee and a National Technical Sub-Committee) may be called by the Agency in support of its regulatory functions, namely for Risk Assessment. Both Committees have an advisory function and their membership is not defined by Law, but decided by the Agency on a case-by-case basis, according to the need.

E) Projects timeframe and governance processes

- Projects are bound by timeframes (e.g. 3 years in case of Ghana and 4 years for Liberia and Nigeria) that are usually inconsistent with the dynamics and the timing of governance processes. This is a major constrain that has made very difficult (Ghana and Nigeria) or impossible (Liberia) to achieve the expected results in the institutional sphere (e.g. approval of Laws and Regulations, establishment of new Biosafety Authority or Agency) within the planned project's schedule.

- National Biosafety Stakeholders of the three countries usually point out similar reasons that (at a variable extent depending on the country), have brought about hindrances and delays. A list of them include:
  - Change of Government
  - Change of Parliamentarians
  - Change of line-Ministries
  - Multi-sectoral nature of Biosafety
  - Controversial nature of GMOs debate
  - Administrative / bureaucratic inertia
  - Institutional indifference
  - Different priorities
  - Poor knowledge on Biosafety

F) Public Awareness, Education and Participation: a challenging issue

- The three Projects Teams attribute great relevance to the setting of an effective Biosafety System for Public Information, Awareness and Participation and believe that the System plays a key-role for the socio-political sustainability of the National Biosafety Framework.

- The Projects are experiencing a common problem in tackling the issue, due to the variety of "target groups" to be addressed: President's Office, Government, Line-Ministries, members of the Parliament, Officers of Stakeholders Line-Ministries and Agencies, Academic institutions and Schools, Lawyers and Judiciary System, the Media, Consumers Associations, Farmers Associations, Private Sector, Environmental and Civil Society NGOs.

- The Projects show concerns regarding the form of properly conveying what they usually define “right messages on GMOs and Biosafety” to the different audiences listed above. The Communication Strategies they are conceiving and developing seem focused on “how communicate to”, more than “how communicate with”. The weakness of an effective two-way communication can deprive Biosafety managers of a relevant instrument to understand societal opinions, perceptions, doubts and concerns regarding GMOs and Biosafety, which is a crucial element for the smooth development of Biosafety agenda in the countries.

Comparative Analysis of main components of the National Biosafety Framework

Component		GHANA	LIBERIA	NIGERIA
Biosafety Policy		▪ Approved by the Line-Ministry ▪ Biosafety included in the NBSAP ▪ Mid-term (2018-21) Biosafety Plan prepared to fit-in Nat. Dev. Plan	▪ No Policy approved ▪ Biosafety included in the NBSAP	▪ Approved by the Federal Executive Council ▪ Biosafety included in the NBSAP (NBSAP revision on-going)
Regulatory Framework				
	Biosafety Law	YES (2011)	NO (drafted but not approved)	YES (2015)
	Biosafety Regulations	NO (drafted but not approved)	NO (drafted but not approved)	YES (2017)
	Guidelines	YES (several guidelines prepared and adopted)	Partially (Guidelines prepared but not in force)	YES (several guidelines prepared and adopted)
	Competent National Authority	National Biosafety Authority (NBA), established by Law (2011), in place since 2015 (10 staff at October 2017)	Environmental Protection Agency (NBA), with a Biosafety Unit within the Dept. of Multilateral Env. Agreements and the support of a Nat. Biosafety Committee (collaborative mechanisms, non-statutory body).	National Biosafety Management Agency (NBMA) established by Law (2015) and in place since 2015 (207 staff at October 2017)

Administrative System		▪ Operational ▪ Guidelines and other tools in place ▪ MoUs with frontline Regulatory Agencies 	▪ Not in place ▪ Guidelines prepared, not in force 	▪ Operational ▪ Guidelines and other tools in place ▪ MoUs with Partners 
	Decision-making process by Law	The Board of the NBA decides on applications with support from Technical Advisory Committee	Not applicable	NBMA decides. It may request advising on Risk Assessment from "ad hoc" National Biosafety Committee (non-mandatory).
Follow-up, Monitoring & Enforcement System		▪ Operational ▪ Guidelines and other tools in place MoUs with frontline Regulatory Agencies 	▪ Not in place ▪ Guidelines prepared, not in force 	▪ Operational ▪ Guidelines and other tools in place MoUs with frontline Regulatory Agencies 
	GMO Laboratory	▪ Lab not installed 	▪ Lab in place but not operational 	▪ Lab in place, fairly operational with staff 
Public Awareness and Participation System		▪ Communication Strategy drafted 	▪ Public Participation Strategy under preparation 	▪ Communication Strategy drafted, under review and 2-year Plan under preparation 
	Biosafety Curricula	▪ Biosafety Curricula prepared (for Academic level and for Extension), not yet implemented	Biosafety Curricula prepared and approved, on-going courses at the University (Biology) with 32	▪ Biosafety Curricula not in place 

			students 	
		TOTAL 	**TOTAL** 	**TOTAL** 

ANNEX 7: LIST OF DOCUMENTS CONSULTED

Project and GEF / UN Environment Documents:

- Terms of Reference of the Terminal Evaluation (2017)
- Evaluation Criteria and Ratings Table (UNEP, 2016)
- Use of Theory of Change in project evaluations (UNEP, 2016)
- ROtI - Review of Outcomes to Impact: Practitioners Handbook, 2009, GEF
- Project Document "Support for the Implementation of the National Biosafety Framework of Nigeria" and its Annexes (in ANUBIS)
- From ANUBIS: PIRs, Budget Revisions, Audit Reports, etc.
- Tools and documents in http://www.unep.org/evaluation/
- Technical documents and reports produced by the Project and posted in ANUBIS:
  - Nigeria National Biosafety Communication Strategy
  - National Biosafety Conference Report 2013
  - National Biosafety Conference Report 2016
- Brief "FAQs" (on Biosafety and NBMA)

Biosafety Law and Regulations

- National Biosafety Management Agency Act, 2015
- National Biosafety Regulations 2017

Nigeria websites:

- http://nbma.gov.ng/
- http://www.environment.gov.ng/
- http://www.nabda.gov.ng/index
- http://www.naqs.gov.ng/departments/plant.html
- http://www.fao.org/nigeria/en/
- http://www.environment.gov.ng/https://www.premiumtimesng.com/news/top-news/233364-%E2%80%8Enigerian-civic-groups-march-against-gmos.html
- https://www.premiumtimesng.com/news/headlines/204966-nigeria-deploys-genetically-modified-cotton-maize-despite-safety-concerns.html
- https://www.icirnigeria.org/17-ngos-sue-fg-over-illegal-permits-for-gm-cotton-and-maize/
- http://toscanyacademy.com/blog/courses-and-programs/biotechnology-postgraduate-programme-in-nigerian-universities

Global / Background documents:

- Cartagena Protocol on Biosafety (CPB)
- Bali Strategic Plan for Technology Support and Capacity- building

- Status of capacity-building activities, UNEP/CBD/BS/COP-MOP/5/INF/9, September 2010
- UNEP Programme of Work 2010-2011
- UNEP Medium-term Strategy 2010–2013, “Environment for Development”
- Strategic plan of CPB 2011-20
- A Comparative Analysis of Experiences and Lessons from the UNEP-GEF Biosafety Projects, 2006, UNEP-GEF Biosafety Unit
- Guidance towards Implementation of National Biosafety Frameworks: Lessons Learned from the UNEP Demonstration Projects, 2008, UNEP-GEF Biosafety Unit
- Learning from experience, the global UNEP-GEF BCH Capacity building project, 2008, UNEP-GEF
- Public Participation and the Cartagena Protocol on Biosafety, A review for DfID and UNEP-GEF (IDS)
- An Explanatory Guide to the Cartagena Protocol on Biosafety, IUCN, 2003
- Genetically Modified Organisms and Biosafety: A background paper for decision-makers and others to assist in consideration of GMO issues, IUCN, 2004

ANNEX 8: BRIEF CV OF THE CONSULTANT

Camillo Risoli (Italy, 1953) is a seasoned international expert in rural development and environmental management. He has a long experience (more than 30 years) in the implementation, coordination and management of projects and programs in Africa and Latin America, with different donors and agencies. Capacity and Institution Building for Rural Development is his main area of expertise.

Camillo has worked as an expert, a chief technical adviser and an independent consultant for UN agencies (FAO, UNEP), Bi-lateral Cooperations (SDC – Swiss Cooperation, Italian cooperation, EC Delegations) and for International NGOs. He has been Team Leader in Long-Term Missions in Nicaragua (1980-82), Cape Verde (1986-96), Mozambique (1996-99) and Zimbabwe (2003-2005).

Food Security and Poverty Reduction have been at the core of his professional commitment, through Community-based projects and participatory actions, Organization & training of rural associations, Sustainable land use and agriculture, Partnership strengthening and networking (Public, Private, Civil Society) for decentralised and participatory local development.

Mainstreaming Environmental issues in Pro-Poor Strategies has been a main component of his action, through Soil & water conservation projects, Reforestation and agro-forestry initiatives, Watershed management and land use planning, Sustainable management of natural resources (soil, water, forests and bio-diversity).

Camillo has acquired a robust experience in advising on national policies and strategic planning for rural development, a solid background in PCM (Programme Cycle Management) and strong skills in Project Monitoring & Evaluation (M&E).

Since 2005, he works as an Independent Consultant and has carried out and led relevant Evaluation missions, such as the Mozambique National Action Plan for Food Security (FAO), the LADA Project - Land Degradation Assessment in Drylands (FAO/UNEP-GEF) in Argentina and China, the Post-Conflict Rural Development in Ivory Coast (FAO/ADB), the setting of the M&E System for FAO/CLCPRO Program (Commission for Locust Control in Western Africa and Maghreb Region), the terminal evaluation of the FAO Programme of Food Security through Commercialization in West Africa (Gambia, Guinea, Liberia, Senegal, Sierra Leone) and the Evaluation of FAO's Decentralization in Latin America & the Caribbean (2013).

From 2012 on, Camillo has carried-out the Biosafety National Frameworks Evaluation (UNEP-GEF) in Kenya, Namibia, Poland, Lithuania, Czech Republic and Slovakia (2012), Bhutan, Lao PDR and Mongolia (2014), Albania, Macedonia and Egypt (2015), Ghana, Liberia and Nigeria (2017) and the Final Evaluation of the Global GEF/UNEP Programme (123 countries) "Development of National Biosafety Frameworks" (2016).

Camillo has a graduate degree in Agricultural Sciences, a Post-Graduate Diploma in Environmental Management at London University and a PhD in Adult Education. He has published with FAO training manuals and methodological guides for trainers and extensionists.

Camillo is currently engaged in the creation of a small private company in partnership with farmers' associations (out-growing scheme) for the development of a profitable value-chain of Aloe Vera in Cape Verde.

Quality Assessment of the Evaluation Report

Evaluation Title:

Terminal Evaluation of the Project "Support for the Implementation of the National Biosafety Framework of Nigeria"

All UN Environment evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills. Nevertheless, the quality assessment is used as a tool for providing structured feedback to the evaluation consultants, especially at draft report stage. This guidance is provided to support consistency in assessment across different Evaluation Managers and to make the assessment process as transparent as possible.

	UN Environment Evaluation Office Comments	Draft Report Rating	Final Report Rating
Substantive Report Quality Criteria			
Quality of the Executive Summary: The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.	Draft report: *(Exec Summaries are not always provided at draft stage)* Final report: Executive covers the most pertinent issues/highlights of the evaluation findings	Not Rated	5
I. Introduction A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.) Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?	Draft report: Precise, well written and captures the main introductory points Final report: Same as draft	6	6

II. Evaluation Methods This section should include a description of how the *TOC at Evaluation*[33] was designed (who was involved etc.) and applied to the context of the project? A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.). The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described. It should also address evaluation limitations such as: low or imbalanced response rates across different groups; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome. Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views.	Draft report: This section is complete, concise, and it covers the required sub-topics satisfactorily Final report: Same as draft	6	6
III. The Project This section should include: • *Context:* 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). • *Objectives and components*: Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • *Stakeholders:* Description of groups of targeted stakeholders organised according to relevant common characteristics • *Project implementation structure and partners:* A description of the implementation structure with	Draft report: This section is also complete and covers all the required sub-topics in a concise and clear manner. Final report: Same as draft	6	6

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

diagram and a list of key project partners • *Changes in design during implementation:* Any key events that affected the project's scope or parameters should be described in brief in chronological order • *Project financing:* Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing			
IV. Theory of Change A summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/revised Prodoc logframe/TOC and b) as formulated in the TOC at Evaluation. *The two results hierarchies should be presented as a two column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'*. The TOC at Evaluation should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.	Draft report: The TOC diagram is coherent and is a result of a consultative process. The narrative is clear and provides a suitable explanation of the causal pathways depicted in the diagrammatic representation. Drivers and Assumptions, as well as stakeholders/change agents in the pathways are described. Final report: Same as draft	5	5
V. Key Findings **A. Strategic relevance:** This section should include an assessment of the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. An assessment of the complementarity of the project with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed: v. Alignment to the UN Environment Medium Term Strategy (MTS) and Programme of Work (POW) vi. Alignment to UN Environment/GEF/Donor Strategic Priorities vii. Relevance to Regional, Sub-regional and National Environmental Priorities viii. Complementarity with Existing Interventions	Draft report: Section is well done and covers all the main aspects of relevance prescribed in the TOR Final report: Same as draft	6	6

B. Quality of Project Design To what extent are the strength and weaknesses of the project design effectively summarized?	Draft report: The strengths and weaknesses of the design are sufficiently described. Where relevant, references to the PDQ assessment that was completed at the inception phase have been used to further support the rating of this criterion. Final report: Same as draft	5	5
C. Nature of the External Context For projects where this is appropriate, key external features of the project's implementing context that may have been reasonably expected to limit the project's performance (e.g. conflict, natural disaster, political upheaval) should be described.	Draft report: The TE sufficiently describes the key external issues that are most likely to affect the project's performance. This is also cross referenced in other sections of the report as appropriate Final report: Same as draft	6	6
D. Effectiveness **(i) Outputs and Direct Outcomes:** How well does the report present a well-reasoned, complete and evidence-based assessment of the achievement of a) outputs, and b) direct outcomes? How convincing is the discussion of attribution and contribution, as well as the limitations to attributing effects to the intervention.	Draft report: Outputs are described by component, and with sufficient evidence provided to support a detailed assessment of the delivery of outputs. The chapter also presents a qualitative analysis and interpretation of the Outcomes achieved in the light of the reconstructed Theory of Change (TOC) from Outputs to Outcomes. Final report: Same as draft	6	6

(ii) Likelihood of Impact: How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact? How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed?	Draft report: The narrative provides an adequate and considered analysis of the causal pathways from outcomes to intermediate states through to impact. The ROtI method has been applied to rationalize the rating given. Cross referencing to the TOC has also been used. Final report: Same as draft	5	5
E. Financial Management This section should contain an integrated analysis of all dimensions evaluated under financial management. And include a completed 'financial management' table. Consider how well the report addresses the following: • *completeness* of financial information, including the actual project costs (total and per activity) and actual co-financing used • *communication* between financial and project management staff and • *compliance* with relevant UN financial management standards and procedures.	Draft report: The section has been covered relatively well and a table summarizing financial management performance is included. Issues of completeness, communication and compliance are addressed to varying degrees. Final report: Same as draft	5	5
F. Efficiency To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including: • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of making use of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • The extent to which the management of the project minimised UN Environment's environmental footprint.	Draft report: This section has been covered sufficiently though examples of time/cost saving measures implemented by the project are not explicitly described. Final report: Suggested revisions have been effected satisfactorily	4.5	5

G. Monitoring and Reporting How well does the report assess: • Monitoring design and budgeting *(including SMART indicators, resources for MTE/R etc.)* • Monitoring implementation *(including use of monitoring data for adaptive management)* • Project reporting *(e.g. PIMS and donor report)*	Draft report: This section is well covered and goes beyond assessing the progress reporting by also looking into the project's results-based monitoring and how the findings of the monitoring toolkit have been used for adaptive management. Final report: Same as draft	6	6
H. Sustainability How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes including: • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability *(including issues of partnerships)*	Draft report: The assessment of sustainability does identify the most pertinent issues likely to undermine sustenance of outcomes. The analysis is quite detailed and includes relevant examples. A good understanding of the contextual issues in the country affecting the different aspects of sustainability is made evident Final report: Same as draft	6	6
I. Factors Affecting Performance These factors are <u>not</u> discussed in stand-alone sections but are **integrated in criteria A-H as appropriate**. To what extent, and how well, does the evaluation report cover the following cross-cutting themes: • Preparation and readiness • Quality of project management and supervision[34] • Stakeholder participation and co-operation • Responsiveness to human rights and gender equity	Draft report: The required sub-criteria are all covered sufficiently. Cross referencing has been done appropriately Final report: Same as draft	5	5

[34] In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment 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 UN Environment.

• Country ownership and driven-ness • Communication and public awareness			
VI. Conclusions and Recommendations **i. Quality of the conclusions:** The key strategic questions should be clearly and succinctly addressed within the conclusions section? It is expected that the conclusions will highlight the main strengths and weaknesses of the project, and connect them in a compelling story line. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.	Draft report: The conclusions section is very well developed and clearly presents the most critical findings of the evaluation. Responses to the key strategic questions are developed satisfactorily. Final report: Same as draft	5	5
ii) Quality and utility of the lessons: Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons must have the potential for wider application and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.	Draft report: The lessons are relevant and based on findings. The context is summarized well and crossreferences have been used adequately. Some amendments are however needed to phrase the lessons in a way that they can have wider application and that are more instructive. Final report: Suggested revisions have been effected satisfactorily	4	5
iii) Quality and utility of the recommendations: To what extent are the recommendations proposals for specific actions to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results. They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when. Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations.	Draft report: The recommendations are relevant and identify the action and who should implement it. Final report: Same as draft	5	5
VII. Report Structure and Presentation Quality			
i) Structure and completeness of the report: To what extent does the report follow the Evaluation	Draft report:	4.5	6

Office guidelines? Are all requested Annexes included and complete?	Report is well structured however the annexes have not yet been submitted Final report: All sections are complete		
ii) **Quality of writing and formatting:** Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow Evaluation Office formatting guidelines?	Draft report: Report is clear and well formatted Final report: Same as draft	**6**	**6**
OVERALL REPORT QUALITY RATING		**S**	**HS**

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 evaluation report is calculated by taking the mean score of all rated quality criteria.