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**Terminal Evaluation of the UN Environment/Global Environment Facility Project “Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and Related Obligations to the Cartagena Protocol on Biosafety - Namibia”**

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**TERMINAL EVALUATION REPORT**

**Evaluation Office of UN Environment  
August 2018**



## Evaluation Office of UN Environment

This report has been prepared by the independent consultants Dr. Segbedzi Norgbey and Mr. Charles Gbedemah, and is a product of the Evaluation Office of UN Environment. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

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Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety - Namibia

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## ABOUT THE EVALUATION<sup>1</sup>

**Joint Evaluation:** No

**Report Language(s):** English

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**Brief Description:** This report is a terminal evaluation of a UN Environment project implemented by the Division of Environmental Policy Implementation, between November 2011 and March 2017. The overall development goal of the project is to develop an empowered and well capacitated human, infrastructural, legal and administrative capacity in biosafety for the efficient implementation of the Biosafety Act of 2006 in compliance with the Cartagena Protocol on Biosafety and all other national, regional and international instruments interfacing and interacting with the Biosafety law. The project's specific objective was to enable Namibia to build capacity to implement the Biosafety Act 2006 and meet its international obligations to the Cartagena Protocol on Biosafety.

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 and their implementing partners including the relevant agencies in the project participating country.

**Key words:** Biosafety; Biodiversity; Biotechnology; Cartagena Protocol on Biosafety; Convention on Biological Diversity; Namibia; Living Modified Organisms, Genetically Modified Organisms; Genetic Engineering; Environmental Regulations; National Biosafety Frameworks; Capacity Building; TE; Terminal Evaluation; GEF; Global Environment Facility

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<sup>1</sup> This data is used to aid the internet search of this report on the Evaluation Office of UN Environment Website

## Acronyms and Abbreviations

ABSP	Agricultural Biotechnology Support Programme
ABNE	African Biosafety Network of Expertise
ABSF	Africa Biotechnology Stakeholders Forum
BTZ	Biotechnology Trust of Zimbabwe
BCH	Biosafety Clearing House
BIOEARN	Biotechnology for Eastern Africa Network
COP	Conference of Parties
CBD	Convention on Biological Diversity
CPB	Cartagena Protocol on Biosafety
CSO	Civil Society Organizations
GMOs	Genetically Modified Organisms
GEF	Global Environment Facility
GATT	General Agreement on Tariffs and Trade
LMOs	Living Modified Organisms
IPPC	The International Plant Protection Convention
ISAAA	International Service for the Acquisition of Agribiotechnology Applications
MOU	Memorandum of Understanding
NABA	Namibia Biotechnology Alliance
NAU	National Agriculture Union
nBCH	National Biosafety Clearing House
NBFs	National Biosafety Frameworks
NBI	National Botanical Institute
NCC	National Coordinating Committee
NCRST	National Commission for Research, Science and Technology
NEC	National Executing Committee
NEPAD	New Partnership for Africa's Development Science & Technology
NIED	National Institute for Educational Development
NNFU	Namibian National Farmers Union
NGO	Non Governmental Organisations
NPC	National Project Coordinator
OIE	Office International des Epizooties (World Animal Health Organisation)
PBS	Program for Biosafety Systems
RAEIN-AFRICA	Regional Agriculture Environmental Initiative Network Africa
RS & T	Research, Science and Technology
SARB	Southern Africa Regional Biotechnology
SADC	Southern Africa Development Community
SPS	Sanitary and Phytosanitary Standards

TBT	Technical Barriers to Trade
ToC	Theory of Change
TRIPS	Trade Related Aspect to Intellectual Property
UNCED	United Nations Conference on Environmental and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WTO	World Trade Organization

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**Table 1: Project Identification**

<b>GEF project ID:</b>	3644	<b>Project type:</b>	Medium Size Project
<b>UN Environment Sub-programme:</b>	Biosafety	<b>Expected Accomplishment(s):</b>	Environmental Governance EA (b) The four outputs under this expected accomplishment relate to the provision of legal and technical support to Governments to develop and enforce laws and strengthen institutions to achieve internationally agreed environment
<b>GEF OP #:</b>		<b>Focal Area(s):</b>	Biodiversity
<b>GEF approval date:</b>	August 2011	<b>GEF Strategic Priority/Objective:</b>	SP 6 Biosafety / BD-3
<b>UN Environment approval date:</b>	26 <sup>th</sup> September, 2011	<b>PoW Output(s):</b>	N/A
<b>Managing division:</b>	Environmental Policy Implementation	<b>Other Divisions:</b>	N/A
<b>Expected Start Date:</b>	16 Nov 2011	<b>Actual start date:</b>	23 Nov 2011
<b>Planned completion date:</b>	15 Nov 2014	<b>Actual completion date:</b>	15 March 2017
<b>Planned project budget at approval:</b>	\$936,000.00	<b>Planned Extra-budgetary financing (XBF):</b>	N/A
<b>GEF Allocation</b>	\$510,000	<b>Total Secured Funds :</b>	\$ 936,000.00
<b>No. of revisions: (6)</b>	1st 3 Aug 2012 2nd 24 June 2013 3 <sup>rd</sup> 4 June 2014 4 <sup>th</sup> 30 July 2015 5 <sup>th</sup> 22 July 2016 6 <sup>th</sup> 12 April 2017	<b>Date of last revision:</b>	April 2017
<b>Terminal Evaluation (actual date):</b>	November 2017	<b>Mid-term review/ evaluation (actual date):</b>	31 October 2013
<b>Coverage (Countries):</b>	Namibia Swaziland	<b>Coverage - Region(s):</b>	Southern Africa

## Executive Summary

The project, Institutional Capacity Building towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety – Namibia, was designed to build capacity to implement the Biosafety Act of 2006 and meet Namibia’s international obligations under the Cartagena Protocol on Biosafety. The project was implemented between November 2011 and March 2017 with the following specific objectives:

- To build the capacity of Namibia to enable it implement the Cartagena Protocol on Biosafety, a subsidiary international instrument to the Convention on Biological diversity (CBD), both of which Namibia is a Party;
- To build capacity to implement an objectively informed national biosafety framework based on the Biosafety Act 2006. The National Biosafety Framework consists of a national policy, the Biosafety Act, an administrative system, a decision-making system and a monitoring and inspection mechanism.
- To build institutional capacity and create mechanisms for information sharing in relation to safe use of modern biotechnology and related research development interventions for the advancement of national development objectives

This evaluation assesses 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 and their implementing partners including the relevant agencies in the project participating country.

### Strategic Relevance of the Project

This project was derived from and is consistent with the GEF Strategy for financing Biosafety under the Biodiversity Focal Area. It was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to “Capacity Building for the implementation of the Cartagena Protocol on Biosafety”. Article 22 of the Cartagena Protocol on Biosafety requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of ensuring the effective implementation of the Protocol. In doing so, Parties are required to take fully into account the needs of developing country Parties and Parties with economies in transition for financial resources and access to and transfer of technology and know-how. In this regard the project translates the objectives of the GEF Strategy for financing Biosafety into a case specific or thematic issue intervention in Namibia.

The project was aligned with the UNEP Biennial Programme of Work (PoW) 2010-2011: Sub-Programme Environmental Governance with Expected Accomplishment (EA) B: The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced with Output 2: Legal and policy instruments are developed and applied to achieve synergy between national and international environment and development goals; and Output 3: Countries’ legislative and judicial capacity to implement their international environmental obligations is enhanced through implementation of policy tools.

## **Effectiveness**

In approximately five and a half years (64 months) of project implementation, the project has enhanced and strengthened the following essential components and functioning of the Namibian national biosafety framework in response to the Cartagena Protocol on biosafety: (i) Establishment and strengthening of the Administrative system; (ii) Harmonization and implementation of Namibia national biosafety instruments; (iii) Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; (iv) Establishment of an effective monitoring and enforcement system; (v) Information sharing, public engagement, collaborative linkages and networking and (vi) Project management mechanisms. It is noted that key stakeholders have developed collaborative linkages to ensure sustainability.

## **Likelihood of Impact**

The results from the implementation of the project show that the project made an appreciable progress from results towards impact. Indeed, with effective government commitment and support, collaboration among scientists and relevant agencies such as the customs department, public awareness, education and participation campaigns and CSO and NGO support, the impact of the project can be achieved. The following outcomes of the project establish the likelihood of achieving impact: (i) A fully functional and effective regulatory and administrative system established for the implementation of the Biosafety Act, 2006; (ii) Enhanced human resource capacity for risk assessment and management developed; (iii) An established information sharing system with mechanism for public engagement and collaboration and an enhanced monitoring and enforcement system. The project enhanced the preparedness of Namibia towards regulating LMOs by helping to devise tools to assess, evaluate and manage potential adverse effects associated with trans-boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio-economic considerations.

## **Efficiency**

To a significant extent, the project built on tools and methodologies that had been developed since 1997, when Namibia participated in a UNEP/GEF supported biosafety pilot project, which developed a draft Namibian national biosafety framework (NBF). The development phase project created awareness among relevant stakeholders on the legal, policy and scientific/technical aspects of biosafety in the NBF development phase. The development phase project also developed some capacity in the areas of risk assessment, management and monitoring and public participation in the decision making processes. The project also tapped on the existing resource of other government departments, policy makers and officials who implement national policies and laws, technical training institutions, teacher training colleges which served as important vehicles for biosafety awareness creation and dissemination of biosafety awareness materials and farmers during project implementation. Local human resources were used in several training workshops undertaken during project implementation such as the academic staff from the University of Namibia.

## **Project Planning and Design**

The project was clearly drafted. It described its relevance to the GEF Strategy for financing Biosafety under the Biodiversity Focal Area. It was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to "Capacity Building for the implementation of the Cartagena Protocol on Biosafety" and the Namibia national priorities in section 3 of the project document. A key strength is the detailed analysis of various stakeholders

expected to participate in project implementation. The activities were designed to contribute to a common objective to protect and conserve biodiversity in Namibia. Good risk identification was undertaken and strategies to mitigate the risk to project implementation were presented. The project document identified critical success factors which were general in nature and not associated with each causal pathway. These were however later refined during project implementation period. Assumptions were however clearly stated. At the time of project approval, 60 per cent of baseline data was available. Baseline data gaps such as biosafety/biotechnology awareness levels and biosafety legal capacity in Namibia were addressed during project implementation as an integral part of the project activities, making it possible to undertake an impact evaluation of the project.

## **Project Management**

A participatory project approach was adopted in the design and development of the project as well as in its implementation. Project supervision also adopted an adaptive management approach. The UN Environment Task Manager developed a project supervision plan at the inception of the project which was communicated to the project partners during the inception workshop. Due to the large size of the portfolio of the Task Manager, there was limited time available for providing the required biosafety technical support and backstopping since project outputs monitoring including project financial management absorbed most of the time of the Task Manager. Progress vis-à-vis delivering the agreed project global environmental benefits was assessed with the Steering Committee at agreed intervals. At the country level, the Ministry of Education together with NABA acted as the National Executing Agencies (NEA). The overall management and decision making of the project was however assigned to the National Coordinating Committee (NCC) which consisted of representatives from the Ministries of Agriculture, Health, Environment, Fisheries, Attorney General's Office and consumer and farmer representatives. The Chairperson of NABA was designated as the National Project Coordinator (NPC) who was accountable to the NEA and to UN Environment for ensuring delivery of project outputs. The assistant project coordinator came from the Directorate of Research Science and Technology of the Ministry of Education. In addition the Directorate of Research, Science and Technology was designated as the technical and administrative support staff in the Biosafety Unit to assist in the implementation of the project.

## **Project Monitoring, Reporting and Evaluation**

A monitoring plan was included in the project document. A mid-term management review or evaluation took place on 31 October 2013. The review included all parameters recommended by the GEF Evaluation Office for terminal evaluations and information gathered through the GEF tracking tools was verified. The review was carried out using a participatory approach whereby parties that may benefit or be affected by the project were consulted. Such parties were identified during the stakeholder analysis (see section 2.5 of the project document). The project National Coordination Committee also participated in the mid-term review and developed a management response to the evaluation recommendations along with an implementation plan. This was the responsibility of the UNEP Task Manager who monitored whether the agreed recommendations are being implemented. However, as a result of the long overrun of the duration of the project, 24 months, the final evaluation has been undertaken at a later date than planned.

## **Recommendations**

- [a]. As noted in the findings, the evaluation recommends that the National Biotechnology Alliance through the Minister of Education, should strive to ensure that Namibia becomes a Party to Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, a key Supplementary Protocol to the Cartagena Protocol;

- [b]. The large number of training workshops organized for targeted stakeholders during the project was beneficial to creating awareness and building capacities in risk assessment, risk management and LMO monitoring in Namibia. **The evaluation recommends that in order to sustain the momentum and maintain biosafety activities on an on-going basis, a holistic national biosafety capacity building strategy, with buy-in from government, needs to be developed;**
- [c]. In as much as some progress has been made towards establishing a fully functional LMO detection laboratory the evaluation notes that the critical mass of human resources for operating an LMO detection laboratory has not been attained. **The evaluation recommends that a concerted effort needs to be made by NABA and the Ministry of Education facilitated by Biosafety Unit to train or leverage on human resource from other scientific institutions to attain this critical mass;**
- [d]. Monitoring and evaluation of LMOs after the issuance of a permit is a critical measure. The evaluation recommends that the Biosafety Unit places more emphasis on capacity building in LMO Sampling including field trial inspection; contained use facility inspection by leveraging on staff from other scientific institutions such as the University of Namibia in addition to those of National Commission for Research, Science and Technology (NCRST);
- [e]. The national Biosafety Clearing House facilitated access to information, played a critical role in creating awareness, and acted as facility for communication among stakeholders during the project. **It is recommended that staff of the Biosafety Unit sustains the use of this facility as a central one for information exchange.**
- [f]. As noted in the findings of the evaluation, the project design did not strongly factor in gender considerations in project implementation. **The evaluation suggests a stronger consideration of gender, as recommended in the Sustainable Development Goals, in future projects.**

## Lessons Learned

- [a]. **The enactment of the Biosafety Act 2006 before the design and implementation of the project proved to have created a congenial facilitating environment for the project. The law acted as the main driver for mainstreaming biosafety into the national development process and facilitated the establishing a functional national biosafety framework in Namibia. The evaluation suggests that Parties to the Cartagena Protocol on Biosafety emulate this arrangement before embarking on the design and implementation of biosafety projects;**
- [b]. **The integration of the budget of the Biosafety Unit into the national budget serves as a means for financial sustainability of biosafety activities in Namibia. This evaluation notes that countries striving to establish functional biosafety frameworks on permanent basis need to pursue this path in attaining financial sustainability;**
- [c]. The 36 months duration estimated for project duration was over ambitious. This resulted in as much as six (6) extensions. **A more realistic project duration of 60 months for similar biosafety implementation projects is practical.**
- [d]. **The ANUBIS project information sharing platform served as a good tool for project implementation and management. The evaluation highly envisages the tool as playing a highly prominent role in future projects as an implementation facilitating tool.**

The evaluation rated the overall project performance as Satisfactory. The table below summarises the evaluation ratings under various performance criteria assessed in the report.

**Table 2: Summary of ratings for each criterion in the terminal evaluation of the project**

<b>Criterion</b>	<b>Rating</b>
Attainment of project objectives and results	S
Effectiveness	S
Relevance	HS
Efficiency	S
Sustainability of project outcomes	S
Financial resources	HS
Socio-political	S
Institutional framework	S
Environmental sustainability	S
Catalytic role (and replication)	S
Likelihood of Impact	S
Stakeholder involvement	S
Country ownership/driven-ness	S
Achievement of outputs and activities	S
Preparation and readiness	S
Implementation approach	S
Financial planning and management	MS
Monitoring and Evaluation	S
M & E Design	S
M & E Implementation	S
Budgeting and funding for M & E activities	S
UN Environment supervision and backstopping	S
<b>Overall Rating</b>	<b>S</b>

# 1 Introduction and Background

1. Among the challenges facing the continent of Africa are primarily food insecurity, environmental degradation, climate change, poverty and human health. Traditionally African economies are mainly agriculture based, and sustainable utilization of the environment is priority for sustained productivity. Biotechnology provides potentially a powerful 'toolbox' capable of addressing some of these challenges. In order to derive the expected benefits, it is necessary however, that African countries contextualize the potential benefits within their own priorities and needs. It is however also recognised that the technology poses potential environmental and health safety concerns. The Convention on Biological Diversity (CBD) through its Cartagena Protocol on Biosafety (CPB) has made attempts to address the environmental sustainability of the technology with its poverty reduction potential and social justice. The Cartagena Protocol on Biosafety (CPB) advocates a transparent and objective regulatory system to ensure the safe and responsible use of modern biotechnology for the benefit of the communities. The technology, as being applied in a number of countries, has also been recognised to increase agriculture. The International Service for the Acquisition of Agri-biotechnology Applications (ISAAA) had predicted that the use of Living Modified Organisms was expected to have doubled by 2015.

2. In addition, contemporary economic trends indicate that many developing countries are aspiring to transform to knowledge-based economies. These are economies that are anchored on the creation, application and use of knowledge and technologies like biotechnology. Namibia in its Vision 2030 long-term developmental plan has these aspirations. This is however only achieved when a well-coordinated and vibrant science, technology and innovation system is in place with all the relevant supporting and enabling policies, legal frameworks and institutional arrangements. The development and implementation of an objective and transparent national biosafety framework is therefore a prerequisite for enabling countries harness the benefits of the technology in a responsible manner.

3. It was however evident that there are challenges peculiar to developing countries that delay the rate and effective development and implementation of national biosafety frameworks. It is also noted that effective and efficient regulatory systems cannot be developed and implemented without general technical, policy and enforcement capacities. It is further recognized that the related science and technology capacities in the form of human, institutional and/or organizational matters need to be developed or enhanced to ensure good regulations in developing countries. Coupled with these challenges is the evidently decreasing interest in scientific fields throughout the education systems. In the mist of the above challenges, Namibia is however obligated to implement its NBF. In 1994, Namibia became a Party to the Convention on Biological Diversity (CBD). Soon after being a Party, Namibia established the Namibian National Biodiversity Programme with the aim of addressing biodiversity issues within the framework of the objectives of the CBD based on the priorities of the country. Under this programme a number of working groups including the Namibia Biotechnology Alliance (NABA) were established under the auspices of the Ministry responsible for Science and Technology. NABA, as a technical working group, was established to provide technical backstopping to the government of Namibia on issues of biotechnology and biosafety.

4. In 1997, a pilot project to develop a Namibian NBF, supported by UNEP/GEF, was adopted. Among its activities the project had a number of capacity building initiatives aimed at enhancing legal, policy and scientific technical capacity in biosafety. Among the priorities of the project was the creation of biotechnology and biosafety awareness among relevant stakeholders and their participation in the NBF development phase. Although these activities contributed considerably to the creation of public awareness, some capacity in the areas of risk assessment, management and monitoring and public participation in the decision making

processes were found to be inadequate. It is also noted that Namibia in its Biosafety Act of 2006, needed to develop both its institutional and human capacity to enable it implement the law. The Biosafety Act required the establishment of a National Biosafety Council to administer the law and all related issues to biosafety under the guidance of the ministry responsible for Biosafety.

5. The earlier interventions in Namibia helped to obtain a first round of answers to a long series of biosafety questions, and led to the formulation of policies and drafting of the biosafety law. Lessons learned from participating in these activities were: (a) A clear need to address issues of biotechnology/biosafety in a holistic manner; (b) The need to establish a coherent and sustainable capacity building initiative in law and policy aspects related to biotechnology and biosafety (this need was more prominent at the stage of development of national law on biosafety); (c) The need to draw capacity building interventions based on existing priority stakeholder needs; (d) The multi-stakeholder and multi-sectoral nature of biosafety demands a harmonized and collaborative capacity building approach be it national, regional and international levels; (e) Regional approach to capacity building involving identification of available capacity and design of mechanisms for sharing capacity needs to be explored; (f) The importance of understanding biotechnology and biosafety issues amongst policy makers and the general public and its importance to policy making is a must; (g) Experience has shown that discussions of issues of modern biotechnology have revolved around the scientist; (h) The need for regimes to manage its application in producing goods and services is however beyond the scientist; (i) The necessity to ensure that other professional groups that need to be involved in designing and enforcing the rules on the use of the technology such as legislators, the judiciary, law enforcement agencies develop an aptitude that makes them relevant and appropriate in providing a fair service. Scientists too require developing an understanding of the purpose of local, regional and international rules and regulations as they apply to specific policy provisions; (k) The need for countries to be able to negotiate their interests in both regional and international fora, separately, or as blocks, was evident; and (l) The need that a large majority of actors involved in policy design, law-making, enforcement and monitoring and resourcing in the spheres affected by biotechnology and biosafety may still require being informed and skilled for greater effectiveness of biosafety law implementation. It was recognised that as long as biosafety is limited, its implementation may remain difficult.

6. In a separate study, the United Nations University-Institute for Advanced Studies (UNU-IAS, 2007) in a project entitled "Internationally funded training in biotechnology and biosafety: Is it bridging the biotech divide" also arrived at the same conclusions. It was also recognized that most of the capacity building initiatives did not factor explicitly built-in sustainability criteria into the project planning and design phases. Furthermore, it was realized that the development context of the local situation was often not taken into consideration in the design of capacity building activities. These include issues such as infrastructure, information, communication and technological limitations. Added to these challenges were the complexities of institutions and governance in the developing countries' setting, where institutions and governance are more informed and influenced by political agendas rather than by social and economic justice issues.

## 2 Context of the Project

7. The Convention on Biological Diversity (CBD) and its subsidiary Protocol on Biosafety puts obligations on Parties to comply with their provisions. By virtue of ratification, states such as Namibia must automatically incorporate such laws in their legal systems as prescribed by their constitutions. Namibia ratified the CBD and the Cartagena Protocol on Biosafety in 1994 and 1999 respectively, and is obliged to honour their provisions. To further advance the objectives of these instruments, Namibia passed its Biosafety legislation in 2006 to advance national policy objectives. The Biosafety Act required the establishment of a National Biosafety Council to administer the law and all issues related to biosafety under the guidance of the Ministry responsible for Biosafety. The current project was designed to make a direct contribution to strengthening Namibia's environmental governance schemes, and to meet its obligations as a Party to both the CBD and the Cartagena Protocol. The project also enables Namibia to establish a continuum in its first efforts to develop and take forward a national biosafety system through its prior NBF projects (the pilot phase and Demonstration Projects) with UNEP/GEF.

8. The fact that modern biotechnology and biosafety are highly technical and multidisciplinary subjects which need a holistic and integrated implementation plan equally requires inputs from all the related fields in the implementation of the law. The national biosafety system is designed to enable Namibia:

- make informed choices on decisions to import, develop and or use LMOs,
- devise tools to assess, evaluate and manage potential adverse effects associated with transboundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio-economic considerations,
- meet the international requirements of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety.

9. Furthermore the general importance of technological capacity building for ensuring a regulatory regime has been a frequent theme and it has been suggested that countries with capacities in biotechnology research are in a better position to design and implement regulatory systems. In the African Biosafety Strategy, it is acknowledged that biotechnology and biosafety capacity building need to be addressed holistically as they influence each other. Biosafety capacity building need to viewed and addressed as an integral part of enhancement of existing capacities in allied expert areas. The project intervention was assist to build institutional capacity to implement the Biosafety Act and to provide mechanisms for science based decision making in the import, development and use of LMOs. The project was expected to build on the earlier developed capacities and provide measures for decision making, enforcement and monitoring.

### 3 Project Objective and Components

10. The overall goal of the project is to develop an empowered and functional human, infrastructural, legal and administrative capacity in biosafety for the efficient implementation of the Namibian Biosafety Act of 2006 in compliance with the Cartagena Protocol on Biosafety and all other national, regional and international instruments that impinge on the Namibian Biosafety law.

11. The main objective of this biosafety capacity building strategy is to enable Namibia to build capacity to implement the Biosafety Act 2006 and meet its international obligations to the Cartagena Protocol on Biosafety. The specific objectives of the project are:

- To build the capacity of Namibia to be able to implement the Cartagena Protocol on Biosafety, that is a subsidiary instrument of the Convention on Biological diversity (CBD), both of which Namibia has ratified.
- To build capacity to be able to implement an objectively informed national biosafety framework based on the Biosafety Act 2006. The National Biosafety Framework consists of a policy, Act, Administrative system, decision-making system, monitoring and inspections.
- To build institutional capacity and create mechanisms for information sharing in relation to safe use of modern biotechnology and related research development interventions for the advancement of the national development objectives.

12. In summary, the project is to enable the Namibian national Biosafety system to: (i) Make informed decisions to import, develop and/or use Living Modified Organisms (LMOs); (ii) Devise tools to assess, evaluate and manage potential adverse effects associated with trans boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio- economic considerations; and (iii) Meet the international requirements of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety.

#### **Component 1: Establishment and strengthening of the regulatory/administrative system for the Biosafety Act**

##### **Sub-component 1.1: Establishment and strengthening of the Administrative system**

Activity 1: Establish administrative filing procedures

Activity 2: Standardize procedures for handling applications

Activity 3: Application system for GMO dealings (forms and procedures)

Activity 4: Established administrative procedures for Biotechnology/Biosafety research activities

Activity 5: Established procedures for handling confidential business

Activity 6: Determine mechanisms for handling confidential information

Activity 7: Design and implement a quality management system in line with current best practice /benchmarking

Activity 8: Device and implement financial and stock management system

Activity 9: Establish and strengthen the interim Council, Registrar, and Secretariat and Biosafety Unit respectively

### **Sub-component 1.2: Harmonization and implementable national biosafety instruments**

Activity 1: Finalize the draft regulations, guidelines and all other supporting documents

Activity 2: Carry out the study and analysis of all the identified national laws/policies related to biosafety

Activity 3: Carry out the study and analysis of all the identified international law instruments interacting and interfacing with biosafety

Activity 4: Align the national biosafety implementation instruments with each other and with the Cartagena Protocol on Biosafety

Activity 5: Carry out the Study and analysis on the possibility of an interim measure in the event that the implementation of the Research, Science and Technology Act is delayed

Activity 6: Carry out the study on the current liability and redress discussions and draft instruments, under the CPB, in the context of the existing Namibian liability and redress regimes and advice accordingly

Activity 7: Meetings to discuss and formulate a common understanding and position of the country delegation to COP/MOP meetings

### **Component 2: Strengthening institutional capacity to facilitate handling and decision making including follow up measures on LMOs**

#### **Sub-component 2.1: Enhancing human capacity**

Activity 1: Training on process vs. product based risk assessment approaches including risk evaluation and review methodologies

Activity 2: Training on methods of recombinant DNA technology and genetic engineering in the context of both process and product based risk assessment and management

Activity 3: Training on how to deal with risks, uncertainty and complexity: Application of the precautionary approach

Activity 4: Training on ecological aspects; influence on the ecosystem function and impacts on biodiversity

Activity 5: Training on Health issues: Toxicology, allergenicity and cocarcinogenesis etc

Activity 6: Training on Environmental biosafety issues: gene flow

Activity 7: Socio-economic studies in the identified topics

Activity 8: Workshop on the findings of all socio-economic assessments and analysis

#### **Sub-component 2.2: Establishment of an effective and efficient monitoring and enforcement system**

Activity 1: Determine and establish national biosafety safety levels and measures for contained use

Activity 2: Standardize good laboratory practices for the various safety level laboratories

Activity 3: Training for all laboratory staff members in the country on the adopted laboratory practices and safety standards for various safety levels

Activity 4: Exchange programmes for laboratory staff including technicians on GMO testing issues

Activity 5: Develop GMO testing protocols and SOP

Activity 6: Research and testing to determine baseline data on GMOs that might be in the country before the implementation of the law for regulatory purposes

Activity 7: Study to determine the wild and indigenous plant varieties related to the current GMO variety; distribution and biology

Activity 8: Research and determination of the gene flow containment measures in the field trials and general release

Activity 9: Purchased laboratory equipment, kits, reagents and consumables for GMO testing for regulatory purposes

Activity 10: Working towards ISO accreditation of the national GMO testing laboratory

Activity 11: Equipment for taking samples at port of entry and general surveillance

Activity 12: Testing equipment for preliminary testing

Activity 13: Training of relevant officials on the use of equipment and sampling methods

### **Component 3: Information sharing public engagement, collaborative linkages and networking:**

#### **Sub-component 3.1: Create international and regional collaborative linkages in the biosafety/biotechnology need areas**

Activity 1: Training on negotiation and communication skills including risk communication skills

Activity 2: Opportunity exploring and discussion visits to identified partners for collaborations on the identified areas.

#### **Sub-component 3.2: Develop a biosafety/biotechnology data management system**

Activity 1: Upgraded national biosafety website (Procurement of data management equipments e.g. hardware, software etc)

Activity 2: Training on the data management of the BCH

Activity 3: Updating the data on the BCH

Activity 4: Stakeholder training on the information available and accessible on the BCH (Council members, adhoc committee members etc)

Activity 5: Electronic management and filling of all project documents like minutes, workshop proceedings, course information etc

Activity 6: Preparation of the country reports as required by the CPB under Article 33

### **Sub-component 3.3: Create public awareness and education throughout the Namibian society**

Activity 1: Carry out base line biosafety/biotechnology awareness survey, analysis and report

Activity 2: Workshop on general public awareness and results sharing

Activity 3: Training of trainers on awareness creation

Activity 4: Develop and print awareness material ranging from pamphlets, brochures, T-shirt and caps

Activity 5: Develop and print booklets, calendar, diary and posters targeting specific audiences

Activity 6: Reprint translated national policy in various languages

Activity 7: Awareness and education meetings for various artists in preparation of drama and poetry development on biosafety

Activity 8: Develop drama, songs and dance on awareness of biosafety/biotechnology

Activity 9: Pilot awareness campaigns and information dissemination in and around Windhoek including road shows, shopping malls displays, expos, industrial shows displays

Activity 10: Impact analysis survey, lessons learned and experiences from the piloted region

Activity 11: Roll out the piloted and improved awareness campaign to all other regions

### **Component 4: Project management mechanisms:**

Activity 1: Appoint project staff

Activity 2: Procurement of project management office equipment

Activity 3: Communications

## **3.1 Strategic Partnerships and Institutional Arrangements**

13. The implementing agency was UN Environment and responsibility for project implementation and coordination was with the UN Environment Division of Environmental Policy Implementation. On the regional and international level, Namibia benefited from a number of biotechnology and biosafety capacity building activities from organizations such as RAEIN-Africa, Southern African Regional Biotechnology (SARB), AfricaBio, Africa Biotechnology Stakeholders Forum (ABSF), Agricultural Biotechnology Support Programme (ABSP), Biosafety and Biotechnology Policy Development (BIOEARN) and New Partnership for Africa's Development Science and Technology Commission (NEPAD S&T). The benefits include specific activities around biosafety and biotechnology such as training scientists in risk assessment and management, setting up a biosafety clearing house, and promoting cooperation and harmonisation of biosafety regulations within the SADC region. For example RAEIN-Africa funded training within the project context: Training on negotiation and communication skills including risk communication skills. During the project duration, collaborative agreements were signed with the governments of Mozambique and South Africa in the field of biotechnology. The project also benefited from private sector entities such as Incotec/SciCorp Laboratories in exchange programmes for laboratory staff including technicians on LMO testing activities.

14. At the national level the project benefited from policy makers and officials who implement national policies and laws which interface and interact with biosafety. These are the Ministry of Environment and Tourism, Ministry of Agriculture and Forestry, Ministry of Health and Social Services, Ministry of Fisheries and Marine Resources, Ministry of Trade of Industry,

The Namibian Standards Institute, Ministry of Finance (Customs officials), and Ministry of Justice.

15. In addition technical training institutions such as the University of Namibia and the Polytechnic of Namibia played important roles in training activities. Institutions such as the Namibia Institute for Educational Development (NIED) which deal with issues like curriculum development for schools have also facilitated important roles of the integration of biotechnology/biosafety into school curriculum. Teacher Training Colleges have served as important vehicles for biosafety awareness creation and dissemination of biosafety awareness materials. Farmers were represented by both the communal association, National Agriculture Union (NAU) and Namibian National Farmers Union (NNFU) during project implementation.

16. All the above mentioned stakeholders played crucial roles in the project implementation. During the project implementation period, a list server was established for communication among these critical stakeholders while constant communication through emails, telephone conversations, workshops, meetings, etc. was maintained. The stakeholders were also taken through specific familiarization training on the use of the national Biosafety Clearing House (nBCH) to ensure its optimum use to update stakeholders on all developments regarding biosafety in the country and elsewhere. A list of partners engaged is included in Annex 5.

### 3.2 Project Cost and Financing

17. The approved project budget was US\$ 936,000.00. The breakdown of the project budget is presented in Table 3 below:

**Table 3: Project Budget Estimate**

Financing source	Amount (USD)
GEF Trust Fund	510,000
Co-financing (National counterpart funding)	426,000
Total	936,000

### 3.3 Modifications to project design before or during Implementation

18. The project has undertaken refinements at the Expected Output level during project implementation which has contributed to operationalizing the main components of the national biosafety framework. The refinements improved the achievement of expected outcomes such as: (i) An administrative structure to handle requests or applications for decisions on LMOs (including risk assessment, risk management, BCH obligations, consultation and decision making, etc.) (ii) Provision of education, information and opportunities for public awareness and participation in decision-making (iii) Systems for enforcement of decisions and longer term monitoring for environmental effects, etc. The changes mainly brought clarity to the results and their outputs at the expected accomplishment level.

### 3.4 Project Theory of Change

19. An explicit Theory of Change (TOC) to monitor progress towards results was not required at the time of the development of the project and none was developed. For the purpose of this evaluation, a Theory of Change was reconstructed in order to gain a better understanding of the conceptual thinking behind project design and to assist with the assessment of project effectiveness and likelihood of impact and sustainability. The reconstructed Theory of Change of the project seeks to define:

- nature and scope of the changes to which the project is expected to contribute;

- cause-effect relationships between outputs delivered by the project and expected higher-level changes (also called results chains or causal pathways);
- external factors and conditions that would allow the project to achieve the expected higher-level changes. These are considered in two groups: assumptions are external conditions over which the project has no influence or control; drivers are external factors that the project can influence with specific activities or outputs; and
- role of key stakeholders in making those changes happen.

20. The reconstructed Theory of Change enhances our common understanding of the underlying programme logic. It depicts what and how the project planned and achieved results and maps out the underlying intervention logic, identifying key drivers of impact and the underlying assumptions. Figure 1.0 presents the draft reconstructed Theory of Change of the project based on the actual results statements in the project document which have been “broken up” and re-arranged to better conform to UN Environment definitions of the different results levels<sup>2</sup> and to show the theoretical cause-effect relationships. The draft reconstructed Theory of change was shared with project staff in Nairobi and the staff of the project in Namibia.

21. The reconstructed Theory of Change shows how the outputs from the activities of the project contribute towards institutional, legal and human resource development with the aim of ensuring that a functional national biosafety system is established. The overall goal of the project is to develop an empowered and functional human, infrastructural, legal and administrative capacity in biosafety for the efficient implementation of the Namibian Biosafety Act of 2006 in compliance with the Cartagena Protocol on Biosafety and all other national, regional and international instruments that impinge on the Namibian Biosafety law is to enable Namibia in its preparedness to conserve and protect its biodiversity.

22. The overall goal of the project is to develop the capability of the Namibia national biosafety framework to function according to Namibian Biosafety Act of 2006 in compliance with the Cartagena Protocol on Biosafety and all other national, regional and international instruments. The goal was to enable Namibia conserve and protect its biodiversity according to the aims of the Convention on biological diversity and its subsidiary Cartagena Protocol on Biosafety. In achieving this goal, Namibia designed the project to develop its human, infrastructural, legal and administrative capacities in biosafety. As depicted in the reconstructed theory of change, the following three main direct outcomes of the project contribute to the above goal.

- A fully functional and effective regulatory/administrative system established for the implementation of the Biosafety Act;
- A developed human resource capacity for risk assessment and risk management and monitoring;
- An established information sharing system (BCH) with mechanisms for public engagement and collaboration.

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<sup>2</sup> UNEP Programme Manual – November 2012 version. **Outputs** are defined as products and services which result from the completion of activities within an intervention. **Outcomes** are intended or achieved short-term and medium-term effects of an intervention’s outputs, usually requiring the collective effort of partners. Outcomes represent changes which occur between the completion of outputs and the achievement of impact. Outcomes could be a change in capacity (immediate outcome) or behaviour (medium-term outcome). Impact is defined as positive and negative, primary and secondary, lasting and significant effects contributed to by an intervention. In UNEP, these effects usually concern the environment, and how it affects human life and livelihoods.

23. In reconstructing the Theory of Change, the evaluators noted that the three outcomes contribute to an intermediate state of the capacities towards the desired impact of conservation and protection of biodiversity.

24. Project activities that contribute to a fully functional and effective regulatory/administrative system established for the implementation of the Biosafety Act includes activities under sub-component 1.1: Establishment and strengthening of the Administrative system and 1.2: Harmonization and implementable national biosafety instruments respectively which result in Outputs 1.

25. Activities under Sub-component 2.1: Enhancing human capacity and those under Sub-component 2.2: Establishment of an effective and efficient monitoring and enforcement system which result in Outputs 2 contribute to a developed human resource capacity for risk assessment and risk management and monitoring.

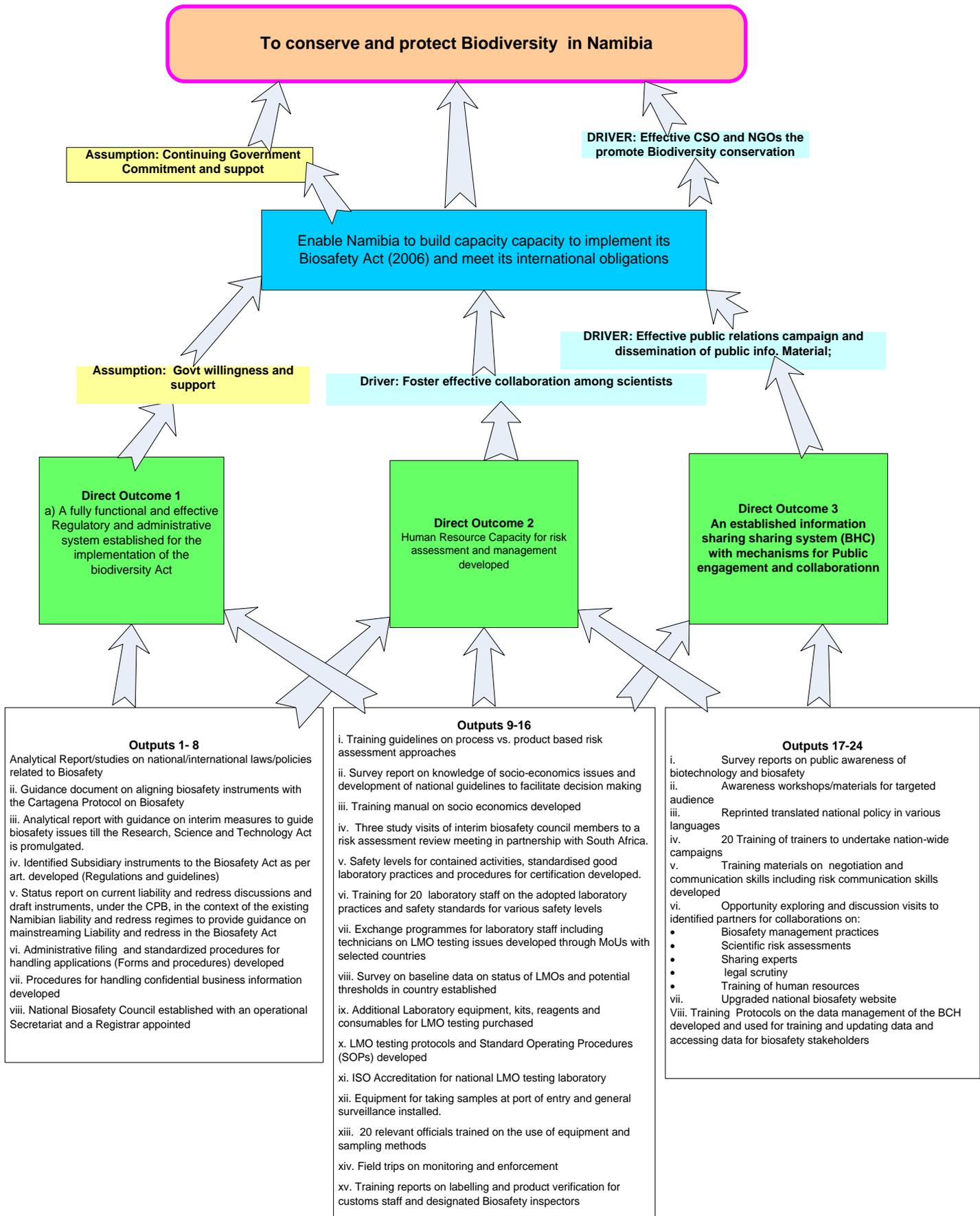
26. Under the outcome, an established information sharing system (BCH) with mechanisms for public engagement and collaboration, the activities under Sub-component 3.1: Create international and regional collaborative linkages in the biosafety/biotechnology need areas, Sub-component 3.2: Develop a biosafety/biotechnology data management system and Sub-component 3.3: Create public awareness and education throughout the Namibian society which result in Output 3, all contribute to this outcome.

27. For changes to happen along the causal chain a number of external conditions need to be met or external factors need to be present. Key assumptions made by the project (over which the project has no influence) are that Governments, IGOs, NGO and the private sector who are key partners give attention and support to maintaining the partnership to reduce exposure risks. Others include lack of long-term political commitment of the Government of Namibia in achieving project objectives, and adequate human and financial resources. Another assumption is that there exists a fluid collaboration among scientists in order to maximize use of resources in areas such as risk assessment and risk management; and LMO identification and monitoring. It is also assumed that society in itself becomes aware of the potential benefits and risks of modern biotechnology.

28. Key drivers for change are that key stakeholders mostly government agencies and the universities have worked together on the earlier biosafety initiative and there is strong motivation to continue the partnership; UN Environment worked with the Government of Namibia and the GEF to seek financial support for the biosafety initiative; there is strong political will to enact legislation to manage LMOs. Strong public support and mobilized public actions are potential drivers for achieving the objective of Namibia having a functioning NBF.

29. The evaluation assessed the likelihood that the project contributes to the desired impact by combining evidence about project effectiveness (i.e. contribution to direct outcomes), progress on the project objective (i.e. the intermediate state towards impact) and validity of assumptions and presence of drivers. The latter will also provide the basis for assessing the likelihood of sustainability of a functional and robust biosafety system.

#### **Figure 1: Reconstructed Theory of Change**



## 4 The Evaluation

### 4.1 Objective and Scope of the Evaluation

30. The objective of the evaluation is two-fold: (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, The GEF and the GEF Partners, the National Executing Agencies and other national partners. The evaluation was to identify lessons of operational relevance for future project formulation and implementation especially for the second phase of the project, if applicable.

31. The key questions to be addressed by the evaluation as articulated in the Terms of Reference (annex 5) are the following:

- [e]. To what extent was the project able to assist Namibia to establish and consolidate a fully functional and efficient regulatory regime that responds to their obligations under the Cartagena Protocol on Biodiversity, as well as their national needs for a viable National Biosafety Framework?
- [f]. To what extent was the project in Namibia able to develop both institutional and capacity and participation in Living Modified Organisms (LMO) risk assessment, evaluation and management to ensure that biosafety becomes part of their permanent action?
- [g]. To what extent was the project able to assist Namibia in establishing and consolidating a functional national monitoring system for LMOs and their possible effects on the environment?
- [h]. To what extent are outcome indicators verifiable, and record progresses towards their target values?

### 4.2 Approach and Methods

32. This evaluation has been an in-depth, independent exercise conducted with oversight from the UN Environment Evaluation Office. The methods used for data collection in response to the objectives, key questions and indicators used the following principles as the basis of the approach to ensure a fair evaluation:

- **Focus on results:** Expected results, performance indicators, as well as potential risks are identified to ensure coherent and integrated results based management (RBM) to frame the evaluation.
- **Learning:** The Evaluation Team will adapt RBM principles, tools and indicators (i.e. the evaluation matrix), based on the needs and context of this evaluation, with the aim of increasing the potential for learning and focus on the achievements of the Biosafety Capacity Building Projects in Namibia.
- **Participatory approach:** The evaluation process will ensure a consultative and collaborative approach with the UN Environment staff members - Project Coordinator, Programme/project managers, and the Office for Operations (OfO) - and other relevant internal and external stakeholders who will be kept informed and regularly consulted throughout the assessment.
- **Evidence-based:** The evaluation will aim to gain insights and conclusion based on a variety of data and data collection methods, and, wherever possible, triangulating

information in order to ensure the reliability and validity of evaluation analysis and conclusions

33. The Evaluation was organized in three overlapping phases. During the inception phase, the Evaluators conducted a documentation review and a number of key interviews in UN Environment to get a clearer grasp of the evaluation context and fine-tune the evaluation approach. The Evaluators drafted an Inception Report which was reviewed by the Evaluation Office and shared with the UN Environment project manager and his team for comment. While the Inception Report was under review, the Evaluators started off the data collection and analysis phase with more in-depth review of project implementation reports and additional phone interviews with project stakeholders. During the reporting phase, the Evaluators prepared a draft evaluation report and the final evaluation report, which was shared widely for comments.

34. Findings from the Inception review further informed the methods used for this evaluation and enable refinement of the evaluation framework by filling information gaps and helping to identify further data collection needs. The preliminary list of project documents reviewed by the consultants is contained in Annex 2. Both primary and secondary data were collected and analysed as part of the evaluation process. Secondary data was obtained mainly from the UN Environment Evaluation Office, UN Environment Nairobi offices, as well as relevant partners and other organizations including project staff members. Primary data was collected through qualitative and quantitative methods, including desk reviews and semi-structured interviews.

35. A limited number of phone interviews with UN Environment staff and managers have been conducted to help orient the Evaluators and inform the development of both the Inception and Draft reports. Subsequent interviews during the data collection phase were primarily semi-structured, based on the evaluation matrix presented in the inception report, and was conducted with project stakeholders including Nairobi office staff and managers, cooperating partners, national and local government administrations involved in project implementation (Ministries of the Environment), CSOs, NGOs, bilateral organizations, regional and local institutions and research Centres and other key informants as relevant. The evaluation focused on a manageable number of meaningful interviews. Interviews included:

- The UN Environment Task Manager and key persons in the project management team
- The UN Environment Fund Management Officer;
- Selected representatives from among the project partners;
- Other relevant resource persons identified by the evaluators.
- A detailed list of interviewees is included in annex 3 to this report.

36. An inception visit was undertaken to the UN Environment HQ in Nairobi, to allow for face-to-face meetings with members of the project team at the Nairobi HQ. These visits provided the opportunity to the evaluation team to gain a better understanding of the project and its current status. It also allowed the evaluation team to collect data and set up the modalities for accessing project information in Anubis, the global project information sharing facility. A field visit was undertaken to Namibia. The field visit enhanced the understanding of the evaluation team on the strengths and weaknesses of the project with regards to country/local situation and context, and how beneficiaries and other key stakeholders especially perceive the project effectiveness, sustainability and impact. The field visit also helped the Evaluation Team to assess limitations and opportunities presented by implementation challenges, address cross-cutting issues (such as gender), and identify possible areas and means for programme improvements. The evaluation timeline and itinerary are provided in Annex 3. The Terminal Evaluation was undertaken about 6 months following official project completion.

## 5 Evaluation Findings

### 5.1 Strategic Relevance

37. This project was derived from and is consistent with the GEF Strategy for financing Biosafety under the Biodiversity Focal Area. It was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to “Capacity Building for the implementation of the Cartagena Protocol on Biosafety”. Article 22 of the Protocol requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of ensuring the effective implementation of the Protocol. In doing so, they are required to take fully into account the needs of developing country Parties and Parties with economies in transition for financial resources and access to and transfer of technology and know-how. In this regard, the project translates the objectives of the GEF Strategy for financing Biosafety into a case specific or thematic intervention in Namibia

38. The project is aligned with the UNEP Biennial Programme of Work (PoW) 2010-2011: Sub-Programme Environmental Governance with Expected Accomplishment (EA) B: The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced with Output 2: Legal and policy instruments are developed and applied to achieve synergy between national and international environment and development goals; and Output 3: Countries’ legislative and judicial capacity to implement their international environmental obligations is enhanced through implementation of policy tools.

39. Namibia’s Vision 2030 long-term developmental plan was anchored on the creation, application and use of knowledge and technologies like biotechnology. The country recognizes that even though the technology has benefits, it also poses environmental and health safety concerns. Namibia notes that the Convention on Biological Diversity (CBD) through its Cartagena Protocol on Biosafety (CPB) addresses both the benefits and the concerns through an objective and transparent regulatory system to ensure the safe and responsible use of modern biotechnology for the benefit of the communities. Namibia also recognizes that a well-coordinated and vibrant science, technology and innovation system, in which all relevant supporting and enabling policies, legal frameworks and institutional arrangements exist, could facilitate the adoption of the technology. The development and implementation of an objective national biosafety framework is recognized as the prerequisite for countries to harness the benefits of the technology in a responsible manner.

40. It was also evident that there are challenges which are peculiar to developing countries which have delayed the effective development and implementation of the national biosafety frameworks. It is worth noting that effective and efficient regulations cannot be developed and implemented without general technical, policy and enforcement capacities. It is well documented that science and technology related capacities such as the human, institutional and/or organizational issues are important factors in the development of NBFs.

41. Furthermore, Namibia recognized its obligation as a Party to both the CBD and the Cartagena Protocol to implement its NBF. Namibia signed and ratified the Convention on Biological Diversity (CBD) in 1992 and 1994 respectively. In 1994 the Namibian National Biodiversity Programme was established with the aim to address biodiversity issues that will lead to the attainment of the objectives of the CBD based on Namibian priorities. Under this programme, a number of working groups including the Namibia Biotechnology Alliance (NABA) were established under the auspices of the Ministry responsible for Science and Technology. NABA is a technical working group established to provide technical backstopping to the government on issues of biotechnology and biosafety.

42. The overall rating on strategic relevance is **highly satisfactory**.

## 5.2 Effectiveness

43. In approximately five and a half years (64 months) of project implementation, the project enhanced and strengthened the following essential components and functioning of the Namibian national biosafety framework in response to the Cartagena Protocol on biosafety to the Convention on Biological Diversity. (i) Establishment and strengthening of the Administrative system; (ii) Harmonization and implementable national biosafety instruments; (iii) Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; (iv) Establishment of an effective and efficient monitoring and enforcement system; (v) Information sharing, public engagement, collaborative linkages and networking and (vi) Project management mechanisms. Key stakeholders have developed sustaining collaborative linkages to ensure sustainability.

The overall rating on Effectiveness is **satisfactory**.

### 5.2.1 Delivery of Outputs

44. Evaluation of the delivery of outputs and activities is based on the log frame and the reconstructed theory of change developed for this project. A review of the log frame clearly shows that all activities and outputs were necessary and appropriate, and formed a series of logical, sequential steps towards achievement of the project outcomes and objectives.

45. ANUBIS, project information sharing platform served as a good tool for project implementation and management. During the evaluation, the facility has been the main source of information on outputs which was collaborated during the field visit interviews. Project implementation reports were made easily accessible in the Anubis to the evaluators.

**Table 4: Planned Versus Actual Outputs**

Components and Activities	Expected Output	Actual Output
<b>Component 1. Establishment and strengthening of the regulatory/administrative system for the Biosafety Act</b>		
<b>Sub-component 1.1. Establishment and strengthening of the Administrative system</b>	An administrative system for handling requests	An administrative system is in place
Established administrative filing procedures	Administrative filing procedures	Handling of GMO application Work Instruction
Standardize procedures for handling applications	Procedures for handling applications	Work Instruction for handling applications
Application system for GMO dealings (forms and procedures)	Application GMO dealings (forms)	-Application for Registration of a GMO Contained Use Facility -Application for a GMO Contained Use permit -Application for a Permit to Conduct a GMO Field Trial -Application for a GMO Environmental Release Permit -Application for Placing on The Market of Genetically Modified Food or Feed

<b>Components and Activities</b>	<b>Expected Output</b>	<b>Actual Output</b>
Established administrative procedures for Biotechnology/Biosafety research activities	Administrative procedures/Guidelines for Biotechnology/Biosafety research activities	Contained Use of GMOs Guidelines
Established procedures for handling confidential business	Procedures for handling confidential business	Public Notification Guidelines
Determine mechanisms for handling confidential information	A functional mechanism for handling confidential information according to the Biosafety Act and regulations	A functional mechanism for handling confidential information according to the Biosafety Act and regulations (reg. 10, 32 & 42)
Design and implement a quality management system in line with current best practice /benchmarking	A functional quality management system in line with current best practice.	
Device and implement financial and stock management system	A functional financial and stock management system	A functional financial and stock management system
Establish and strengthen the interim Council, Registrar, and Secretariat and Biosafety Unit respectively	A functional Biosafety Council, Biosafety Unit (Registrar, and Secretariat).	A functional Biosafety Council, Biosafety Unit (Registrar, and Secretariat).
<b>Sub-component 1.2 Harmonization and implementable national biosafety instruments</b>	Fully functional NBF in fully functional legal instruments	Fully functional NBF is in place including the law, regulations, a Biosafety Council and Biosafety secretariat
Finalize the draft regulations, guidelines and all other supporting documents	Biosafety regulations and Biosafety guidelines	-Biosafety Regulations 2016, no. 6116 -Contained Use of GMOs Guidelines -Field Trials Guidelines -Environmental release of GMOs Guidelines -Placing genetically modified food or feed on the market Guidelines -Public Notification guideline. -Biosafety Inspection procedure. -Biosafety Administrative procedure. -Work Instruction for handling applications.
Carry out the study and analysis of all the identified national laws/policies related to biosafety	An informative study on all the identified national laws/policies related to biosafety	Ongoing
Carry out the study and analysis of all the identified international law instruments interacting and interfacing with biosafety	An informative study on all all the identified international law instruments interacting and interfacing with biosafety	Completed
Align the national biosafety implementation instruments with each other and with the Cartagena Protocol on Biosafety	An aligned national biosafety implementation instruments to the CPB	An aligned national biosafety implementation instruments to the CPB has been achieved through the Biosafety Act and its regulations

<b>Components and Activities</b>	<b>Expected Output</b>	<b>Actual Output</b>
Carry out the Study and analysis on the possibility of an interim measure in the event that the implementation of the Research, Science and Technology Act is delayed	An informative study on the possible interim measure (in the event that the implementation of the Research, Science and Technology Act is delayed).	The NCRST was established and the Biosafety Council could thereafter be constituted. A Biosafety Unit is operational as a department on its own. The funds however are under the fund within the NCRST
Carry out the study on the current liability and redress discussions and draft instruments, under the CPB, in the context of the existing Namibian liability and redress regimes and advice accordingly	An informative study on liability and redress under the CPB, in the context of the existing Namibian liability and redress regimes.	The Biosafety Act has been passed and the regulations thereof are being implemented. The regulations however to regulate Liability and Redress still need to be formulated. The consultants (Namibian and Non-Namibian) has been identified. The NCRST will take over the final payment of the consultants.
Meetings to discuss and formulate a common understanding and position of the country delegation to COP/MOP meetings	A formulated common understanding and position of the country for COP/MOP meetings.	A formulated common understanding and position of the country for COP/MOP meetings is an on-going activity. A group of the participants as identified by the various institutions in the country under the leadership of the Ministry of Environment department of Environment and Tourism is organized prior to COP/MOP meetings
<b>Component 2. Strengthening institutional capacity to facilitate handling and decision making including follow up measures on LMOs</b>		
<b>Sub-component 2.1 Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making</b>	Human resource capacity for risk assessment, evaluation and management, including socio economic considerations	Training activities have on RA and RM have been conducted and various people have been trained. A report on Socio-economic considerations has been drafted and this paves the way for negotiations under this item.
Training on process vs. product based risk assessment approaches including risk evaluation and review methodologies	Competence in risk assessment approaches (process vs. product based including risk evaluation and review methodologies) by Biosafety Council, and all implementing Ministries and Agencies.	Competence in risk assessment approaches (process vs. product based including risk evaluation and review methodologies) by Biosafety Council, and all implementing Ministries and Agencies.  Training workshop report on: (1) Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017. Attended by 24 Participants (2) Biosafety Workshop Implementing a fit for Purpose GMO regulatory System in Namibia" 14 – 18 March 2016.

Components and Activities	Expected Output	Actual Output
		<p>Attended by 56 Participants.</p> <p>(3) Biosafety Administration &amp; Decision Making: 12 July 2016  Attended by 25 Participants</p>
<p>Training on methods of recombinant DNA technology and genetic engineering in the context of both process and product based risk assessment and management</p>	<p>Competence in risk assessment and management (methods of recombinant DNA technology and genetic engineering in the context of both process and product) by Biosafety Council, and all implementing Ministries and Agencies.</p>	<p>Competence in risk assessment and management (methods of recombinant DNA technology and genetic engineering in the context of both process and product) by Biosafety Council, and all implementing Ministries and Agencies.</p>
<p>Training on how to deal with risks, uncertainty and complexity: Application of the precautionary approach</p>	<p>Competence in dealing with risks, uncertainty and complexity based on precautionary approach by Biosafety Council, and all implementing Ministries and Agencies</p>	<p>Competence in dealing with risks, uncertainty and complexity based on precautionary approach by Biosafety Council, and all implementing Ministries and Agencies</p> <p>Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017.  Attended by 24 Participants</p>
<p>Training on ecological aspects; influence on the ecosystem function and impacts on biodiversity</p>	<p>Better understanding of ecological aspects; influence on the ecosystem function and impacts on biodiversity by Biosafety Council, and all implementing Ministries and Agencies</p>	<p>Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017.  Attended by 24 Participants</p>
<p>Training on Health issues: Toxicology, allergenicity and cocarcinogenesis etc.</p>	<p>Better understanding of Health issues: Toxicology, allergenicity and cocarcinogenesis by Biosafety Council, and all implementing Ministries and Agencies</p>	<p>Better understanding of Health issues: Toxicology, allergenicity and cocarcinogenesis by Biosafety Council, and all implementing Ministries and Agencies</p> <p>(1) Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017.  Attended by 24 Participants</p> <p>(2) A Workshop Report on: "Implementing a fit for purpose GMO regulatory system in Namibia" is available with the list of participants - Attended by 56 Participants.</p>
<p>Training on Environmental biosafety issues: gene flow</p>	<p>Better understanding of biosafety issues: gene flow by Biosafety Council, and all implementing Ministries and Agencies</p>	<p>Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017.  Attended by 24 Participants</p> <p>Ongoing. One staff member in the secretariat supported to conduct a study on this as part of her MSc degree</p>

<b>Components and Activities</b>	<b>Expected Output</b>	<b>Actual Output</b>
Short courses/training in the identified areas		
Socio-economic studies in the identified topics	An Informative study on Socio-economic consideration	Socio-economic consideration Study Report is available and hereto attached
Workshop on the findings of all socio-economic assessments and analysis	A guide on national socio-economic assessments	Workshop Report on: "Implementing a fit for purpose GMO regulatory system in Namibia" is available with the list of participants - Attended by 56 Participants.
<b>Sub-component 2.2 Establishment of an effective and efficient monitoring and enforcement system</b>	Efficient and effective monitoring and enforcement system	Not fully done
Determine and establish national biosafety safety levels and measures for contained use	An established national biosafety levels and measures for contained use.	Contained Use guidelines. Registration of facilities (forms and checklist).
Standardize good laboratory practices for the various safety level laboratories	Standardized good laboratory practices for the various safety level laboratories.	Draft of SOPs are available and being used at the now being established laboratory
Training for all laboratory staff members in the country on the adopted laboratory practices and safety standards for various safety levels	Competence of all laboratory staff members in the country on the adopted laboratory practices and safety standards for various safety levels.	Training for 4 staff members has taken place at well-Incotec/SciCorp testing laboratories in SA. This included also someone from UNAM
Exchange programmes for laboratory staff including technicians on GMO testing issues	Exchange programmes for laboratory staff including technicians on GMO testing between laboratories.	Working together with ABNE for Incotec/SciCorp exchanging of technicians
Develop GMO testing protocols and SOP	Testing Protocols and SOPs	Sample collection protocol developed and used SOPs for GMO testing under development
Research and testing to determine baseline data on GMOs that might be in the country before the implementation of the law for regulatory purposes	An informative Baseline study on the GMO status	Phase I sampling and testing of GMOs Phase II sampling and testing of GMOs Baseline Report.
Study to determine the wild and indigenous plant varieties related to the current GMO variety; distribution and biology	An informative Study to determine the wild and indigenous plant varieties related to the current GMO variety; distribution and biology	biology report on the 1st collection of information is available. NCRST will take this over because it needs two more seasons
Research and determination of the gene flow containment measures in the field trials and general release	An informative Study on gene flow containment measures in the field trials and general release	This will only be done when such an application has been approved and work done.
Purchased laboratory equipment, kits, reagents and consumables for GMO testing for regulatory	Fit for purpose GMO testing laboratory equipment, reagents	GMO testing laboratory equipment for the lab and NABA office have been purchased. The NCRST has

<b>Components and Activities</b>	<b>Expected Output</b>	<b>Actual Output</b>
purposes	and consumables	also paid for some other equipment needed for the lab. These are under the inventory and under the NCRST register
Working towards ISO accreditation of the national GMO testing laboratory	Improved and reliable system for testing GMOs	This will only be done when the laboratory has been modernised. The lab at UNAM which was inaugurated by then the Minister responsible for S&T is not fit and too small to be able to ask for accreditation. The will be using the ISO guidelines because there is no Namibian standard on that yet
Equipment for taking samples at port of entry and general surveillance	Fit for purpose GMO sampling equipment	These are available within the NCRST and AMTA
Testing equipment for preliminary testing	Fit for purpose GMO screening kits	Kits identified. To be procured in February 2018
Training of relevant officials on the use of equipment and sampling methods	Competent official in conducting sampling	GMO Sampling training; field trial inspection training; contained Use facility inspection. The NCRST staff members are still involved in this and the payment for this is falling under the co-finance
<b>Component 3. Information sharing, public engagement, collaborative linkages and networking</b>		
<b>Sub-component 3.1 Create international and regional collaborative linkages in the biosafety/biotechnology need areas</b>	International and regional collaborative linkages in the biosafety/biotechnology need areas	Signed MoU with FNI, Mozambique to support Biotechnology;  Bilateral agreement with South Africa that supports Biotechnology
Training on negotiation and communication skills including risk communication skills	Competence in negotiation and communication skills including risk communication skills.	Training was done for 4 people attending various training activities funded by RAEIN-Africa in SA and in Namibia as well
Opportunity exploring and discussion visits to identified partners for collaborations on the identified areas.	Benchmarking visits to countries with existing functional biosafety systems. Established partnership.	Benchmarking visits by Biosafety Council and Biosafety unit staff to (South Africa, Mauritius and Ghana).
<b>Sub-component 3.2 Develop a biosafety/biotechnology data management system</b>	Biosafety/biotechnology information and data management system	Financial regulations and procedures
Upgraded national biosafety website (Procurement of data management equipment e.g. hardware, software etc.)	A functional national biosafety website	National Biosafety Clearing House <a href="http://bch.ncrst.na/">http://bch.ncrst.na/</a> Is up and running. It is being monitored by the NCRST webmaster <a href="http://bch.ncrst.na/">http://bch.ncrst.na/</a>
Training on the data management of the BCH	Effective data management on BCH	Training on effective data management on BCH was carried out for the Biosafety Council and Biosafety Unit. The training for the

Components and Activities	Expected Output	Actual Output
		Ad Hoc committee will be done by the NCRST and funds are available for that <a href="http://bch.ncrst.na/">http://bch.ncrst.na/</a>
Updating the data on the BCH	A regular updated BCH	This as mentioned above is been taken over by the NCRST Webmaster <a href="http://bch.ncrst.na/">http://bch.ncrst.na/</a>
Stakeholder training on the information available and accessible on the BCH (Council members, adhoc committee members etc)	Competent Biosafety Secretariat, Council members, adhoc committee members, Government Ministries and Agencies on how to access information on BCH.	The Biosafety Unit is very effective and Council
Electronic management and filling of all project documents like minutes, workshop proceedings, course information etc	Effective electronic filling management system	Filling management Procedure
Preparation of the country reports as required by the CPB under Article 33	CPB National Report as per Article 33	Namibia has always submitted its report and on time expect the 1st report that was submitted together with the second national report.
<b>Sub-component 3.3 Create public awareness and education throughout the Namibian society</b>	Objective and meaningful public participation in the biosafety decision making	Ongoing
Carry out base line biosafety/biotechnology awareness survey, analysis and report	An informative baseline biosafety/biotechnology awareness survey report.	An informative baseline biosafety/biotechnology awareness survey report was conducted and the report is available.
Workshop on general public awareness and results sharing	Informative public awareness workshops	Informative public awareness workshop was held at Hilton Hotel
Training of trainers on awareness creation		
Develop and print awareness material ranging from pamphlets, brochures, T-shirt and caps	Awareness Materials (pamphlets, brochures, T-shirt and caps)	These materials have been developed including pens and rulers
Develop and print booklets, calendar, diary and posters targeting specific audiences	Awareness Biosafety/Biotechnology booklets, calendar, diary and posters.	Awareness Biosafety/ Biotechnology booklets, calendar, diary and posters.
Reprint translated national policy in various languages	Translated Biosafety Act and regulations into national Languages.	Was done and the Biosafety Act and Regulations was also printed
Awareness and education meetings for various artists in preparation of drama and poetry development on biosafety	Consultative meetings with local artists on Biosafety/Biotechnology awareness Drama and Poetry.	A drama to explain Biotechnology and Biosafety was done at UNAM, Soweto Market and Khomasdal
Develop drama, songs and dance on awareness of biosafety/biotechnology	Educative awareness Drama and Poetry on Biosafety/Biotechnology.	This activity will be carried over to the Biosafety Unit action plan for 2018
Pilot awareness campaigns and information dissemination in and around Windhoek including road	Country wide awareness campaigns and information dissemination including road	Awareness campaign have taken place. Brochures, Biosafety Act and Regulation, Posters have been

Components and Activities	Expected Output	Actual Output
shows, shopping malls displays, expos, industrial shows displays	shows, shopping malls displays, expos, industrial shows displays	distributed widely
Impact analysis survey, lessons learned and experiences from the piloted region	Informative Post Biosafety/Biotechnology awareness Reports.	Post Biosafety/Biotechnology awareness Reports.
Roll out the piloted and improved awareness campaign to all other regions	Improved countrywide awareness campaigns	Improved awareness countrywide campaigns
<b>Component 4. Project management mechanisms</b>		
Appoint project staff	Competent Project Staff	Staff for the Biosafety Unit been appointed and Biosafety Council has been constituted
Procurement of project management office equipment	Project Management office equipment	All staff offices are well equipped
Communications	Effective Communications Charter	Communications Charter. Communication structure within the NCRST is being well implemented

Source: Information in this table has been assembled from Anubis January 2018 Project Activity Report

The overall rating of the delivery of outputs is **satisfactory**.

### 5.2.2 Achievement of Direct Outcomes

46. The overall project goal is to develop an empowered and enabling human, infrastructural, legal and administrative capacity in biosafety for the efficient implementation of the Biosafety act of 2006 in compliance with the Cartagena Protocol on Biosafety and other national, regional and international instruments. This enabling environment is to ensure that Namibia makes informed decisions regarding LMOs to conserve and protect its biodiversity.

47. The project was expected to enable Namibia devise tools to assess, evaluate and manage potential adverse effects associated with trans-boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio- economic considerations. Ultimately, these institutional arrangements are to facilitate informed decisions making to import, develop and/or use Living Modified Organisms (LMOs), meeting the obligations under Convention on Biological Diversity and the Cartagena Protocol on Biosafety.

48. Over the period covered by the evaluation, the project enhanced and strengthened the following essential components of any functioning national biosafety framework in response to the Cartagena Protocol on biosafety to Convention on Biological Diversity. (i) Establishment and strengthening of the Administrative system; (ii) Harmonization and implementable national biosafety instruments; (iii) Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; (iv) Establishment of an effective and efficient monitoring and enforcement system; (v) Information sharing, public engagement, collaborative linkages and networking and (vi) Project management mechanisms. Key stakeholders have developed sustaining collaborative linkages to ensure sustainability.

### *Establishment and strengthening of the Administrative system*

49. The implementation of project activities has resulted in a functioning administrative system with operational procedures for handling applications for LMO contained use, field trial, environmental release permit and for placing on the market. The system also enables administrative procedures/guidelines for Biotechnology/Biosafety research activities. There are administrative procedures for filling applications for record purposes and handling of confidential information according to the Namibia Biosafety Act and regulations (Regulations. 10, 32 & 42). Public notification guidelines have also been produced.

50. To support the above procedures and processes, a functional Biosafety Unit has been established with a Registrar and a small Secretariat with a decision making body - the Biosafety Council - as mandated by the Biosafety Law 2006. The recurrent annual budget of the Biosafety Unit is integrated in the national budget system to ensure sustainability.

#### ***Harmonization of the Biosafety Act with other international instruments***

51. A major output of the project was the Biosafety Regulations 2016, no. 6116 with the following facilitating guidelines: Contained Use of LMOs Guidelines; Field Trials Guidelines; Environmental release of GMOs Guidelines; Guidelines for marketing living modified food or feed; Public Notification guideline; Biosafety Inspection procedure; Biosafety Administrative procedure; and Work Instruction for handling applications to ensure consistent operational procedure of the Biosafety Unit. The project facilitated a review of all international instruments that impinge on biosafety and to which Namibia is a Party. The review ensured that the Biosafety Act 2006 and its regulations are in harmony with these instruments.

52. It is however noted that with the entry into force of Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety on 5 March 2018, Namibia should strive to become a Party. The Supplementary Protocol aims to contribute to the conservation and sustainable use of biodiversity by providing international rules and procedures in the field of liability and redress relating to living modified organisms. **It is recommended that Namibia strives to become a Party to the Supplementary Protocol and develop its implementing national regulations.**

53. The project also facilitated the creation of a national platform that promotes understanding among stakeholders and the development of a common position in Namibia for COP/MOP meetings. A group of various stakeholder institutions under the leadership of the Ministry of Environment's department of Environment and Tourism prepare for such international meetings.

#### ***Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making***

54. A number training workshops were conducted during the project period, aimed at increasing the necessary human resource capacity for risk assessment, evaluation and management, including socio economic considerations. In order to achieve competence in risk assessment approaches (process vs. product based including risk evaluation and review methodologies) by Biosafety Council, and all implementing Ministries and Agencies, the following workshops were conducted: (a) Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017 for 24 participants; (b) Biosafety Workshop Implementing a fit for Purpose GMO regulatory System in Namibia" 14 – 18 March 2016 for 56 participants and Biosafety Administration & Decision Making: 12 July 2016 for 25 participants.

55. To increase competence in risk assessment and management (methods of recombinant DNA technology and genetic engineering in the context of both process and product) and in dealing with risks, uncertainty and complexity based on the precautionary approach, a workshop was held on Biotechnology Products Application Evaluation in Namibia: 17 to 22 September 2017 for 24 participants from the Biosafety Council, and all implementing Ministries and Agencies. The workshop also enabled the participants to have a better understanding of the

impacts of LMOs on ecosystems function and biodiversity; toxicology, allergenicity, carcinogenesis; and gene flow.

56. An informative study on Socio-economic consideration was conducted during the project period. The project also supported an MSc degree study conducted on biotechnology products application evaluation.

#### ***Establishment of an effective and efficient monitoring and enforcement system***

57. As part of an effective national monitoring system for LMOs in Namibia, safety levels and measures in the use of biotechnology products for contained use were established with the registration of facilities, development of laboratory protocols, sample collection protocols and the standardization of good laboratory practices (Standard Operating Procedures) for the various safety level laboratories. Four staff members undertook training with private industry, Incotec/SciCorp testing laboratories of South Africa in laboratory practices and safety standards. The project, in collaboration with African Biosafety Network of Expertise (ABNE), organized this exchange programme.

58. Baseline data on LMOs that may already be in Namibia before the implementation of the Biosafety law was created for regulatory purposes. A study was also conducted on the biology and distribution of wild and indigenous plant varieties that are related to the current LMOs in global circulation to facilitate the risk assessment and risk management processes in LMO decision making.

59. The equipment for the national LMO identification laboratory and NABA office have been purchased. These equipment have been further augmented by additional equipment purchased by the NCRST. The laboratory is expected to work towards ISO accreditation once in operation. The evaluation found that progress has been made towards establishing a fully functional LMO detection laboratory. All equipment have been purchased but are yet to be operational since installation of the equipment is still in progress. It is however noted that the critical mass of human resources has not been attained. A concerted effort is needed to train or leverage on human resource from other scientific institutions to attain this critical mass.

60. The Biosafety Unit is expected to leverage the sampling equipment that already exists in the newly established Agro-Marketing and Trade Agency (AMTA) under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities and the NCRST at port of entry and for general surveillance. Training in LMO Sampling; field trial inspection; contained use facility inspection are ongoing and being conducted by staff of NCRST. The senior inspector and inspector have been appointed by NCRST and have undergone training in Kenya.

#### ***Information sharing, public engagement, collaborative linkages and networking***

61. This evaluation noted collaborative agreements signed with the governments of Mozambique and South Africa in the field of biotechnology and the benefits derived from the private sector entities such as Incotec/SciCorp Laboratories of South Africa for exchange programmes for laboratory staff in LMO testing. Partnership arrangements were established with functioning national biosafety systems with accompanying visits by Biosafety Council members to countries such as Ghana, Mauritius and South Africa.

62. A functional National Biosafety Clearing House; <http://bch.ncrst.na/> has been established and monitored by the NCRST webmaster. The members of the Biosafety Council and Biosafety Unit have all been trained in the effective use of data and its management on the BCH. The biosafety website has been upgraded with the necessary data management equipment e.g. hardware, software etc. The BCH has been effectively used in electronic management and filling of all project documents like minutes, workshop proceedings, course

information etc. and Namibia has been using the BCH in the preparation of its national reports in meeting its obligations under Article 33 of the Cartagena Protocol on biosafety.

63. In order to ensure an objective and meaningful public participation in the biosafety decision making in Namibia, a baseline biosafety/biotechnology awareness survey was conducted and the report made available to the public in the form of a brochure and other public awareness materials. An Informative public awareness workshop was also held during the project duration. The Biosafety Act and its Regulations were also reproduced and made available to the public. Biotechnology and biosafety were dramatized in the form of a play to facilitate easier understanding by the public. These public awareness mechanism and materials enhanced better understanding of the biotechnology/biosafety issues countrywide in Namibia.

### ***Project management mechanisms***

64. Staff of the project formed the nucleus of the Biosafety Unit and Biosafety Council with the budget of the Unit integrated in the national budget to ensure the sustainability of the unit with effective communication arrangements with the National Commission for Research, Science and Technology (NCRST).

The overall rating of the achievement of outcomes is **satisfactory**.

### **5.2.3 Likelihood of Impact**

65. As stated above in section 1.5, Figure 1 presents the draft reconstructed Theory of Change of the project based on the actual results statements in the project document which have been "broken up" and re-arranged to better conform to UN Environment definitions of the different results levels and to show the theoretical cause-effect relationships. Using the reconstructed Theory of Change, the results from the implementation of the project show that the project made an appreciable progress from results towards impact. Indeed, with effective government commitment and support, collaboration among scientists and relevant agencies such as the customs department, public awareness, education and participation campaigns and Civil Society Organizations CSO and NGO support, the impact of the project can be achieved.

#### ***A fully functional and effective regulatory and administrative system established for the implementation of the Biosafety Act 2006:***

66. A direct outcome of the project which involved setting up or enhancing the functioning components of a national biosafety framework comprising a system for receiving LMO applications with transparent procedures for handling applications for LMO contained use, field trial, environmental release permit and for marketing was achieved. The project ensured the harmonization and implementation of national biosafety instruments. The project further established procedures and processes including administrative filing procedures which are supported by a functional Biosafety Unit made up of a Biosafety Council as its decision making body, a Registrar and a small secretariat,

#### ***Human resource capacity for risk assessment and management developed:***

67. Concurrently with the development of the procedures and processes along with institutional arrangements, the necessary human capacity for risk assessment and management, a mandatory component of LMO decision making was being enhanced. Workshops were held with the aim of increasing the necessary human resource capacity for risk assessment, evaluation and management, including socio economic considerations. These workshops enabled better understanding of the impacts of LMOs on the ecosystem function and biodiversity; toxicology, allergenicity and carcinogenesis; and gene flow.

68. Additionally, an effective national monitoring system for LMOs was established. Safety levels and measures in the use of biotechnology products for contained use were established with the registration of facilities, development of laboratory protocols, sample collection protocols and the standardization of good laboratory practices (Standard Operating Procedures) for the various safety level laboratories. A baseline data on already existing LMOs in the Namibia was created for regulatory purposes.

69. Staff members undertook training with private industry, Incotec/SciCorp testing laboratories of South Africa in laboratory practices and safety standards. Accommodation for the LMO identification laboratory is in place, with all equipment purchased but yet to be installed.

70. Arrangements are also far advance to leverage the sampling equipment that already exists in the newly established agency, Agro-Marketing and Trade Agency (AMTA) under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities and the NCRST at port of entry and for general surveillance. Training in LMO Sampling; field trial inspection; contained use facility inspection are ongoing and being conducted by staff of NCRST.

71. An established information sharing system with mechanism for public engagement and collaboration:

72. Another direct outcome of the project is the establishment of a national Biosafety Clearing- house which has a direct link with the global BCH in the exchange of information to facilitate the decision making, public awareness, education and participation. The facility has been effective in the electronic management and filling of all project documents like minutes, workshop proceedings, course information etc. and Namibia has been used the BCH in the preparation of its national reports in meeting its obligations under Article 33 of the Cartagena Protocol on biosafety.

### ***Drivers and Assumptions***

73. The key drivers were effective government commitment and support, good collaboration among scientists and relevant agencies such as the customs department through MOUs, workable mechanisms for public awareness, education and participation campaigns and support by CSOs and NGOs. The government through National Commission on Research, Science and Technology (NCRST), Biosafety Council provided dedicated staff time and logistics to support the project and the Biosafety Council as per the Biosafety law. There has also been good collaboration among scientists and relevant agencies which maximizes use of available resources for the project.

74. Other drivers include active engagement of stakeholders including civil society and the private sector such as ABNE support for training and private sector support for training technicians in South Africa laboratories.

75. With respect to long-term political will, the relevant government commitment has been evident with the mainstreaming of the budget of biosafety secretariat in government national budget. The project, at the time of this final evaluation has indications of a long lasting financial and human resource support from government.

### ***Impact***

76. The project provided most of the indicators of impact including a legal regime comprising the biosafety law and its implementing regulations, an administration system to handle requests for permits for science-based decision making in the import, development and use of LMOs with its enhanced institutional and human capacity, a national monitoring system

for LMOs and an established information sharing system with mechanism for public engagement and collaboration.

77. The project has enhanced the preparedness of Namibia by helping to devise tools to assess, evaluate and manage potential adverse effects associated with trans-boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio-economic considerations.

The overall rating of the likelihood of impact is **satisfactory**.

### 5.3 Sustainability of Project Outcomes

78. Sustainability is understood to mean the extent to which outcomes and impacts derived from project implementation are likely to continue after external funding and assistance end. Factors and conditions affecting sustainability have been considered in four areas: socio-political factors, financial conditions, institutional conditions and environmental factors. The project was designed to build capacity for making informed decisions to import, develop and or use GMOs, while meeting both national and international obligations under the Convention on Biological Diversity and the Cartagena Protocol on Biosafety. Ultimately the project was aimed at the protection and conservation of biodiversity. The four factors and conditions affecting sustainability thus apply to the goal of the project.

79. In the pursuit of building capacity, the project raised awareness and created knowledge among stakeholders on the protection and conservation of biodiversity. The participation of appropriate agencies through the signing of MOUs has ensured some level of continuity into the future.

#### 5.3.1 Socio-political factors

80. An essential component of socio-political sustainability relates to ownership by state and non-state actors. The project created an enabling environment for awareness creation and capacity-building at the national level. Government agencies / institutions are primary targets of the capacity building efforts. The partnership formed among government institutions, with their various mandates, in pursuit of maximizing use of local resources provides the driving force for action. Collaboration with high level political support from governments indeed provides a measure of sustainability because the political will is there to continue work towards the trans-boundary movement, transit, handling and use of LMOs. Ownership, awareness and capacity built within government agencies and quasi-government institutions are likely to continue to shape attitudes and behaviours on conservation and protection of biodiversity in the long term.

The rating on Socio-political factors is **satisfactory**.

#### 5.3.2 Financial conditions

81. The availability of financial resources is required to transform policy, plans, regulations and skills into action. The government's commitment to provide a budget line for the biosafety secretariat in the national budget is a positive sign towards sustainability.

The rating on Financial conditions is **highly satisfactory**

### 5.3.3 Institutional Sustainability

82. This dimension of sustainability addresses the issue of the sustainability of results and onward progress towards impact relating to factors associated with processes, policies, national agreements, legal and regulatory frameworks and governance structures. The institutional sustainability revolves around the biosafety secretariat with its decision making body - the Biosafety Council. The operational elements being a functioning regulatory and administrative system for the implementation of the Biosafety law and its implementing regulations, on-going capacity building activities on the risk assessment and management issues, an effective and efficient monitoring and enforcement system and an established information sharing system with a mechanism for public engagement and collaboration. This arrangement is likely to be sustained in the long term.

The overall rating of the Institutional sustainability is **satisfactory**.

### 5.3.4 Environmental Sustainability

83. This dimension addresses factors, positive or negative, that can influence the future flow of project benefits. It assesses project outputs or higher level results that are likely to affect the environment which, in turn, might affect sustainability of benefits. The preparedness of Namibia for the potential adverse effect of GMOs on biodiversity is an environmental benefit in itself. In the implementation of the project, the awareness created on both the potential benefits and adverse effects of GMO on biodiversity also contributes to promoting environmental benefit.

The overall rating of the likelihood of sustainability is **satisfactory**.

### 5.3.5 Replication

84. The potential for replication of activities undertaken by the project exists. There is a sizeable number of developing countries that can benefit from the lessons learned from the project for the future design of their biosafety implementation projects. It is noted that the enactment of a biosafety law prior to the project design and implementation facilitate the processes that lead to putting in place a functional biosafety framework. The law also galvanizes sectorial contribution and national resource leveraging for the project and lays the clear roles of government department to the NBF implementation. The lessons learned would be of benefit to the developing countries in general but to the SADC and Africa region in particular.

The rating of Replication is **satisfactory**.

### 5.3.6 Efficiency

85. Efficiency is a performance issue regarding the timeliness and cost-effectiveness of the implementation of planned activities and the delivery of outputs and outcomes. These could include positive contributions to performance such as: cost and time saving measures; use of existing systems to support project design/activity; and fullest use of human and financial inputs; as well as negative contributions to performance such as: administrative delays and management delays.

86. To a significant extent, the project built on tools and methodologies developed since 1997, when Namibia participated in a biosafety pilot project, supported by UNEP/GEF, which developed a draft Namibian NBF. The development phase project created awareness among relevant stakeholders on the legal, policy and scientific/technical aspects of biosafety in the

NBF development phase. It also developed some capacity in the areas of risk assessment, management, monitoring and public participation in the decision making processes.

87. The project also tapped on existing resources of other government departments such as leveraging the sampling equipment that already existed in the newly established Agro-Marketing and Trade Agency (AMTA) under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities and the NCRST at port of entry and for general surveillance.

88. Policy makers and officials who implement national policies and laws at the Ministry of Environment and Tourism, Ministry of Agriculture and Forestry, Ministry of Health and Social Services, Ministry of Fisheries and Marine Resources, Ministry of Trade of Industry, the Namibian Standards Institute, Ministry of Finance (Customs officials), and Ministry of Justice contributed and provided resources to the project.

89. In addition technical training institutions like the University of Namibia and the Polytechnic of Namibia played important roles in training activities. Institutions such as the Namibia Institute for Educational Development (NIED) which deals with issues like curriculum development for schools also facilitated the integration of biotechnology/biosafety into school curricula.

90. Teacher Training Colleges have served as important vehicles for biosafety awareness creation and dissemination of biosafety awareness materials. Farmers were represented by both the communal association, National Agriculture Union (NAU) and Namibian National Farmers Union (NNFU) during project implementation.

The overall rating of the efficiency is **satisfactory**.

## **5.4 Processes Affecting Project Performance**

### **5.4.1 Project Preparation and Readiness**

91. The project was designed to deliver outputs that contribute to achieving the expected results. An assessment of the initial design of the project was undertaken as a part of the inception report (see Annex 5). It helped to refine the questions and issues defined in the evaluation matrix and the Reconstructed Theory of Change (Figure 1) for the project by identifying causal links, assumptions and drivers. Key sources of information for project design quality assessment included the approved project document, the Project Review Committee (PRC) review sheet, and the project logical framework.

92. This evaluation found that the project was clearly drafted. It clearly described its relevance to the GEF Strategy for financing Biosafety under the Biodiversity Focal Area. It was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to "Capacity Building for the implementation of the Cartagena Protocol on Biosafety" and the Namibia national priorities in section 3 of the project document. A key strength is the detailed analysis of various stakeholders expected to participate in project implementation. The activities were designed to contribute to a common objective of Namibia in its process of preparedness to protect and conserve biodiversity. Good risk identification was undertaken and strategies to mitigate the risk to project implementation were presented. The project document identified critical success factors; however they were general in nature and not associated with each causal pathway. These were however later refined during project implementation period. Assumptions were however clearly stated.

93. There were clear SMART indicators with targets written at lower results levels. Project output indicators were mostly well formulated. However, they are mostly quantitative measures which do not usually assess the quality of support provided or the actual enhancement of capacities of stakeholders. At the time of project approval, 60 percent of baseline data was available. Baseline data gaps were addressed during project implementation as an integral part of the project activities such as biosafety/biotechnology awareness levels and biosafety legal capacity in Namibia, making it possible to undertake an impact evaluation of the project.

#### ***Critical success factors and risks***

94. For the most part, critical success factors have been identified and have been adequately considered. A Risk analysis table was included in the project document. Biotechnology and biosafety, like all science and technology related subjects, have relatively low interest among society in general. This was identified as a major challenge in Namibia. Also the weak institutional coordination in the absence of the national coordinating body amongst all science and technology stakeholders is another issue of consideration.

95. Hence participatory project approach in the design and development and also the implementation of the project was identified as essential to inculcate ownership of all national stakeholders and promote active participation in project activities. This approach was envisaged to not only ensure the attainment of the project objectives but also aid in awareness creation and public education. Delay in setting up the Biosafety Council by the Commission for Research, Science and Technology was also identified as a risk, not only for the delivery of project outputs and outcomes but also for its sustainability. Efforts were therefore mobilized which were successful in overcoming these identified risks.

96. The evaluation rated the project design as Moderately Satisfactory (see Annex 5).

#### **5.4.2 Implementation Approach and Adaptive Management**

97. A participatory project approach was adopted in the design and implementation of the project. It was noted as essential to inculcate ownership of all national stakeholders and thus ensuring that stakeholders actively participation in the project activities. This was aimed not only at ensuring the attainment of the project objectives but also to aid in the biosafety awareness creation and public education effort.

98. The Task Manager developed a project supervision plan at the inception of the project which was communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision was on outcome monitoring including project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits was assessed with the Steering Committee at agreed intervals. At the country level, the Ministry of Education together with NABA acted as the National Executing Agencies (NEA). The overall management and decision making of the project was the responsibility of the National Coordinating Committee (NCC) which consisted of representatives from the Ministries of Agriculture, Health, Environment, Fisheries, Attorney General's Office and consumer and farmer representatives. The Chairperson of NABA was designated as the National Project Coordinator (NPC) who was accountable to the NEA and to UN Environment for ensuring delivery of project outputs. The assistant project coordinator came from the Directorate of Research Science and Technology of the Ministry of Education. In addition the Directorate of Research, Science and Technology designated technical and administrative support staff in the Biosafety Unit to assist in the implementation of the project.

The overall rating of Implementation Approach and Adaptive Management is **satisfactory**.

### 5.4.3 Stakeholder Participation and Public Awareness

99. The project document presented a thorough identification and analysis of the various stakeholders in the various activities of the project. The partners include governments, departments and inter-governmental organizations. The Namibian National Assembly, Cabinet National Coordinating Committee were identified as national decision makers in the project design and were consulted in the project implementation on relevant issues as well as empowered through tailor made awareness creation programmes.

100. The Ministry of Justice, Ministry of Agricultural and Forestry, Ministry of Environment and Tourism, Ministry of Health and Social Services and the Ministry of Trade and Industry were identified in the project design as responsible institutions for policies related to biosafety/biotechnology and during project implementation were represented on the NCC and actively participated in all relevant project activities. The Ministry of Justice provided the legal technical backstopping to assist in the development of the implementing regulatory instruments and their adoption.

101. The University of Namibia, Polytechnic of Namibia, Colleges of Education, the NIED, Research, Science and Technology related institutions were identified to play their critical roles in the project implementation. These institutions offered biosafety/biotechnology training activities at tertiary institutions and also provided technical backstopping in conducting biosafety research to inform the national policy agenda. NIED, in particular had the specific role of integrating biosafety issues in the school curriculum.

102. The consumer lobby groups, mass media associations, churches and farmers unions were identified to represent the interest of the public at large as well as the farmers who might be directly involved in the application of biotechnology products. During project implementation, all of these institutions were invited to consultations, training workshops, and seminars etc under the project as specific target groups.

The overall rating of Stakeholder Participation is **satisfactory**.

### 5.4.4 Learning, Communication and Outreach

103. In the project document, it was planned that a proper list server for communication would be established to disseminate information while constant communication through emails, telephone conversations, workshops, meetings etc would also be maintained. The process was designed to enable stakeholders to familiarize themselves with both the national and international information sharing facility, the BCH.

104. During the project implementation, a national public awareness strategy on modern biotechnology was developed to promote a conducive and interactive platform whereby the public can raise socio-economic, health and environmental, safety and regulatory concerns that are brought about by the use of modern biotechnology. Also developed were BCH training and public awareness materials and related data management protocols which were used for the training of the various stakeholders. The result is that Namibians became aware and knowledgeable on issues of biosafety/biotechnology in all the regions of the country. As shown in the project accomplishments above, a significant amount of effort went into public awareness activities and BCH data management activities related to the risk and the adverse impact of LMOs.

### 5.4.5 Country Ownership and Driven-ness

105. The participatory project approach in the design and development and also the implementation of the project established the process of ownership among national

stakeholders and hence got their active participation in the project activities. The integration of the budget of the Biosafety Unit and its Biosafety Council in the national budget of Namibia is a good output of the project.

106. The building of a new accommodation for the LMO detection laboratory under the NCRST and tapping on existing resource of other government departments such as the leveraging of the sampling equipment that already existed in the newly established Agro-Marketing and Trade Agency (AMTA) under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities and the NCRST at port of entry and for general surveillance, all manifest the two concepts of country ownership and driven-ness.

The rating for country ownership is **satisfactory**

#### **5.4.6 Financial Planning and Management**

107. The project's financial plan and a detailed budget (in UN Environment format) were presented in the Project Document. The resources in the budget came primarily from GEF Trust Fund and Government sources. The GEF Trust fund contribution is US\$ 510,000 with Government cash contribution of US\$ 353,900 and in-kind of US\$ 72,100; making the total cost of the project US\$ 936,000. Six formal project budget revisions were undertaken.

108. The first revision was done in August 2012 and the last in April 2017. The revisions to the budget were designed primarily reflect adjustments to project delivery schedule which was extended from the planned 36-month to 64-month and the phasing out of unspent balances over the project duration. The revisions were at no additional cost to the project and were authorized by the Task Manager and reflected in the project information sharing platform , Anubis, which ensured monitoring capacity, transparency and accountability.

109. All disbursement documents and signed periodic expenditure records were reflected in the Anubis. Also available on the Anubis were the acknowledgement of all the 9 cash advances covering the GEF Trust Fund contribution of US\$ 510,000 and the signed Final Financial Statement. In an interview with both the Funds Management Officer (FMO) and the Task Manager, it was established that both officers were satisfied with the regularity of periodic expenditure reports.

110. In general the planned funding target was met. However the expected co-finance contribution received was only approximately 52% of the expected target. The financial management table in Annex 1 presents an assessment of the management of the finances of the project. All routine quarterly expenditure reports were provided over the project duration. Key financial parameters were monitored quarterly to ensure cost-effective use of financial resources. However, a financial audit has yet to be made available in Anubis at the time of the evaluation. Interviews with the FMO did not reveal any communication problems with the project team.

The rating on Financial Planning and Management is **Moderately satisfactory**

#### **5.4.7 UN Environment Supervision and Backstopping**

111. The project document was signed in UN Environment 26 November 2011. One Task manager was responsible for implementing the various components of the project, among other projects, under the purview of the same Task Manager. The Task Manager provided oversight by UNEP that ensured that the project met UNEP and GEF policies and procedures. The Task Manager reviewed the quality of draft project outputs, provide feedback to the project partners, and established peer review procedures to ensure adequate quality of scientific and technical outputs and publications. The Evaluation Consultants held face-to-face discussion with the Task Manager in Nairobi and exchanged email messages during the conduct of this evaluation.

The central dedicated data management platform, Anubis, provided a reliable resource platform for project management. Reporting on the progress of project implementation has been done in Anubis over the period covered by this evaluation. Indeed, the evaluation of project delivery came mostly from Anubis sources. It is however noted that a more effective supervision could be achieved if the Task Manager's portfolio could be reduced. This is an area that requires UNEP management attention.

The rating on UN Environment Supervision and Backstopping is **satisfactory**

#### 5.4.8 Gender

112. The project document is silent on gender equality issues in data collection/analysis and policy formulation. To a question posed to the national project staff, the latter admitted the silence but indicated that in all activities, they have tried to ensure gender balance.

#### 5.4.9 Project monitoring & evaluation

113. Elements of a monitoring plan were included in the project document. Milestones seem adequate for measuring implementation progress. Anubis has served as the repository of a substantial portion of the information used in this report on the achievement of planned project outputs, the primary source of information on project monitoring.

#### *M & E Design*

114. The project followed UN Environment and GEF standard monitoring, reporting and evaluation processes and procedures. Reporting requirements and templates were an integral part of the UN Environment legal instrument signed by the Government of Namibia through the Namibia Biotechnology Alliance and UN Environment. The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators, along with the key deliverables and benchmarks, were the main tools for assessing project implementation progress and whether project results are being achieved.

115. Project supervision adopted an adaptive management approach. The Task Manager developed a project supervision plan at the inception of the project which was communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision was on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits, conservation and protection of biodiversity was assessed with the National Coordination Committee at agreed intervals. Project risks and assumptions were regularly monitored both by NABA and UN Environment. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation was reviewed and rated as part of the PIR. Key financial parameters were monitored quarterly to ensure cost-effective use of financial resources. It was the responsibility of the UN Environment Task Manager to monitor whether the agreed recommendations are being implemented. The current independent terminal evaluation was designed as part of the M&E at the end of project implementation managed by the Evaluation Office of UN Environment.

The rating on M&E design and arrangements is **satisfactory**

#### 5.4.10 Monitoring Implementation

116. As mentioned above, no significant changes were made to the results framework. Monitoring of project implementation was reported through the UN Environment's project reporting tool in the Anubis. This quarterly reporting was done in the automated data system, Anubis, which made available to the evaluators. Financial reports were also submitted through the Anubis. A mid-term management review took place on 31 October 2013. The review

included all parameters recommended by the GEF Evaluation Office for terminal evaluations and verified information gathered through the GEF tracking tools, as relevant. The review was carried out using a participatory approach whereby parties that may benefit or be affected by the project were consulted. However as a result of the long overrun of the duration of the project, 28 months, the final evaluation has been undertaken at a later date than planned.

117. Project risks and assumptions were regularly monitored both by project partners and UN Environment. Risk assessment and rating was an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation was also reviewed and rated as part of the PIR. A mid-term management review took place on 31 October 2013. The review included all parameters recommended by the GEF Evaluation Office for terminal evaluations and information gathered through the GEF tracking tools was verified. The review was carried out using a participatory approach whereby parties that may benefit or be affected by the project were consulted. Such parties were identified during the stakeholder analysis (see section 2.5 of the project document). The project Steering Committee also participated in the mid-term review and developed a management response to the evaluation recommendations along with an implementation plan. This was the responsibility of the UN Environment Task Manager who monitored whether the agreed recommendations are being implemented.

The rating on M & E implementation is **satisfactory**

#### **5.4.11 Project Reporting**

118. Monitoring of project implementation was reported through Project Implementation Reports (PIRs) the project reporting tool for GEF projects. All PIR reporting was duly done against output indicators and milestones. Financial reports including a final financial report prepared in March 2018 on the GEF grant was also submitted to UN Environment.

119. The project reports reviewed for this evaluation show that project performance reporting is done mostly at the output level. Development of capacity at the national level for example was often reported as training activities, workshops, seminars or meetings. Compliance with reporting requirements at the project level was adequate. Anubis provided easy access progress reports. Annual Performance Reports were reviewed and approved by the Project Steering Committee.

The rating on project Reporting is **satisfactory**

## 6 Conclusions and Recommendations

### 6.1 Conclusions

120. The project was designed to enable the Namibian National Biosafety system to: (i) Make informed decisions to import, develop and/or use Living Modified Organisms (LMOs); (ii) Devise tools to assess, evaluate and manage potential adverse effects associated with trans boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio- economic considerations; and (iii) Meet the international requirements of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety. The project was designed under strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to "Capacity Building for the implementation of the Cartagena Protocol on Biosafety". Article 22 of the Protocol requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of ensuring the effective implementation of the Protocol. The project is aligned with the UNEP Biennial Programme of Work (PoW) 2010-2011: Sub-Programme Environmental Governance with Expected Accomplishment (EA) B: The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced with Output 2.

121. After approximately five and a half years (64 months) of project implementation, the project was successful in enhancing and strengthening the main components of the Namibian national biosafety framework in response to the Cartagena Protocol on biosafety to the Convention on Biological Diversity. The project, as set up in the objectives, succeeded in putting in place a functioning administrative system that has operational procedures for handling applications for trans boundary movement, transit, handling and use of LMOs. The administrative system is backed by the Biosafety Law, 2006 with gazetted regulations and facilitating guidelines. A number of training workshops were conducted during the project period to enhance human resource capacity for risk assessment, evaluation and management, including socio economic considerations to ensure objective science-based decision making. Concurrently, procedures and processes were developed to facilitate the risk assessment process as depicted under the section on Delivery of Outputs

122. The project resulted in the establishment of an effective monitoring and enforcement system. There was also the training of staff and establishment of baseline data on LMOs that were already in Namibia before the implementation of the Biosafety law for regulatory purposes. Furthermore, a study was conducted on the biology and distribution of wild and indigenous plant varieties that are related to the GMOs currently in global circulation to help facilitate risk assessment and risk management processes in GMO decision making.

123. A functional National Biosafety Clearing House; <http://bch.ncrst.na/> was established and training workshops organized for members of the Biosafety Council and Biosafety Unit in its effective use as a biosafety data management facility and biosafety awareness creation tool. A permanent office, the Biosafety Unit was established for all biosafety activities with staff and its decision making body, the Biosafety Council. To ensure sustainability, the Biosafety Unit had its budget integrated into the national budget.

124. The project has enabled Namibia to enhance and strengthen capacity to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions. These legislative and judicial capacities will enable Namibia to implement its international environmental obligations through implementation of

policy tools. **The key driver of the transition for a fully function National Biosafety Framework, the Biosafety Act 2006, has been enacted.** The enacted law acts as the main driver for mainstreaming biosafety into the national development process and facilitated progress towards establishing a functional national biosafety framework in Namibia. Efforts are being made towards having the subsidiary legislations. The establishment of a Biosafety Unit which is financed from the national budget is also a key factor in driving the outcomes of the project toward impact. There is also the establishment of a partially functional LMO detection laboratory and a minimum number of technicians and scientists. The effective government commitment and support, collaboration among scientists and relevant agencies such as the customs department, public awareness, education and participation campaigns and CSO and NGO support are also established key drivers of the full impact of the project. The large number of training workshops organized for targeted stakeholders during the project was beneficial to creating awareness and building capacities such as in risk assessment, risk management and LMO monitoring in Namibia and will continue to contribute to establishing a fully functional national biosafety framework.

125. The 36 months duration estimated for project implementation was overly ambitious. This resulted in as many as six (6) extensions. The evaluation suggests a more realistic project duration of 60 months for such biosafety implementation projects. As noted in the findings of the evaluation, the project design did not strongly factor in gender considerations in project implementation. The evaluation suggests a stronger consideration of gender, as recommended in the Sustainable Development Goals, in future projects.

126. The findings of the evaluation also note the size of the portfolio of the Task Manager which does inure to effective technical supervision of the intricate components of supervising the implementation of national biosafety framework projects. The evaluation suggests that UN Environment management reviews the size of the Task Manager's portfolio or employs additional technical staff to augment the Biosafety Unit.

## 6.2 Recommendations

- [a]. As noted in the findings, **the evaluation recommends that the National Biotechnology Alliance through the Minister of Education, should strive to ensure that Namibia becomes a Party to Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, a key Supplementary Protocol to the Cartagena Protocol;**
- [b]. The large number of training workshops organized for targeted stakeholders during the project was beneficial to creating awareness and building capacities in risk assessment, risk management and LMO monitoring in Namibia. **The evaluation recommends that in order to sustain the momentum and maintain biosafety activities on an on-going basis, a holistic national biosafety capacity building strategy, with buy-in from government, needs to be developed;**
- [c]. In as much as some progress has been made towards establishing a fully functional LMO detection laboratory the evaluation notes that the critical mass of human resources for operating an LMO detection laboratory has not been attained. **The evaluation recommends that a concerted effort needs to be made by NABA and the Ministry of Education facilitated by Biosafety Unit to train or leverage on human resource from other scientific institutions to attain this critical mass;**
- [d]. Monitoring and evaluation of LMOs after the issuance of a permit is a critical measure. The evaluation recommends that the Biosafety Unit places more emphasis on capacity building in LMO Sampling including field trial inspection; contained use facility inspection by leveraging on staff from other scientific institutions such as the University of Namibia in addition to those of National Commission for Research, Science and Technology (NCRST);

- [e]. The national Biosafety Clearing House facilitated access to information, played a critical role in creating awareness, and acted as facility for communication among stakeholders during the project. **It is recommended that staff of the Biosafety Unit sustains the use of this facility as a central one for information exchange.**
- [f]. As noted in the findings of the evaluation, the project design did not strongly factor in gender considerations in project implementation. **The evaluation suggests a stronger consideration of gender, as recommended in the Sustainable Development Goals, in future projects.**

### 6.3 Lessons Learned

- [a]. The enactment of the Biosafety Act 2006 before the design and implementation of the project proved to have created a congenial facilitating environment for the project. The law acted as the main driver for mainstreaming biosafety into the national development process and facilitated the establishing a functional national biosafety framework in Namibia. The evaluation suggests that Parties to the Cartagena Protocol on Biosafety emulate this arrangement before embarking on the design and implementation of biosafety projects;
- [b]. The integration of the budget of the Biosafety Unit into the national budget serves as a means for financial sustainability of biosafety activities in Namibia. This evaluation notes that countries striving to establish functional biosafety frameworks on permanent basis need to pursue this path in attaining financial sustainability;
- [c]. The 36 months duration estimated for project duration was over ambitious. This resulted in as much as six (6) extensions. **A more realistic project duration of 60 months for similar biosafety implementation projects is practical.**
- [d]. **The ANUBIS project information sharing platform served as a good tool for project implementation and management.** The evaluation highly envisages the tool as playing a highly prominent role in future projects as an implementation facilitating tool.

The findings of the evaluation also note the size of the portfolio of the Task Manager which does inure to effective technical supervision of the intricate components of supervising implementation of national biosafety frameworks. The evaluation suggests that UN Environment management reviews the size of the Task Manager’s portfolio or employs additional technical staff to augment the Biosafety Unit of UN Environment.

### 6.4 The summary of ratings for each criterion

**Table 5: Summary of ratings for each criterion in the terminal evaluation of the project**

Criterion	Summary Assessment	Rating
Attainment of project objectives and results	<p>The project was to enable the Namibian national Biosafety system to: (i) Make informed decisions to import, develop and/or use Living Modified Organisms (LMOs); (ii) Devise tools to assess, evaluate and manage potential adverse effects associated with trans boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio- economic considerations; and (iii) Meet the international requirements of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety.</p> <p>The project outputs have resulted in putting in place a functioning administrative system that has operational procedures for handling</p>	S

Criterion	Summary Assessment	Rating
	<p>applications for LMO contained use, field trial, environmental release permit and for placing on the market; enabled a review of all international instruments that Namibia is obligated to be aligned to the national biosafety implementation instruments to the CPB through the Biosafety Act and its regulations; strengthened the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; Established an effective monitoring and enforcement system and enhanced an information sharing, public engagement, collaborative linkages and networking.</p>	
Effectiveness	<p>In approximately five and a half years (64 months) of project implementation, the project enhanced and strengthened the following essential components and functioning of the Namibian national biosafety framework in response to the Cartagena Protocol on biosafety to the Convention on Biological Diversity. (i) Establishment and strengthening of the Administrative system; (ii) Harmonization and implementable national biosafety instruments: (iii) Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; (iv) Establishment of an effective and efficient monitoring and enforcement system; (v) Information sharing, public engagement, collaborative linkages and networking and (vi) Project management mechanisms. Key stakeholders have developed sustaining collaborative linkages to ensure sustainability.</p>	S
Relevance	<p>This project was derived from and is consistent with, on the global front, with the GEF Strategy for financing Biosafety under the Biodiversity Focal Area. It was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to "Capacity Building for the implementation of the Cartagena Protocol on Biosafety". Article 22 of the Cartagena Protocol on Biosafety requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of ensuring the effective implementation of the Protocol. In doing so, Parties are required to take fully into account the needs of developing country Parties and Parties with economies in transition for financial resources and access to and transfer of technology and know-how. In this regard the project translates the objectives of the GEF Strategy for financing Biosafety into a case specific or thematic issue intervention in Namibia</p>	HS
Efficiency	<p>To a significant extent, the project built on tools and methodologies that have been developed since 1997, when Namibia participated in a biosafety pilot project, supported by UN Environment/GEF, which developed a draft Namibian national biosafety framework (NBF). The development phase project created awareness among relevant stakeholders on the legal, policy and scientific/technical aspects of biosafety in the NBF development phase. The development phase project also developed some capacity in the areas of risk assessment, management and monitoring and public participation in the decision making processes. The project also tapped on existing resource of other government departments, policy makers and officials who implement national policies and laws, technical training institutions, teacher training colleges which served as important vehicles for biosafety awareness creation and dissemination of biosafety awareness materials and farmers during project implementation. Local human resource has been used in several training workshops that were</p>	S

Criterion	Summary Assessment	Rating
	undertaken during the project such as the academic staff from the University of Namibia.	
Sustainability of project outcomes		S
Financial resources	The availability of financial resources is required to transform policy, plans, regulations and skills into action. The government's commitment to provide a budget line for the biosafety secretariat in the national budget is a positive sign towards sustainability.	HS
Socio-political	An essential component of socio-political sustainability relates to ownership by state and non-state actors. The project created an enabling environment for creating awareness and building capacity at the national level. Government agencies / institutions are primary targets of the capacity building efforts. The partnership formed among government institutions, with their various mandates, in pursuit of maximizing use of local resources provides the driving force for action. Collaboration with high level political support from governments indeed provides a measure of sustainability because the political will is there to continue work towards the trans-boundary movement, transit, handling and use of LMOs. Ownership, awareness and capacity built within government agencies and quasi-government are likely to continue to shape attitudes and behaviours on conservation and protection of biodiversity in the long term.	S
Institutional framework	The institutional sustainability revolves around the biosafety secretariat with its GMO decision making body of the Biosafety Council. The operational elements being a functioning regulatory and administrative system for the implementation of the biosafety act, the Biosafety law and its implementing regulations, on-going capacity building activities on the risk assessment and management issues, an effective and efficient monitoring and enforcement system and an established information sharing system with mechanism for public engagement and collaboration. This arrangement is likely to be sustained in the long term.	S
Environmental sustainability	This dimension addresses factors, positive or negative, that can influence the future flow of project benefits. It assesses project outputs or higher level results that are likely to affect the environment which, in turn, might affect sustainability of benefits. The preparedness of Namibia for the potential adverse effect of GMOs on biodiversity is an environmental benefit in itself. In the implementation of the project, the awareness created on both the potential benefits and adverse effects of GMO on biodiversity also contributes to promoting environmental benefit.	S
Catalytic role (and replication)	The potential for replication of activities undertaken by the project exists. There is a sizeable number of developing countries that can benefit from the lessons learned from the project for the future design of their biosafety implementation projects. It is noted that the enactment of a biosafety law prior to the project design and implementation facilitates the processes that leads to putting in place a functional biosafety framework. The law also galvanizes sectorial contribution and national resource leveraging for the project and lays the clear roles of government department to the NBF implementation.  The lessons learned would be of benefit to the developing countries in general but to the SADC and Africa region in particular.	S

Criterion	Summary Assessment	Rating
Likelihood of Impact	<p>The project provided most of the indicators of impact including a legal regime comprising the biosafety law and its implementing regulations, an administration system to handle requests for permits for science based decision making in the import, development and use of GMOs with its enhanced institutional and human capacity, a national monitoring system for GMOs and an established information sharing system with mechanism for public engagement and collaboration.</p> <p>The project has enhanced the preparedness of Namibia by helping to devise tools to assess, evaluate and manage potential adverse effects associated with transboundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio-economic considerations.</p>	S
Stakeholder involvement	<p>The project document presented a thorough identification and analysis of the various stakeholders in the various activities of the project. The partners include governments, departments and inter-governmental organizations. The project has successfully engaged the category and number of stakeholders identified in the project document.</p>	S
Country ownership/driven-ness	<p>Although there was very little discussion of country ownership and driven-ness in the project document, most actions and activities bore elements of the above two issues. For example, the participatory project approach in the design and development and also the implementation of the project is adopted to inculcate ownership by all national stakeholders and hence get their active participation in the project activities. The integration of the budget of the Biosafety Unit and its Biosafety council in the national budget of Namibia was good results of the project. The building of a new accommodation for the LMO detection laboratory under the NCRST and tapping on existing resource of other government departments such as leveraging on the sampling equipment that already existed in the newly established agency, Agro-Marketing and Trade Agency (AMTA) under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities and the NCRST at port of entry and for general surveillance, all manifest the two concepts.</p>	S
Achievement of outputs and activities	<p>The project enhanced and strengthened the following essential components of any functioning national biosafety framework in response to the Cartagena Protocol on biosafety to Convention on Biological Diversity. (i) Establishment and strengthening of the Administrative system; (ii) Harmonization and implementable national biosafety instruments; (iii) Strengthening the national human capacity for risk assessment, evaluation and management, including socio-economic considerations, to ensure objective decision making; (iv) Establishment of an effective and efficient monitoring and enforcement system; (v) Information sharing, public engagement, collaborative linkages and networking and (vi) Project management mechanisms. Key stakeholders have developed sustaining collaborative linkages to ensure sustainability</p>	S

Criterion	Summary Assessment	Rating
Preparation and readiness	The project document was clearly drafted and objectives as well as results to be achieved clearly defined. Roles and responsibilities of various stakeholders well defined and the implementation approach reasonably well defined.	S
Implementation approach	The participatory project approach was adopted in the design and development of the project and also the implementation. It was noted as essential to inculcate ownership of all national stakeholders and thus ensuring that stakeholders actively participation in the project activities. This was view not only to ensure the attainment of the project objectives but was also to aid in the biosafety awareness creation and public education. Project supervision also adopted an adaptive management approach. The Task Manager developed a project supervision plan at the inception of the project which was communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision was on outcome monitoring including project financial management and implementation monitoring.	S
Financial planning and management	<p>The project's financial plan and a detailed budget (in UN Environment format) were presented in the Project Document. The resources in the budget came primarily from GEF Trust Fund and Government sources. The GEF Trust fund contribution is US\$ 510,000 with Government cash contribution of US\$ 353,900 and in-kind of US\$ 72,100; making the total cost of the project US\$ 936,000. Six formal project budget revisions were undertaken. The first revision was done in August 2012 and the last in April 2017. The revisions to the budget were designed primarily to adjust to project activity delivery in which extended from the planned 36-month project to 64-month project duration. In general the planned funding target had been met however the expected cofinance contribution has been below target at approximately 49% of the expected.</p> <p>All routine signed quarterly expenditure reports have been provided during the project duration. However, a financial audit was yet to be available in Anubis at the time of the evaluation. The summary of financial status is available. Interviews with the FMO did not reveal any communication problems with the project team.</p>	MS
Monitoring and Evaluation	The M & E design is according to the requirements of UN Environment. The logical framework has SMART indicators. M & E activities were conducted throughout the project. However, Anubis served as the project platform for reporting, monitoring and evaluation adequately while other sources provided information to supplement those in the Anubis on project accomplishments	S
M & E Design	The M & E design satisfied the requirements of UN Environment. Project supervision adopted an adaptive management approach. The Task Manager developed a project supervision plan at the inception of the project which was communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision was on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits, conservation and protection of biodiversity was assessed with the National Coordination Committee at agreed intervals. Project risks and	S

Criterion	Summary Assessment	Rating
	assumptions will be regularly monitored both by NABA and UN Environment. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation was reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources. It was the responsibility of the UN Environment Task Manager to monitor whether the agreed recommendations are being implemented. The current independent terminal evaluation was designed as part of the M&E at the end of project implementation managed by the Evaluation and Oversight Unit (EOU) of UN Environment.	
M & E Implementation	Monitoring of project implementation was reported through the UN Environment's project reporting tool in the Anubis. This quarterly reporting was done in the automated data system, Anubis, which made available to the evaluators. Financial reports were also submitted through the Anubis. A mid-term management review or evaluation took place on 31 October 2015. The review will include all parameters recommended by the GEF Evaluation Office for terminal evaluations and verified information gathered through the GEF tracking tools, as relevant. The review was carried out using a participatory approach whereby parties that may benefit or be affected by the project were consulted. However as a result of the long overrun of the duration of the project, 24 months, the final evaluation has been undertaken at a later date than planned.	S
Budgeting and funding for M & E activities	The Project allocated funds for evaluation activities. However, there was no clear distinction made between monitoring for adaptive project management and monitoring for reporting purposes and resources to enable adequate data collection and reporting.	S
UN Environment supervision and backstopping	<p>In general, UN Environment Supervision was adequate. The project document was signed in UN Environment 26 November 2011. One Task manager was responsible for implementing the various components of the project, among other projects, under the purview of the same Task Manager. The Task Manager provided the oversight by UN Environment that ensured that the project met UN Environment and GEF policies and procedures. The Task Manager reviewed the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications. The Evaluation Consultants held face-to-face discussion with the Task Manager in Nairobi and exchanged email messages during the conduct of this evaluation. The central dedicated data management platform, Anubis, provided a reliable resource platform for project management. Reporting on the progress of project implementation has been done in Anubis over the period covered by this evaluation. Indeed, the evaluation of project delivery came mostly from Anubis sources.</p> <p>It is however noted that a more effective supervision could be achieved if the Task Manager's portfolio could be reduced. This is an area that requires UN Environment management attention.</p>	S
Overall Rating	<b>The project has enabled Namibia to enhance and strengthen capacity to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions.</b>	S

## Annexes

### Annex 1. Financial Tables

**Table 6: Co-financing Table (GEF Projects only)**

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			353.9	212.3					
- Loans									
- Credits									
- Equity investments									
- In-kind support			72.1						
- Other (*)			17.7	17.7	000				
-									
-									
<b>Totals</b>			443.7	230.0					

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

**Table 7: Financial Management Table**

NON-GEF AND GEF PROJECTS			
Financial management components:		Rating	Evidence/ Comments
<b>1. Questions relating to financial management across the life of the project:</b>			
Compliance with financial requirements and procedures of UN Environment and all funding partners (including procurement rules, financial reporting and audit reports etc)		HS:HU	S
Timeliness of project financial reports and audits		HS:HU	S
Quality of project financial reports and audits		HS:HU	S
Contact/communication between the PM/TM & FMO		HS:HU	S
PM/TM & FMO responsiveness to addressing and resolving financial issues		HS:HU	S
<b>2. Questions relating to financial information provided during the evaluation:</b>			
Provision of key documents to the evaluator (based on the provision of A-F below)		HS:HU	S
A.	An up-to-date 'Co-financing and Project Cost's table	Y/N	Y
B.	A summary report on the project's annual financial expenditures during the life of the project.	Y/N	Y
C.	Financial documents from Mid-Term Evaluation/Review (where appropriate)	Y/N	Y
D.	All relevant project legal agreements (e.g. SSFA, PCA, ICA) – where appropriate	Y/N	Y
E.	Associated financial reports for legal agreements (where applicable)	Y/N	Y
F.	Copies of any completed audits	Y/N	N
Demonstrated knowledge by the PM/TM & FMO of partner financial expenditure		HS:HU	S
PM/TM & FMO responsiveness to financial requests during the evaluation process		HS:HU	S
<b>Overall rating</b>			<b>S</b>

## Annex 2. Documentation list

- UN Environment/GEF Project: NAMIBIA: BS Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety;
- Inception Workshop on the Implementation of the Biosafety Act and the Cartagena Protocol on Biosafety in Namibia, 4 August 2011, GZ Centre, Windhoek;
- Biosafety Regulations, Biosafety Act, 2006. (2016);

### Output Documents of the Project

- Guidelines for Contained Use of Genetically Modified Organisms under the Biosafety Act, 2006. (2016)
- Guidelines for Conducting Field Trials under the Biosafety Act, 2006. (2016)
- Guidelines for Environmental Release of Genetically Modified Organisms Under the Biosafety Act, 2006. (2016)
- Guidelines for Placing Genetically Modified Food or Feed on The Market Under the Biosafety Act, 2006. (2016)
- Public Notification Guidelines for Activities Relating to Genetically Modified Organisms (GMOs) and GMO products in Namibia. (2016)
- ABNE Newsletter: Training Workshop on Biotechnology Products Application Evaluation in Namibia July - September 2017
- Brochure: Biosafety & Biotechnology in Namibia
- Workshop Report: Biosafety workshop "Implementing a fit for purpose GMO regulatory system in Namibia"
- Workshop Programme & Attendance Register: Biosafety Administration & Decision Making: 12 July 2016

### Mandatory Documents

- Mid-term Review of the UN Environment/GEF Project: Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety;
- Project Terminal Report
- Project progress reports, PIRs, including financial reports submitted
- Project supervision plan, with associated budget
- Half-Yearly Progress Reports 2011- 2017
- Supervision mission reports
- National Coordination Committee meeting documents, including agendas, meeting minutes, and any summary reports

### Annex 3 – Interviewee List

N°	NAME	POSITION	INSTITUTION	CONTACTS
1	Dr. Martha Kandawa Schulz	National Project Coordinator/Chair Biosafety Council	UNAM/NABA	kschulz@unam.na
2	Mr. Paulus Mungeyi	Project Technical and Administrative Assistant	Biosafety Unit Staff	pmungeyi@ncrst.na
3	Ms. Lavinia Mbongo	Inspector	Biosafety Unit Staff	lmbongo@ncrst.na
4	Mr. S. Shikongo	Director	Ministry of Environment and Tourism	sts@met.na s_shikongo@hotmail.com

## Annex 4: Evaluation Schedule

Phase	Activities & Deliverables	Proposed timeline (2017-2018)
Inception	Start-up teleconference	October 18, 2017
	Initial documentation review	October 18-30
	Initial consultative interviews with UN ENVIRONMENT Staff	November 1-4
	Draft Inception report	November 13
	(Internally) Finalized Inception report	November 20
Data Collection and Analysis	In-depth documentation review	November - December
	Survey Launch	as necessary
	Interviews in Swaziland and Namibia	November 30 - 20
	Telephone Interviews (where needed)	November 20- Dec 30
	Data analysis and triangulation	November – January
	Draft Report shared for comments within UN ENVIRONMENT	February 30, 2018
	UN ENVIRONMENT comments due	February 15, 2018
Final Report	February 28, 2018	

## Annex 5. UN Environment Assessment of project design quality (PDQ) - Namibia

1. This template is intended for use during the inception phase of an evaluation or review. It supports an assessment of the initial design of a project. (For Terminal Evaluations/Reviews where a revised version of the project was approved based on a Mid-Term Evaluation/Review, then the revised project design forms the basis of this assessment). The purpose of this template is to stimulate thinking, based on a review of project design documentation that will strengthen: a) the development of useful and insightful evaluation questions and b) the development of a robust causal pathway, assumptions and drivers in the reconstructed Theory of Change. Where substantive and significant weaknesses are apparent at the project design stage, these may either be potential areas for further questioning, may have stimulated adaptive management or may have limited the overall effectiveness of the intervention.
2. Key sources of information for completing this assessment include the approved project document (ProDoc), the Project Review Committee (PRC) review sheet, the project logical framework or Theory of Change (TOC) at design stage and, where appropriate, a revised project design following a Mid-Term Evaluation/Review. (For GEF projects the GEFSEC reviews sheet and UN Environment response sheet should also be reviewed).
3. The ratings should be established across a six-point scale (see below) for each section and aggregated to determine an overall rating for the Quality of Project Design. Note that this score, combined with other information gathered during the data collection process, later informs the final evaluation rating under *Factors Affecting Project Performance: Preparation and Readiness*.

A.	Nature of the External Context <sup>3</sup>		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating: (see footnotes 2 & 3)
1	Does the project face an unusually challenging operational environment that is likely to negatively affect project performance?	i)Ongoing/high likelihood of conflict?	NO		
		ii)Ongoing/high likelihood of natural disaster?	NO		
		iii)Ongoing/high likelihood of change in national government?	NO		
B.	Project Preparation		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating: (see footnote 2)
2	Does the project document entail a clear and adequate problem analysis?		YES	The lack of capacity to implement the national biosafety frameworks in accordance with the Namibia Biosafety Act was clearly identified	
3	Does the project document entail a clear and adequate situation analysis?		YES	Opportunities and Constraints were identified through earlier projects and stakeholders	
4	Does the project document include a clear and adequate stakeholder analysis?		YES	Stakeholder analysis is presented in a detailed manner	
5	If yes to Q4: Does the project document provide a description of stakeholder consultation during		YES	Reference to numerous stakeholders consultations were indicated	

<sup>3</sup> For Nature of External Context the 6-point rating scale is changed to: Highly Favourable = 1, Favourable = 2, Moderately Favourable = 3, Moderately Unfavourable = 4, Unfavourable = 5 and Highly Unfavourable = 6. (*Note that this is a reversed scale*)

	project design process? (If yes, were any key groups overlooked: government, private sector, civil society and those who will potentially be negatively affected)			in the documents	
6	Does the project document identify concerns with respect to human rights, including in relation to sustainable development?	i) Sustainable development in terms of integrated approach to human/natural systems	NO		
		ii) Gender	NO		
		iii) Indigenous peoples	NO		
C	Strategic Relevance		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
7	Is the project document clear in terms of its alignment and relevance to:	i) UN Environment MTS and PoW	NO		
		ii) UN Environment /GEF/Donor strategic priorities (including Bali Strategic Plan and South-South Cooperation)	Yes	Project complies with GEF financing Biosafety under the Biodiversity Focal Area, specifically strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area Strategy.	
		iii) Regional, sub-regional and national environmental priorities?	YES	Regional collaboration and harmonisation of methods of assessment and testing through the relevant SADC protocols	
		iv. Complementarity with other interventions	YES	The project emphasized the need to ensure sustainable livelihoods by conserving and promoting the country's biodiversity resources.	
D	Intended Results and Causality		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
8	Is there a clearly presented Theory of Change?		NO		
9	Are the causal pathways from project outputs (goods and services) through outcomes (changes in stakeholder behaviour) towards impacts (long term, collective change of state) clearly and convincingly described in either the logframe or the TOC?		YES	A logframe was presented that exhibits activity outputs.	
10	Are impact drivers and assumptions clearly described for each key causal pathway?		YES	Partially included in the project document on critical factors	
11	Are the roles of key actors and stakeholders clearly described for each key causal pathway?		YES	The roles are described in a generic way and not linked definitively to the key causal pathways	
12	Are the outcomes realistic with respect to the timeframe and scale of the intervention?		YES	Outcomes seemed realistic to realize project results.	
E	Logical Framework and Monitoring		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
13	Does the logical framework	i) Capture the key elements of the Theory of Change/ intervention logic for the project?	YES	The logical framework was well designed but limited to realizing project outputs	
		ii) Have 'SMART' indicators for outputs?	YES	The indicators, for the most part were SMART.	
		ii) Have 'SMART' indicators for outcomes?	YES	Expected outcomes were partially set.	
14	Is there baseline information in relation to key performance indicators?		YES	The baseline data have rather a weak link to key performance indicators	
15	Has the desired level of achievement (targets) been specified for indicators of outputs and		YES	Targets were set for the respective indicators	

	outcomes?		
16	Are the milestones in the monitoring plan appropriate and sufficient to track progress and foster management towards outputs and outcomes?	YES	The milestones seem adequate for tracking project progress
17	Have responsibilities for monitoring activities been made clear?	YES	Responsibilities for monitoring were clear stated in the monitoring plan
18	Has a budget been allocated for monitoring project progress?	NO	Monitoring is factored into the project as an integral part of project activities.
19	Is the workplan clear, adequate and realistic? (eg. Adequate time between capacity building and take up etc)	YES	Work plan is set out very clearly and seemed to have been carefully gone through thought process
F	Governance and Supervision Arrangements	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)
20	Is the project governance and supervision model comprehensive, clear and appropriate? ( <i>Steering Committee, partner consultations etc.</i> )	YES	Project Governance and supervision model was clear. While there was no narrative to explain how it was going to operate, the diagram was quite clear
21	Are roles and responsibilities within UN Environment clearly defined?	YES	There were clear roles and responsibilities set
G	Partnerships	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)
22	Have the capacities of partners been adequately assessed?	YES	Reasonable assessment of capacities of partners was made.
23	Are the roles and responsibilities of external partners properly specified and appropriate to their capacities?	YES	Roles and responsibilities of external partners were noted and clearly described.
H	Learning, Communication and Outreach	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)
24	Does the project have a clear and adequate knowledge management approach?	YES	A knowledge management approach in the form of Anubis was established.
25	Has the project identified appropriate methods for communication with key stakeholders during the project life? If yes, do the plans build on an analysis of existing communication channels and networks used by key stakeholders?	YES	There is clearly stakeholder analysis and partners and their roles at the country level were clearly defined relative to UN Environment responsibilities
26	Are plans in place for dissemination of results and lesson sharing at the end of the project? <i>If yes, do they build on an analysis of existing communication channels and networks?</i>	YES	Anubis and the Biosafety Clearing House facilities were identified for the dissemination of results and lessons learned.
I	Financial Planning / Budgeting	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)
27	Are there any obvious deficiencies in the budgets / financial planning at design stage? ( <i>coherence of the budget, do figures add up etc.</i> )	NO	Budget was fully been secured for project components at the start of the project
28	Is the resource mobilization strategy reasonable/realistic? (E.g. If the expectations are over-ambitious the delivery of the project outcomes may be undermined or if under-ambitious may lead to repeated no cost extensions)	NO	Specific resource mobilization from the Government has been identified
J	Efficiency	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)

29	Has the project been appropriately designed/adapted in relation to the duration and/or levels of secured funding?	YES	Funding has been secured from the GEF and Government	
30	Does the project design 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?	YES	The project built on the outputs of the earlier UN Environment/GEF development project	
31	Does the project document refer to any value for money strategies (ie increasing economy, efficiency and/or cost-effectiveness)?	NO	No value for money analysis was undertaken	
32	Has the project been extended beyond its original end date? (If yes, explore the reasons for delays and no-cost extensions during the evaluation)	YES	Revisions were done to extend duration of the project in order to complete activities	
K	Risk identification and Social Safeguards	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
33	Are risks appropriately identified in both the TOC/logic framework and the risk table? (If no, include key assumptions in reconstructed TOC)	YES	A risk analysis was undertaken and risk levels were identified in the project document	
34	Are potentially negative environmental, economic and social impacts of the project identified and is the mitigation strategy adequate? (consider unintended impacts)	YES	There was an indication of socioeconomic contribution and poverty alleviation potential of the project was described. The project itself was designed to contribute to the protection of human health and the environment.	
35	Does the project have adequate mechanisms to reduce its negative environmental foot-print? (including in relation to project management)	YES	The main aim of the project is to minimize negative environmental effects	
L	Sustainability / Replication and Catalytic Effects	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
36	Was there a credible sustainability strategy at design stage?	YES	Sustainability strategy was not articulated fully but arrangement had been put in place legally and institution frameworks established.	
37	Does the project design include an appropriate exit strategy?	YES	A project closing arrangement was put in place	
38	Does the project design present strategies to promote/support scaling up, replication and/or catalytic action?	YES	Arrangement had been put in place to promote scaling up of results	
39	Did the design address any/all of the following: socio-political, financial, institutional and environmental sustainability issues?	YES	The project design addressed to a reasonable extent socio-political, financial, institutional and environmental sustainability issues.	
M	Identified Project Design Weaknesses/Gaps	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
40	Were recommendations made by the PRC adopted in the final project design? If no, what were the critical issues raised by PRC that were not addressed.	YES	Recommendations made by the PCR were adopted in the project final design phase.	
41	Were there any critical issues not flagged by PRC?	NO		

**CALCULATING THE OVERALL PROJECT DESIGN QUALITY SCORE**

(An excel file is available to support the calculation of the overall PDQ rating)

	SECTION	RATING (1-6)	WEIGHTING	TOTAL (Rating x Weighting)
A	Nature of the External Context	3	0.4	1.2
B	Project Preparation	6	1.2	7.2
C	Strategic Relevance	5	0.8	4.0

D	Intended Results and Causality	5	1.6	8.0
E	Logical Framework and Monitoring	4	0.8	3.2
F	Governance and Supervision Arrangements	6	0.4	2.4
G	Partnerships	5	0.8	4.0
H	Learning, Communication and Outreach	6	0.4	2.4
I	Financial Planning / Budgeting	6	0.4	2.4
J	Efficiency	5	0.8	4.0
K	Risk identification and Social Safeguards	5	0.8	4.0
L	Sustainability / Replication and Catalytic Effects	6	1.2	7.2
M	Identified Project Design Weaknesses/Gaps	6	0.4	2.4
			TOTAL SCORE (Sum Totals)	52.4
			<b>AVG SCORE (Divide Total Score by 13)</b>	<b>4.03 – Moderately Satisfactory</b>

1 (Highly Unsatisfactory)	< 1.83	4 (Moderately Satisfactory)	>=3.5 <=4.33
2 (Unsatisfactory)	>= 1.83 < 2.66	5 (Satisfactory)	>4.33 <= 5.16
3 (Moderately Unsatisfactory)	>=2.66 <3.5	6 (Highly Satisfactory)	> 5.16

## Annex 6: List of Project Personnel and Partners

	Namibia Biosafety Council Members	
Dr. Martha Kandawa Schulz	Chair	kschulz@unam.na
Mr. Jakobus Etuna Josua	Member	jeljoshua@iway.na / jjosua@me.com
Dr. Ronnie Bock	Member	rbock@unam.na
Ms. Carololine Garus Oas	Member	carolinegarusoas@web.com.na/ caroline808dk@yahoo.com
Mr. Teofilus Nghitila	Member	tnghitila@yahoo.com
Dr. Herbert Schneider	Member	herbert@farmhabis.com
Mr. Simana Chimana	Member	Simana.Chimana@gmail.com
	Biosafety Unit Staff	
Mr. Vincent Nowaseb		vnowaseb@ncrst.na
Mr. Paulus Mungeyi		pmungeyi@ncrst.na
Ms. Mwangala Nalisa		mnalisa@ncrst.na
Ms. Lavinia Mbongo	Inspector	lmbongo@ncrst.na
Ms. Hilde Amputu		hamputu@ncrst.na

## **Annex 7: Brief Resumes of the Consultants**

### **Segbedzi NORGBEY, Ph. D. (Lead Consultant)**

As Chief Executive Officer of the Sustainable Development Group (SDG) International, I coordinate a group of international professionals to provide cutting edge professional and advisory services to governments, intergovernmental organizations and NGOs on development issues in the fields of Agriculture, Environment and Development, Biodiversity/Biosafety, Gender Studies, Science and Technology Education with specific focus on Program Planning, Research, Program/Project Management, Monitoring and Evaluation.

For about 12 years, I directed and managed the financial and human resources of the Evaluation Office in the UN Environment. I provided intellectual leadership and guidance to the Evaluation Office, led the development of UN Environment's Evaluation policy and provided strategic guidance in its implementation. I developed monitoring and evaluation plans and conducted independent evaluations of UNEP's programs including those aimed at providing strategic input into program planning. The Evaluation Synthesis reports I have prepared for the Governing Council have been commended in the UN Secretary General's report to the General Assembly. I have led the development of tools, guidelines, processes and methods for undertaking monitoring and evaluations, managed the work of a large number of independent consultants and promoted partnership with other UN systems organizations, through effective participation in the United Nations Evaluation Group and bilaterally by serving on Evaluation Management Groups in UNDP, GEF, UNEP, and UN Habitat.

Prior to my appointment as Head of Evaluation, I worked as Senior Program Officer responsible for coordinating, project design, formulation, review and approval methodologies, guidelines and procedures to increase the efficiency of the respective process, especially by making them consistent with project design criteria used by the Global Environmental Facility (GEF) and donors. Further, I ensured that the processes correspond with UNEP's requirements for transparency and oversight. As Secretary to UNEP's Project Approval Group and the Technical Peer Review Committee, I have done the necessary preparatory work for meetings of the committees and organized and conducted numerous meetings. I have reviewed numerous projects and provided guidance to program/ project managers on project design and formulation.

Earlier in my career I worked for The Michigan Department of Environmental Quality for 14 years to conduct assessments of hazardous waste sites and manage brownfields programs.

## **Charles M. GBEDEMAH (Supporting Consultant)**

### ***Education***

Master of Philosophy Degree in Mycology, University of Ghana, Legon (1991)

***Core skills:*** Includes Biosafety programme design/evaluation, Science programme formulation, technical support, policy development and Capacity building, Institutional Capacity Assessments, Institutional Functional review.

### ***Professional experience***

- May 2016 – February 2017, Director, Science and Policy Support Division, Secretariat of the Convention on Biological Diversity (CBD), Montreal, Canada;
- May 2014 – December 2016, Lead Director, Functional Review of the Secretariat of the Convention on Biological Diversity (CBD), Montreal, Canada;
- January 2007 – April 2016, Director, Biosafety Division, Secretariat of the Convention on Biological Diversity (CBD), Montreal, Canada;
- June 2001 – December 2006: Regional Coordinator for Africa, Biosafety, UNEP/GEF Coordination Office, Nairobi, Kenya;
- January 1995 – June 2006: Africa Project Scientific Consultant, Ghana Atomic Energy Commission, Accra, Ghana;
- January 1979 – January 1995: Scientific Officer, Ghana Atomic Energy Commission, Accra, Ghana.

## Annex 8: Evaluation Brief

### **Main Evaluation Findings, Lessons Learned, and Recommendations from the project: Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety - Namibia**

The project, Institutional Capacity Building towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety – Namibia, was designed to build capacity to implement the Biosafety Act of 2006 and meet Namibia’s international obligations under the Cartagena Protocol on Biosafety. The project was implemented between November 2011 and March 2017 with the following specific objectives:

- To build the capacity of Namibia to enable it implement the Cartagena Protocol on Biosafety, a subsidiary international instrument to the Convention on Biological diversity (CBD), both of which Namibia is a Party;
- To build capacity to implement an objectively informed national biosafety framework based on the Biosafety Act 2006. The National Biosafety Framework consists of a national policy, the Biosafety Act, an administrative system, a decision-making system and a monitoring and inspection mechanism.
- To build institutional capacity and create mechanisms for information sharing in relation to safe use of modern biotechnology and related research development interventions for the advancement of national development objectives

**Strategic Relevance of the Project:** This project was specifically aligned with the strategic objective 3 and strategic programme 6 of the Biodiversity Focal Area strategy with regard to “Capacity Building for the implementation of the Cartagena Protocol on Biosafety”. translates the objectives of the GEF Strategy for financing Biosafety into a case specific or thematic issue intervention in Namibia. The project was aligned with the UNEP Biennial Programme of Work (PoW) 2010-2011: Sub-Programme Environmental Governance with Expected Accomplishment (EA) B.

**Effectiveness:** In approximately five and a half years (64 months) of project implementation, the project has enhanced and strengthened the following essential components and functioning of the

Namibian national biosafety framework in response to the Cartagena Protocol on biosafety.

**Likelihood of Impact:** The project enhanced the preparedness of Namibia towards regulating LMOs by helping to devise tools to assess, evaluate and manage potential adverse effects associated with trans-boundary movement, transit, handling and use of LMOs on the conservation and sustainable use of biological diversity taking into account risks to human health as well as socio-economic considerations.

**Efficiency:** The project also tapped on the existing resource of other government departments, policy makers and officials who implement national policies and laws, technical training institutions, teacher training colleges which served as important vehicles for biosafety awareness creation and dissemination of biosafety awareness materials and farmers during project implementation. Local human resources were used in several training workshops undertaken during project implementation such as the academic staff from the University of Namibia.

**Project Planning and Design:** The project document identified critical success factors which were general in nature and not associated with each causal pathway. These were however later refined during project implementation period. Assumptions were however clearly stated. At the time of project approval, 60 per cent of baseline data was available. Baseline data gaps such as biosafety/biotechnology awareness levels and biosafety legal capacity in Namibia were addressed during project implementation as an integral part of the project activities, making it possible to undertake an impact evaluation of the project.

**Project Management:** A participatory project approach was adopted in the design and development of the project as well as in its implementation. Project supervision also adopted an adaptive management approach. Progress vis-à-vis delivering the agreed project global environmental benefits was assessed with the Steering Committee at agreed intervals.

**Project Monitoring, Reporting and Evaluation:** A monitoring plan was included in the project document. A mid-term management review or evaluation took place on 31 October 2013. The review included all parameters recommended by the GEF Evaluation Office for terminal evaluations and information gathered through the GEF tracking tools was verified. The review was carried out using a participatory approach whereby parties that may benefit or be affected by the project were consulted.

### Lessons Learned

- 1) The enactment of the Biosafety Act 2006 before the design and implementation of the project created a congenial facilitating environment for the project. The law acted as the main driver for mainstreaming biosafety into the national development process and facilitated progress towards establishing a functional national biosafety framework in Namibia. The evaluation suggests that Parties to the Cartagena Protocol on Biosafety emulate this arrangement before embarking on the design and implementation of biosafety projects.
- 2) The integration of the budget of the Biosafety Unit into the national budget serves as a means for financial sustainability of biosafety activities in Namibia. This evaluation notes that countries striving to establish functional biosafety frameworks on permanent basis need to pursue this path in attaining financial sustainability.
- 3) The 36 months duration estimated for project implementation was overly ambitious. This resulted in as many as six (6) extensions. The evaluation suggests a more realistic project duration of 60 months for such biosafety implementation projects.
- 4) The ANUBIS project information sharing platform served as a good tool for project implementation and management. The evaluation envisages the tool as playing a highly prominent role in future projects as an implementation facilitating tool and should be considered as a replicable option for future UN Environment projects.
- 5) As noted in the findings of the evaluation, the project design did not strongly factor in gender considerations in project implementation. The evaluation suggests a stronger consideration of gender, as

recommended in the Sustainable Development Goals, in future projects.

- 6) The findings of the evaluation also note the size of the portfolio of the Task Manager which does inure to effective technical supervision of the intricate components of supervising the implementation of national biosafety framework projects. The evaluation suggests that UN Environment management reviews the size of the Task Manager's portfolio or employs additional technical staff to augment the Biosafety Unit.

### The evaluation recommends that:

- 1) The National Biotechnology Alliance (NABA) through the Minister of Education should strive to ensure that Namibia becomes a Party to Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, a key Supplementary Protocol to the Cartagena Protocol that facilitates NBF implementation.
- 2) In order to sustain the momentum and maintain biosafety activities on an on-going basis, a holistic national biosafety capacity building strategy based on stakeholder consultation and buy-in from government, needs to be developed.
- 3) A concerted effort be made by NABA and the Ministry of Education facilitated by Biosafety Unit to train or leverage human resource from other scientific institutions to attain this critical mass.
- 4) The Biosafety Unit places more emphasis on capacity building in LMO sampling, field trial inspection, and contained use facility inspection by leveraging staff from other scientific institutions such as the University of Namibia in addition to those of the National Commission for Research, Science and Technology (NCRST).
- 5) Staff of the Biosafety Unit sustain the use of national Biosafety Clearing house as a central one for information exchange.

## Annex 9: Quality Assessment of the Evaluation Report

### Terminal Evaluation of the UN Environment/Global Environment Facility Project: “Institutional Capacity Building Towards the Implementation of the Biosafety Act 2006 and related obligations to the Cartagena Protocol on Biosafety - Namibia”

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	Rating
<b>Substantive Report Quality Criteria</b>		
<p><b>Quality of the Executive Summary:</b> 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.</p>	A summary of the main findings has been presented by criteria. Includes the main objectives of the evaluation, as well as the recommendations and lessons learned from the exercise. Does not explicitly address the key strategic questions; these have to be gleaned from the summary.	4.5
<p><b>I. Introduction</b> 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?</p>	The introduction captures the project background adequately, though the results framework to which the project contributes are covered in section 5.1 and the institutional arrangements are discussed under section 3.1	5
<p><b>II. Evaluation Methods</b> This section should include a description of how the <i>TOC at Evaluation</i><sup>4</sup> 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</p>	This section covers most of the required sub-topics satisfactorily. It includes a description on the objective and scope of the evaluation, the approach and methods used by the team to include visits undertaken and other means of data collection and analysis. The description of how TOC was designed at the evaluation is missing from this	5

<sup>4</sup> 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*.

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<p>verified (e.g. triangulation, review by stakeholders etc.). The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>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.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views.</p>	<p>section but is adequately captured in Chapter 3 (section 3.4)</p>	
<p><b>III. The Project</b></p> <p>This section should include:</p> <ul style="list-style-type: none"> <li>• <i>Context</i>: Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses).</li> <li>• <i>Objectives and components</i>: Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised)</li> <li>• <i>Stakeholders</i>: Description of groups of targeted stakeholders organised according to relevant common characteristics</li> <li>• <i>Project implementation structure and partners</i>: A description of the implementation structure with diagram and a list of key project partners</li> <li>• <i>Changes in design during implementation</i>: Any key events that affected the project's scope or parameters should be described in brief in chronological order</li> <li>• <i>Project financing</i>: Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing</li> </ul>	<p>These topics are not covered in the format/order of items as prescribed (because a previous structure given in previous TORs was used), however the report provides a description of the project which is satisfactory as most of the issues are indeed covered</p>	5
<p><b>IV. Theory of Change</b></p> <p>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. <i>The two results hierarchies should be presented as a two column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.</i> 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.</p>	<p>The TOC diagram is coherent and is a result of a consultative process with the project team in Nairobi and Namibia. The narrative is however quite brief in elaborating on the causal pathways. The drivers, assumptions and roles of the change agents (stakeholders), as depicted in the diagrammatic representation of the TOC are briefly discussed.</p>	4.5
<p><b>V. Key Findings</b></p> <p><b>A. Strategic relevance:</b></p> <p>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</p>	<p>Section is well done and covers some of the main aspects of relevance prescribed in the TOR in sufficient detail.</p>	6

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<p>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:</p> <ol style="list-style-type: none"> <li>1. Alignment to the UN Environment Medium Term Strategy (MTS) and Programme of Work (POW)</li> <li>2. Alignment to UN Environment/GEF/Donor Strategic Priorities</li> <li>3. Relevance to Regional, Sub-regional and National Environmental Priorities</li> <li>4. Complementarity with Existing Interventions</li> </ol>		
<p><b>B. Quality of Project Design</b> To what extent are the strength and weaknesses of the project design effectively <u>summarized</u>?</p>	<p>This section is discussed under 'Project preparation and Readiness' (section 5.4.1). It covers the pertinent aspects of the project design and highlights its critical success factors and risks. A table summary is presented in Annex 5.</p>	5.5
<p><b>D. Effectiveness</b> <b>(i) Outputs and Direct Outcomes:</b> 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.</p>	<p>Outputs are described by component and Sub-component, with an update on the completion status for each planned output. Qualitative aspects of output delivery are included in the assessment. Linkages between output delivery and achievement of direct outcomes have been discussed, and sources of data used in the assessment of outputs have been included.</p>	5
<p><b>(ii) Likelihood of Impact:</b> 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?</p>	<p>The narrative provides an adequate and considered analysis of the causal pathways from outcomes to intermediate states through to impact. Cross-referencing to the TOC has been used. The status of Assumption and Drivers is also included in the narrative. Linkages between outcomes and impact achievement are also discussed</p>	5
<p><b>E. Financial Management</b> This section should contain an integrated analysis of all dimensions evaluated under financial management. And include a completed 'financial management' table. Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> <li>• <i>completeness</i> of financial information, including the actual project costs (total and per activity) and actual co-financing used</li> <li>• <i>communication</i> between financial and project management staff and</li> <li>• <i>compliance</i> with relevant UN financial management standards and procedures.</li> </ul>	<p>The assessment is covered under section 5.4.6 and captures the two main aspects of financial management (communication and compliance). Completeness of financial information (actual project costs and co-financing) is also mentioned and reference is made to Annex 1 where summary tables for financial data are presented.</p>	5

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<p><b>F. Efficiency</b> To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p> <ul style="list-style-type: none"> <li>• Implications of delays and no cost extensions</li> <li>• Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe</li> <li>• 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.</li> <li>• The extent to which the management of the project minimised UN Environment’s environmental footprint.</li> </ul>	This section has been covered sufficiently and discusses pertinent issues (i.e. time-saving measures and cost-effectiveness)	5
<p><b>G. Monitoring and Reporting</b> How well does the report assess:</p> <ul style="list-style-type: none"> <li>• Monitoring design and budgeting (<i>including SMART indicators, resources for MTE/R etc.</i>)</li> <li>• Monitoring implementation (<i>including use of monitoring data for adaptive management</i>)</li> <li>• Project reporting (<i>e.g. PIMS and donor report</i>)</li> </ul>	This section attempts to go beyond assessing progress reporting by also looking into the monitoring for adaptive management. The rating given by the evaluators is however found to be too generous, considering shortcomings in results-based monitoring observed by the evaluation.	5
<p><b>H. Sustainability</b> 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:</p> <ul style="list-style-type: none"> <li>• Socio-political Sustainability</li> <li>• Financial Sustainability</li> <li>• Institutional Sustainability (<i>including issues of partnerships</i>)</li> </ul>	The assessment of sustainability identifies the most pertinent issues likely to undermine sustenance of project outcomes into the future. The analysis of sustainability of the outcomes is found to be brief but adequate	5
<p><b>I. Factors Affecting Performance</b> These factors are <u>not</u> discussed in stand-alone sections but are <b>integrated in criteria A-H as appropriate</b>. To what extent, and how well, does the evaluation report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> <li>• Preparation and readiness</li> <li>• Quality of project management and supervision<sup>5</sup></li> <li>• Stakeholder participation and co-operation</li> <li>• Responsiveness to human rights and gender equity</li> <li>• Country ownership and driven-ness</li> <li>• Communication and public awareness</li> </ul>	The required sub-criteria are all covered though the consultant used a previous reporting format. The assessment of these factors has been done to varying degrees of detail and where appropriate some suggestions for improvement were provided.	5
<p><b>VI. Conclusions and Recommendations</b></p> <p><b>i. Quality of the conclusions:</b> The key strategic</p>	The conclusions include a summary of main findings, lessons learned and	4.5

<sup>5</sup> 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.

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<p>questions should be clearly and succinctly addressed within the conclusions section?</p> <p>It is expected that the conclusions will highlight the main strengths and weaknesses of the project, and connect them in a compelling story line. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.</p>	<p>recommendations. Although the key strategic questions were not explicitly addressed, the conclusion highlights the main successes by the project, as well as some of the shortcomings encountered in its implementation.</p>	
<p><b>ii) Quality and utility of the lessons:</b> 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.</p>	<p>The formulation of the lessons learned statements is satisfactory. Their context is quite clear. The lessons have potential for wider application</p>	5
<p><b>iii) Quality and utility of the recommendations:</b></p> <p>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.</p>	<p>The recommendations are easy to comprehend and are anchored on findings found in the main report.</p>	5
<b>VII. Report Structure and Presentation Quality</b>		
<p><b>i) Structure and completeness of the report:</b> To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete?</p>	<p>Report is complete though an older format was used.</p>	5
<p><b>ii) Quality of writing and formatting:</b></p> <p>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?</p>	<p>The report quality is satisfactory</p>	5
<b>OVERALL REPORT QUALITY RATING</b>		<b>S</b>

A number rating 1-6 is used for each criterion. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

1 (Highly Unsatisfactory)	< 1.83	4 (Moderately Satisfactory)	>=3.5 <=4.33
2 (Unsatisfactory)	>= 1.83 < 2.66	5 (Satisfactory)	>4.33 <= 5.16
3 (Moderately Unsatisfactory)	>=2.66 <3.5	6 (Highly Satisfactory)	> 5.16