



# United Nations Environment Programme

## Terminal Evaluation of the UNEP GEF Project Support for Implementation of the National Biosafety Framework for Tunisia

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## Acronyms and abbreviations

ANPE	Agence Nationale pour la Protection de l'Environnement
BCH	Biosafety Clearing House
BS	Biosafety
BSP	Bali Strategic Plan
Bt	Bacillus thuringensis
CBD	Convention on Biodiversity
CPB	Cartagena Protocol on Biosafety
DGEQV	Direction Générale de l'Environnement et de la Qualité de la Vie
EA	Expected Accomplishment
FAO	Food and Agriculture Organization
GATT	General Agreement on Tariff and Trade
GBIF	Global Biodiversity Information Facility
GEF	Global Environmental Facility
GIS	Geographic Information System
GMO	Genetically Modified Organisms
GoT	Government of Tunisia
IT	Information Technology
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
LMO	Living Modified Organisms
M&E	Monitoring and Evaluation
NBC	National Biodiversity Committee
NBF	National Biosafety Framework
NFP	National Focal Point
NGO	Non governmental organization
OECD/DA C	Organization for Economic Cooperation and Development / Development Assistance Committee
PIR	Programme Implementation Report
PoW	Programme of Work
PPP	Public Private Partnerships
R&D	Research and Development
rDNA	Recombinant Deoxyribonucleic Acid
ROtI	Review of Outcomes to Impacts
ToC	Theory of Change
ToRs	Terms of Reference
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
US\$	United States Dollars
WB	World Bank

## Project identification table

<b>GEF project ID:</b>	2648	<b>IMIS number:</b>	GFL-2328-2716-4953
<b>Focal Area(s):</b>	BD1/BD-SP6	<b>GEF OP #:</b>	
<b>GEF Strategic Priority/Objective:</b>	Biodiversity	<b>GEF approval date:</b>	February 8, 2006
<b>UNEP approval date:</b>	January 22, 2007	<b>First Disbursement:</b>	February 8, 2006
<b>Actual start date:</b>	June 11, 2007	<b>Planned duration:</b>	48 months
<b>Intended completion date:</b>	December 2010	<b>Actual or Expected completion date:</b>	July,21 2014
<b>Project Type:</b>	MSP	<b>GEF Allocation:</b>	\$848,900
<b>PDF GEF cost:</b>		<b>PDF co-financing*:</b>	
<b>Expected MSP/FSP Co-financing:</b>	\$919.260	<b>Total Cost:</b>	\$1,768,160
<b>Mid-term review/eval. (planned date):</b>	June – July 2009	<b>Terminal Evaluation (actual date):</b>	September 2014
<b>Mid-term review/eval. (actual date):</b>	October 2009	<b>No. of revisions:</b>	12
<b>Date of last Steering Committee meeting:</b>	N/A	<b>Date of last Revision:</b>	January 1, 2014
<b>Disbursement as:</b>	\$837,590.26	<b>Date of financial closure:</b>	Financial closure will be done in IMIS when the Terminal Evaluation is done.
<b>Date of Completion:</b>	N/A	<b>Actual expenditures reported as of:</b>	USD 722,337.89 (at 30/06/2014)
<b>Total co-financing realized</b>	\$681,095 (at 30/06/2014)	<b>Actual expenditures entered in IMIS as 30 June 2013:</b>	Co-finance is not recorded in IMIS
<b>Leveraged financing:</b>			

Project Number: GFL-2328-2716-4953

Geographical Scope: National

Start Date: June 11, 2007

Completion Date: July 31, 2014

Executing Agency: United Nations Environment Programme, Nairobi, Kenya

National Executing Agency: General Directorate of Environment and Quality of Life of the Ministry of Environment

## Executive summary

### A. Introduction

The project Support for Implementation of the National Biosafety Framework for Tunisia (GFL-2328-2716-4953) had the goal to assist Tunisia in putting in place a workable and transparent national biosafety framework in line with its international obligations and national development priorities. The UNEP/GEF assigned US\$ 848,900 to this project and the Tunisian government co-financing amounted to US\$ 919,260, for a total budget of US\$ 1,768,100.

The project was articulated in the following components:

- A. Biosafety is integrated into the national biotechnology strategy of Tunisia
- B. A fully operational and responsive regulatory regime in line with existing national laws and other international obligations is in place
- C. An efficient national system for handling requests and decision-making is in place
- D. An effective national system for follow-up activities, namely monitoring, inspections and enforcement is in place
- E. An active national system for public awareness and participation is in place

The project targeted the managers, administrators and technicians of the institutions mentioned above as well as decision makers, the press, and the public education sector. The local executing agency was the *Direction générale de l'environnement et de la qualité de la vie* (General directorate of the environment and quality of life, DGEQV) of the Ministry of environment. The project started on June 11, 2007 and was completed on July 21, 2014.

*Strategic relevance.* Tunisia is a signatory of the Convention on Biological Diversity (CBD) and the Cartagena Protocol on Biosafety (CPB). The target of this action is a topic critical for the country sustainable development: the balance between biotechnology driven economic growth and the conservation of natural resources and agro-biodiversity. The design of this initiative recognizes that biosafety concerns – Living modified organisms (LMOs) potential risks and hazards could hamper the benefits of biotechnology innovation – are key to conciliate the country's strategic commitment to economic development and the conservation and sustainable utilization of the national biological resources. The project is part of the cross-cutting thematic priorities listed in section III of the UNEP Medium-term Strategy 2010–2013 and contributes to the Environmental governance sub-programme, which intends to address agreed environmental priorities, by supporting governments in establishing, implementing and strengthening the necessary processes, institutions, laws, policies and programmes to achieve sustainable development. The project is also relevant to the Ecosystems management sub-programme. The project outputs contributed to enhance the national capacity to develop and enforce laws and to strengthen institutions to achieve internationally agreed environmental objectives and goals in order to comply with the related obligations. It achieved the Global environmental benefit of putting in place a sound biosafety framework implementing the Cartagena Protocol on Biosafety to the Convention on Biological Diversity.

*Achievement of outputs.* The project delivered most of its outputs, although work plans revision – due to the long interruption in decision making in the aftermath of the “Arab spring” – resulted in the dropping of some of the planned activities and also caused delays and replanning in the execution of activities. As the two draft Genetically Modified Organisms (GMO) laws were not enacted, the National Biosafety Framework (NBF) regulations were not approved, their procedures were not operationalized and the National Biosafety Committee was not established.

*Effectiveness: attainment of project objectives and results.* The project has achieved most of its immediate objectives, by building capacities and procuring equipment for implementing the NBF procedures. Four laboratories have been strengthened in GMO detection analyses. Awareness raising activities were the project weakest component. They did not mobilize the interest of the economic sectors in creating the conditions to ensure biosafety in Tunisia. This setback hampered the implementation of the other components, more notably the approval of the Biotechnology Development Strategy and the GMO regulatory regime.

*Sustainability and replication.* The Government of Tunisia development strategies identify biotechnology innovation as an instrument to achieve economic growth. The continuation of project results depends on the private sector interest in investing in this field as well as in mobilizing the resources to complete and run the NBF. Proximity to the export markets facilitates the acquisition of Biosafety (BS) related services from abroad. This situation reduces the appeal of the NBF for Tunisian producers and traders. The project catalytic role has been jeopardized by the long delay in its implementation, and the diminished interest by decision makers in supporting value chains and addressing customers’ biosafety concerns. Presently, the resources made available to implement and run the NBF – raised internally from the Government budget - are not adequate for the deployment of a fully-fledged monitoring system and for performing the connected GMO detection analyses.

*Efficiency.* The existence of high level technical skills in Tunisia facilitated the deployment of the project activities. Coordination was easily achieved at the technical level, while decision making processes lagged behind. Thus the results achieved in one component didn’t impact on the other ones. Activities resumed in 2012 with a new work plan designed to complete technical trainings and awareness raising actions by the end of 2014. A National technical commission on biosafety was established to provide continuity to the project results. However, its mandate does not address the administrative and political tasks that should be performed by the National Biosafety Committee, which should assist political and administrative decision making.

*Factors and processes affecting the project performance.* The strategy for the implementation of this project follows GEF-UNEP past experiences and is part of a coordinated effort to implement the provisions of the Cartagena Protocol on Biosafety worldwide. The project made the best use of the highly skilled personnel of Tunisian institutions and academia. On the other side, high ranks in the Ministries and the private sector interested in biotechnology marginally contributed to the achievement of the project goal. The project cost-effectiveness resides in the concentration of efforts to build capacities by exploiting those already existing in the Tunisian/ institutions. By June 30, 2013, the actual expenditure of GEF-UNEP contribution amounted to

99% of the planned expenditure, those of the Tunisian Government' in kind contribution reached 74%. The UNEP Biosafety unit supplied technical advice and monitoring of the execution of the activities. The project did not allocate any specific budget line to implement the M&E plan. Thus, no specific resources were devoted to surveying and collecting the indicators, but the UNEP Task manager reported on the accomplishment of activities and their immediate objectives.

*Complementarity with UNEP strategies and programmes.* This project is in line with the commitment made by UNEP to assist developing countries in establishing NBF along the evolving GEF Biosafety strategy and follows the methodology developed by the UNEP Biosafety Unit. The project contributed to some of the UNEP's Expected Accomplishments and Programme of Work for the period 2008-2009, 2010-2011 and 2012-2013 under the Environmental Governance and Ecosystem Management Sub-programmes.

## B. Findings and conclusions

The project was designed to operationalize the NBF by strengthening the national Biosafety related knowledge and skills. It concentrated resources on the development of GMO monitoring and detection and in a lesser measure on the components on awareness raising and supporting decision makers and administrators to structure the NBF.

The project activities were mostly executed in the component on the building of the GMO monitoring and detection capacities. However, due to lack of resources, the GMO detection laboratories have not yet been internationally accredited, the BCH is still in the process of data acquisition and the website is being developed. An interim process based on the existing draft legal documents has been used to develop training and outreach materials. The final approved legal instruments are expected to be in line with such documents, but the *Arab spring* events resulted in slow progress in the approval of new arrangements.

The activities supporting the integration of biosafety in development strategies, the approval of the legal framework and deployment of its procedures were partly successful. Private sector interest and political support to establishing the legal framework was limited due to the fact that:

- Tunisian biotechnological research on the Living modified organisms is ongoing but has not yet reached the stage of product development, thus it has not yet attracted the interest of private investors,
- Tunisian entrepreneurs have already access to biosafety service providers from the import markets and do not realize the advantages of a locally run NBF.

At the time of the evaluation, the project overall goal had not been reached, the biosafety procedures had not been legally enacted or tested, reference laboratories had not been accredited and phyto-sanitary controllers working in the country customs offices were not legally enabled to monitor GMO.

The DGEQV effectively coordinated the project implementation until the interruption of activities due to the national crisis and institutional changes. After over three years, the project

activities were resumed. A new work plan was designed, concentrating resources on capacity building and awareness raising. The national Executing agency has agreed with partners on a plan to commit assigned funds to complete expenditures by the end of 2014. The National technical commission on Biosafety was established in 2013 in order to coordinate the local partners. Its three subcommittees (legal issues, laboratories and accreditation, public awareness) and the molecular laboratory network are now well established. They provide technical advice and services to the national Biosafety focal point and partner institutions.

UNEP played its role in streamlining the project design along the GEF Biosafety approach by facilitating the deployment of field activities and in providing technical support and agile financial procedures for procurement of good and services.

### C. Lessons learnt and recommendations

*An R letter distinguishes Recommendations from Lessons learnt.*

A policy gap analysis has to be performed in order to systematically appraise the current situation, map the interests at stake in biotechnology innovation, help focus the debate, provide background documents concerning the implementation of the NBF and to identify challenges ahead in economic development and natural resources conservation.

In order to achieve the participation of higher institutional level stakeholders – typically policy makers – the implementation of the NBF has to be integrated into national and regional economic governance related initiatives (building of local authorities’ skills, integration of regional market).

R. The Biosafety focal point should explore new ways to stimulate biotechnology innovation and strengthen the Biosafety approach with representatives of the private sector. The Ministry of Trade’s current work on a Biotechnology Strategy has to be exploited for stimulating the interest of the private sector in the implementation of the NBF. Presentations on the Biosafety framework have to be developed by the DGEQV in collaboration with representatives of key economic development sectors (e.g., food industry, seed, environmental friendly chemical products, etc.) to present in a targeted way the opportunities and challenges of mainstreaming biosafety in economic development.

R. The National Technical Commission on biosafety should establish a Steering Committee in charge of planning activities and to assist the BS focal point to communicate with institutions and stakeholders taking decisions on biotech/biosafety issues.

R. The completion of the project activities has to be integrated with the elaboration of the project exit strategy, in order to ensure that the three areas of interest (legal framework, laboratories and accreditation, awareness raising) converge to provide a road map to decision makers on priority actions. This activity has to be led by the biosafety focal point, in collaboration with the National technical commission on biosafety.

The table below presents a summary of the ratings of the project.

<b>Criterion</b>	<b>Rating</b>
<b>A. Strategic relevance</b>	MS
<b>B. Achievement of outputs</b>	S
<b>C. effectiveness: Attainment of project objectives and results</b>	MU
1. Achievement of direct outcomes	MS
2. Likelihood of impact	MS
3. Achievement of project goal and planned objectives	MU
<b>D. Sustainability of project outcomes</b>	MU
1. Financial	MU
2. Socio-political	MU
3. Institutional framework	MU
4. Environmental	HL
5. Catalytic role and replication	S
<b>E. Efficiency</b>	<b>S</b>
<b>F. Factors affecting project performance</b>	MS
1. Preparation and readiness	S
2. Project implementation and management	S
3. Stakeholders involvement	MS
4. Country ownership / driven-ness	U
5. Financial planning and management	S
6. UNEP supervision and backstopping	S
7. Monitoring and Evaluation	MS
a. M&E Design	MS
b. M&E Plan Implementation	MS
c. Budgeting and funding for M&E activities	S
<b>Overall assessment</b>	MS

## I. Introduction

1. The project Support for Implementation of the National Biosafety Framework for Tunisia (GFL-2328-2716-4953) was designed after Tunisia elaborated the National Biosafety Regulatory Framework with the assistance of the UNEP/GEF project on the Development of the National Biosafety Framework and drafted the draft GMO laws providing for the regulation of development, handling, trade and use of GMOs and derived products. The project was identified in 2004 and started on June 11, 2007, following the first release of UNEP funds. A midterm review was held in the third quarter of 2009. The project planned duration was 48 months, was extended by about 3 and half years and was completed on July 21, 2014. The UNEP/GEF assigned to this project US\$ 848,900 and the Tunisian government co-financing amounted to US\$ 919,260, for a total budget of US\$ 1,768,100.

2. The local executing agency was the *Direction générale de l'environnement et de la qualité de la vie* (DGEQV, General directorate of the environment and quality of life) of the Ministry of environment. Stakeholders involved in the project activities included:

*Institutions:* Ministry of Environment and Sustainable Development, Ministry of Public health, Ministry of Trade, Ministry of Finance (Customs), Ministry of Higher Education, Research and Technology, Ministry of agriculture, Ministry of Economic Development and international cooperation and Ministry of industry,

*Scientific sector:* Institut National d'Agronomie de Tunis (INAT), Centre de Biotechnologie de Sfax (CBS), Institut National de Recherche Agronomique INRA, Faculté de Sciences de l'Université de Tunis, Centre de Biotechnologie de Monastir (CBM), Institut National de Sciences Appliquées à la Technologie (INSAT), Institut National de Recherche Scientifique et Technique (INRST), Institut National de Normalisation et de Propriété Intellectuelle,

*Private sector:* Tunisian Union of Agriculture and Fishing (UTAF); The Tunisian Union of Industry, Commerce and Art craft (UTICA), Office Tunisienne du Commerce (OTC),

*Civil society:* Association du Développement Durable, Organisation de Défense des Consommateurs.

3. The objectives of this evaluation are:

- to provide evidence of results to meet accountability requirements,
- to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners.

## II. The evaluation

4. The evaluation looks at the outputs, outcomes and mechanism of the intervention to assess the contribution of the project to the implementation of a National Biosafety Framework in Tunisia.
5. This study identifies the relations between goal, impact and results by analysing:
  - a. project plans and reports, identification studies and other recorded information,
  - b. project monitoring data (progress, achievements and indicators), and by
  - c. interviewing stakeholders, including field visits to Tunisia and meetings with stakeholders from institutions, economic and civil society organizations.
6. As the project indicators listed in the project Logframe were not systematically collected, those included in the Evaluation matrix (Table 2) are slightly adapted from the Logframe. The interview of project staff and key stakeholders summarized in Annex 3 enabled the collection of information for the assessment of the project indicators. The evaluation process included:
  7. *Desk phase.* Collection of project documents, preliminary analysis – including the elaboration of the Theory of change and the analysis of the quality of the project design -, elaboration of the evaluation methodology and work tools and planning of the field visits. The Inception report was submitted at the end of July, 2014 to the UNEP Evaluation office.
  8. *Field phase.* Annex 2 lists the people contacted by the evaluator in performing the assessment of this project. Annex 3 presents the synthesis of the answers by Interviewees. This feedback allowed, among others, to perform the qualitative cross-check and validate the values of the project indicators. This phase was kicked off by an interview with the UNEP Task Manager.
  9. *Synthesis phase.* The information collected was analyzed along the evaluation criteria set out in the Terms of reference (ToR) and completed by the elaboration of conclusions, lessons learnt and recommendations. The Financial analysis (see Annex 5) was limited to the assessment of the consistency of actual vs. planned expenditures and their correspondence to the project implementation needs (cost – effectiveness analysis).

## III. The project

### A. Context

10. The Government of Tunisia (GoT) formulated the National Strategy on Biological Diversity with GEF financial assistance, and drafted the National policy on biological diversity, implemented through a five-year strategic action plan. The GoT considered biotechnology as an instrument to achieve sustainable economic development. To achieve this purpose, it has formulated a strategy aiming at the creation of a cluster of academic as well as research and development institutions specializing in different areas of biotechnology and assisting the private sector to access to biotechnology innovation.

11. Tunisia participated in the UNEP/GEF Pilot Project on Biosafety Enabling Activities (Project GF/1200-89-86 MEAT/GEF/UNEP). In 1999, the GoT set up an interim mechanism for handling requests for permits coordinated by the newly establishing Committee for Genetically Modified Organisms. It later elaborated the draft National Biosafety Framework, formulating its main elements through 2 draft Laws – the first one on the use, release and sale of LMOs and the second one on the movement of LMOs -, 3 Decrees and 3 Orders. The establishment of the National Commission for Biosafety under the aegis of the Minister in charge of Environment was foreseen in the draft Law. On January 22, 2003, Tunisia ratified the Cartagena Protocol on Biosafety.

12. The process leading to the formulation of the present project was started at the end of the pilot project. Identification of national and local stakeholders was carried out via a thorough process of consultation. This dialogue highlighted that notwithstanding the above mentioned achievements, Tunisia has to *raise Biosafety to the level of national development strategy and to build/strengthen capacity in the country* to make the NBF operational. The present project complements the BCH project expanding the existing Biodiversity Information System (System Informatique de Biosécurité) of the Ministry of the Environment in charge of the biosafety database and ancillary information sharing activities.

## **B. Objectives and components**

13. The project purpose was to contribute to the safe use of biotechnology and reduce the potential risk associated with LMO use on biodiversity, human and animal health.

14. The overall *goal* of the project in Tunisia was that the country would have a workable, responsive and transparent NBF by 2010, in line with its national development priorities, the Cartagena Protocol on Biosafety and other international obligations.

15. The project *objective* was to develop the national biosafety capacities required to establish functional, workable and transparent national biosafety frameworks in accordance with national development priorities and international obligations. Specific project objectives included:

- To integrate biosafety into a national development strategy
- To establish and consolidate a fully functional and responsive regulatory regime in line with the CP, national needs and other international obligations.
- To enhance the existing administrative system on biosafety to be competent and efficient in handling requests for applications, including systems for risk assessments, decision-making and administrative processing.
- To strengthen the present national system for public awareness, participation, education and access to information on biosafety

16. The project components were:

A. Biosafety is integrated into the national biotechnology strategy of Tunisia

Outputs:

- Two preparatory workshops to consult main stakeholders, collect views and identify salient points to develop a biotech/biosafety strategy are carried out
- National biosafety strategy drafted
- A workshop on the drafted strategy is carried out
- The strategy is agreed upon and submitted for approval

B. A fully operational and responsive regulatory regime in line with existing national laws and other international obligations is in place

Outputs:

- Two workshops for decision-makers to create awareness and to accelerate approval of the two draft Laws in Parliament are carried out
- Review and final adoption of the biosafety regulatory regime
- Identification of priority actions needed to implement the regulatory regime is carried out
- Workshops for decision makers on identified priority actions
- Training guides on the National Biosafety Regulatory Regime are prepared

Two training courses for legal and administrative staff on the interpretation and operation of the new National Biosafety Regime are carried out

C. An efficient national system for handling requests and decision-making is in place

Outputs:

- Methodologies for RA/RM of LMOs are drafted and finalized
- Statutory forms for applications or requests, including a review of the utility of these forms by selected experts carried out
- Statutory forms are finalized and in use
- Two workshops on risk assessment and risk management for members of the Commission for Biosafety and other administrative personnel carried out
- Training guides on handling applications prepared and in use

D. An effective national system for follow-up activities, namely monitoring, inspections and enforcement is in place

Outputs:

- Methodologies for monitoring of environmental effects developed, finalized and in use
- Enforcement actions required for handling, transport, use, transit and release of LMOs developed, finalized and in use
- Existing laboratories for LMO detection are equipped and certified
- Two sets of training guides for monitoring and enforcement respectively are developed, finalized and in use
- Two intensive courses for technicians to enable them to carry out laboratory inspections carried out
- Two 4-day training workshops for inspectors and custom officials on LMOs identification carried out
- An overseas study tour for inspectors and officers to counterpart agencies experienced in monitoring, inspection and enforcement activities carried out

E. An active national system for public awareness and participation is in place

- Plans for public participation, awareness, education on biosafety and safe use of biotechnologies developed, finalized and implemented
- Education materials on biosafety prepared
- Public awareness raised via mass media
- Homepage on biosafety created
- Standards for producing and validating data related to LMOs to be entered in the national biosafety homepage developed
- A training guide on public information and participation produced
- A series of special workshops designed for different target audience such as government officials, journalists, scientists, NGO representatives and members of the public conducted
- A series of training workshops for stakeholders, including the public, on public participation in the implementation of the Tunisian NBF carried out
- Lessons learned and best practices identified, shared and disseminated

### **C. Target areas/groups**

17. The identification of national and local stakeholders was carried out via a thorough process of consultation and dialogue. The project targeted the managers, administrators and technicians of the institutions mentioned above as well decision makers, the press, and the public education sector.

### **D. Milestones/key dates in project design and implementation**

18. The project was identified in 2004 and started on June 11, 2007, following the first release of GEF funds. A midterm review was held in the third quarter of 2009. The project planned duration was 48 months, having been extended by about 3 and half years and completed on July 21, 2014; completion of expenditures is expected by the end of 2014.

### **E. Implementation arrangements**

19. The Steering Committee chaired by UNEP directed the implementation of the project. The General Directorate of Environment and Quality of Life (DGEQV) of the Ministry of Environment played a central role in the implementation of the project activities, being also the National Focal Point (NFP) to the Cartagena Protocol on Biosafety. The UNEP Biosafety unit provided technical assistance to the DGEQV. As National Executing Agency, the DGEQV appointed a National project coordinator. A core group of 3 national experts specialized in administrative, juridical and scientific fields concerning biosafety, with the assistance of technical experts, coordinated the execution of the activities. The DGEQV is expected to chair the National Biosafety Committee (not yet legally instituted, due to the stand-by in the approval of the draft law). This body should be in charge of advising the national authorities on technical

and administrative issues regarding the biosafety regulations and decisions concerning the Living modified organisms (LMO) release / introduction. The local partners were coordinated through the National coordination committee. Partners participated organizing activities such as capacity building, workshops, and strengthening of the 4 reference laboratories.

20. The *Agence nationale pour la protection de l'environnement* (ANPE) was in charge of the financial execution of the project. Its expenditures procedures are more flexible than those of the DGEQV. After resuming activities in 2012, following over 2 years of interruption, the updated work plan concentrated on capacity building and awareness raising. Due to late availability of the funds disbursed by UNEP/GEF - as a consequence of the complex procedure used by the technical committee in charge of procurement and the need to clarify previous expenditures before releasing the final tranche -, the payment for the remaining awareness raising activities is expected to be completed by the end of 2014.

## **F. Project financing**

### *Actual project costs by activities compared to budget*

21. The UNEP-GEF grant assigned to this project was US\$ 848,900 and the Tunisian government co-financing amounted to US\$ 919,260 (US\$ 78,000 in cash, the rest in kind), for a total budget of US\$ 1,768,100. By June 30, 2013, the actual expenditure of GEF-UNEP contribution amounted to 99% of the planned expenditure, the in kind part by the Tunisian Government reached an expenditure rate of 74% (see Annex 5.2).

### *Financial management*

22. The initial budgeted GEF contribution (Annex 1 A of the project document) is structured through budget lines designed along UNEP standards. A detailed breakdown along components and sub-components was not mandatory when the project started. Expenditures are mostly made of work and service procurement – capital investment is quite limited. UNEP financial management principles and procedures have been adopted and enforced. Flexibility was adopted through advances disbursed upon DGEQV Request. ANPE established a bank account, and paid the expenditures approved by the project manager in charge of the administrative procedure at the DGEQV, after checking the validity of the supporting documents. According to the documentation uploaded in Anubis database, audits were regularly performed until 2009.

A part from a small initial contribution (US\$ 2,040), the first advance of US\$ 127,000 (15% of the GEF-UNEP contribution) was disbursed on 11/6/2007 and 11 more instalments were done until 17/6/2014, for a total US\$ 837,590.26 i.e. the 99% of the initial GEF-UNEP contribution.

### *Co-financing*

23. The contributions from the government of Tunisia were stopped because of the national institutional changes associated to the Arab spring. Expenditure of co-financing- in kind but equivalent to US\$ 78,000 - created some inconveniences such as the loss of trained staff and budgetary constraints.

#### *Breakdown of final costs and co-financing for the different project components*

24. Component 4 (Monitoring and inspection) represents the main budget line (52%), covered for 3/5 by the Government, followed by Project coordination (17%), covered for 2/3 by the Government. Components 1, 2, 3 and 5 range among 3% and 8% of the total budget, with a slight prevalence of GEF-UNEP contribution for each component. Technical support, exclusively funded by GEF-UNEP represent about 4% of the budget and is completed by other project support (6%), mostly funded by GEF-UNEP.

25. At the moment of the preparation of this report, the terminal budget document is in preparation. The UNEP/GEF contribution was distributed as foreseen among the 5 project components, while on June 30, 2014, 74% of the Tunisian government contribution had been spent.

### **G. Project partners**

26. The DGEQV coordinated the work of the following stakeholders in the execution of the field activities:

- *Institutions*: Ministry of Environment and Sustainable Development, Ministry of Public health, Ministry of Trade, Ministry of Finance (Customs), Ministry of Higher Education, Research and Technology, Ministry of Agriculture, Ministry of Economic Development and international cooperation and Ministry of industry,

- *Scientific sector*: Institut National d’Agronomie de Tunis (INAT), Centre de Biotechnologie de Sfax (CBS), Institut National de Recherche Agronomique INRA, Faculté de Sciences de l’Université de Tunis, Centre de Biotechnologie de Monastir (CBM), Institut National de Sciences Appliquées à la Technologie (INSAT), Institut National de Recherche Scientifique et Technique (INRST), Institut National de Normalisation et de Propriété Intellectuelle,

- *Private sector*: Tunisian Union of Agriculture and Fishing (UTAF); The Tunisian Union of Industry, Commerce and Art craft (UTICA), Office Tunisienne du Commerce,

- *Civil society*: Association du Développement Durable, Organisation de Défense des Consommateurs.

### **H. Changes in design during implementation**

27. Action plans with clearly defined deliverables were formulated in the first phase of the project. Thanks to the inventory of the status of national biosafety, it was possible to target training actions and thus to save money. Adherence to the national procurement process resulted in some delays in the clearance of procurement of goods and services, according to the Executing agency representatives. The late disbursement of the last tranche of GEF-UNEP contribution delayed the last payments that are expected to be completed by December 2014. The restart of

activities in 2012 was used to complete the training and awareness raising actions, a task fulfilled in a great extent.

28. The most relevant change in the project implementation with respect to its original design concerns the long delay due to the interruption of activities in the aftermath of the Arab spring. A fundamental hurdle to project activities has been the fact that the Laws establishing the NBF have not yet been ratified by the Tunisian Parliament. Thus the regulatory regime is not yet in place and its components / procedures are not legally binding, e.g. the BSC is not formally established and NBF procedures have not yet been activated.

## I. Reconstructed Theory of Change of the project

### 1. Project context

29. The growing scientific knowledge on the structure and function of the living organisms is triggering investments in biotechnology. According to the project document, Tunisia is endowed with a rich biodiversity and opportunities for economic development and is expected to become a net importer of Living Modified Organisms – typically through an increasingly export oriented farming, import of cheap food and bioengineered pharmaceuticals and other chemicals. Tunisia has enacted a number of policies, strategies and programmes that relate to conservation and management of biodiversity. It has adhered to the Cartagena Protocol on Biosafety but it lacks resources to implement the national Biosafety framework to regulate and supervise this process.

30. Political, administrative, and economic obstacles within the country have been limiting the effective enforcement of the Cartagena Protocol on Biosafety. In-country resources and decision-making capacity are weak and the public opinion is generically aware of the potential consequences of the mismanagement of LMOs and the need for the systematic monitoring of their release and introduction. The project identified these two challenges as the critical elements to address in order to facilitate the implementation of a NBF. It also expected that the economic benefits originating from the implementation of the authorization, monitoring and supervision procedures would contribute to the sustainability of the system, by paying for the costs of the regulatory system. However, opportunities for orientating development to sustainability are presently lost and biodiversity is threatened due to the delay in deploying the NBF.

### 2. Project Theory of change

31. The project *Immediate Objective* is to put in place a functional and transparent national biosafety framework in accordance with national development priorities and international obligations. According to the project document (section 2.4.2.1): *The Government of Tunisia identifies biotechnology as a vehicle for development... At the same time, the Tunisian Government is cognizant of the potential harm which biotechnology can cause and therefore, places great emphasis on the need to develop in parallel a biosafety strategy and put an adequate biosafety regulatory regime in place.* To realize this vision, Tunisia considers science

and technology to be central to creating wealth and improving the quality of life while promoting sustainable development. Sustainable development depends upon the application of new technologies such as rDNA technology and utilization of renewable resources. On the other hand, the safe application of modern biotechnology needs to be guaranteed through a clear and effective national biotechnology policy, functional biosafety system and government commitment.

32. Tunisia has therefore taken steps such as incorporating biosafety issues into sector policies, national biotechnology strategies and a national action plan in order to conserve and manage the biodiversity and protect human health. It engaged with development partners such as UNEP and the European Union to mainstream biosafety in economic development.

33. The challenges of establishing a NBF in Tunisia are multiple. Their solution faces the typical hurdles challenging development in emerging countries: lack of resources in key areas such as research and economic governance, pressure to solve immediate social problems such as food insecurity and income diversification, and difficulty to establish public private partnerships to facilitate investment in innovation while preserving natural resources. Dependence on external knowledge results in a weak position when Tunisian enterprises deal with foreign partners controlling the newest biotechnological innovation. This situation is exacerbated by:

(a) the accelerating integration of the Tunisian economy into the global one, with little concerns for socio-economic constraints (according to the DGEQV representatives); for example, investments in innovative production, both in farming and industry, are growing (e.g., quality food for export) with little consideration for environmental sustainability

(b) transboundary trade in the absence of a reliable system checking if such product threaten the environment and human health,

(c) restrictions on LMOs by traditional trade partners such as the EU, calling for stricter regulatory practices. Hence the need to invest more heavily in the monitoring and enforcement practices (as it happened in the later stage of the project implementation).

34. The novelty of the biotechnological revolution has raised the concern of the public opinion about the importance of biosafety and the need for caution in releasing and introducing LMOs in the environment. Concerns are equally directed to the preservation of human health and conservation of biodiversity from the human driven genetic shift. The international consensus on such approach is represented by the Cartagena Protocol on Biosafety (2000) that advocates for the development and use of biotechnology under adequate safety measures, particularly - by adopting the precautionary principle.

35. The GEF guidelines for establishing NBFs are consistent with such vision, as they are intended to establish or maintain the means to regulate, manage or control the risks associated with the use and release of LMOs along the precautionary principle approach and to promote public information and education about biosafety.

36. The impact pathways connecting the project outcomes to its immediate goal tackle the institutional, technical and administrative dimensions of the behavioral change need to achieve the project's objective, as well as that of ensuring the understanding of and consensus on relevant challenges among the specialists and general public. The participation of the private sector (biotechnology promoters) to such mechanism was marginal.

37. The reconstructed Theory of Change (ToC) reveals that the intended change is expected in three key areas: technological change (enhanced exploitation of biodiversity and conservation of natural resources to achieve sustainable development), social and political participation (information and participation promoting the control of innovation) and international cooperation on biosafety (integration and collaboration with other countries to achieve a global approach to biotechnology and biosafety).

38. Critical assumptions of the reconstructed ToC concern the access by Tunisia to knowledge and innovation – i.e., the availability of resources to invest in such field and keep abreast with the development of biotechnology - as well as its ability to enforce a legal framework protecting intellectual property rights. A driver that the project intended to address is the ability of the relevant institutions to increase environmental awareness in order to provide guidance and support to political decisions in the environmental and human health field.

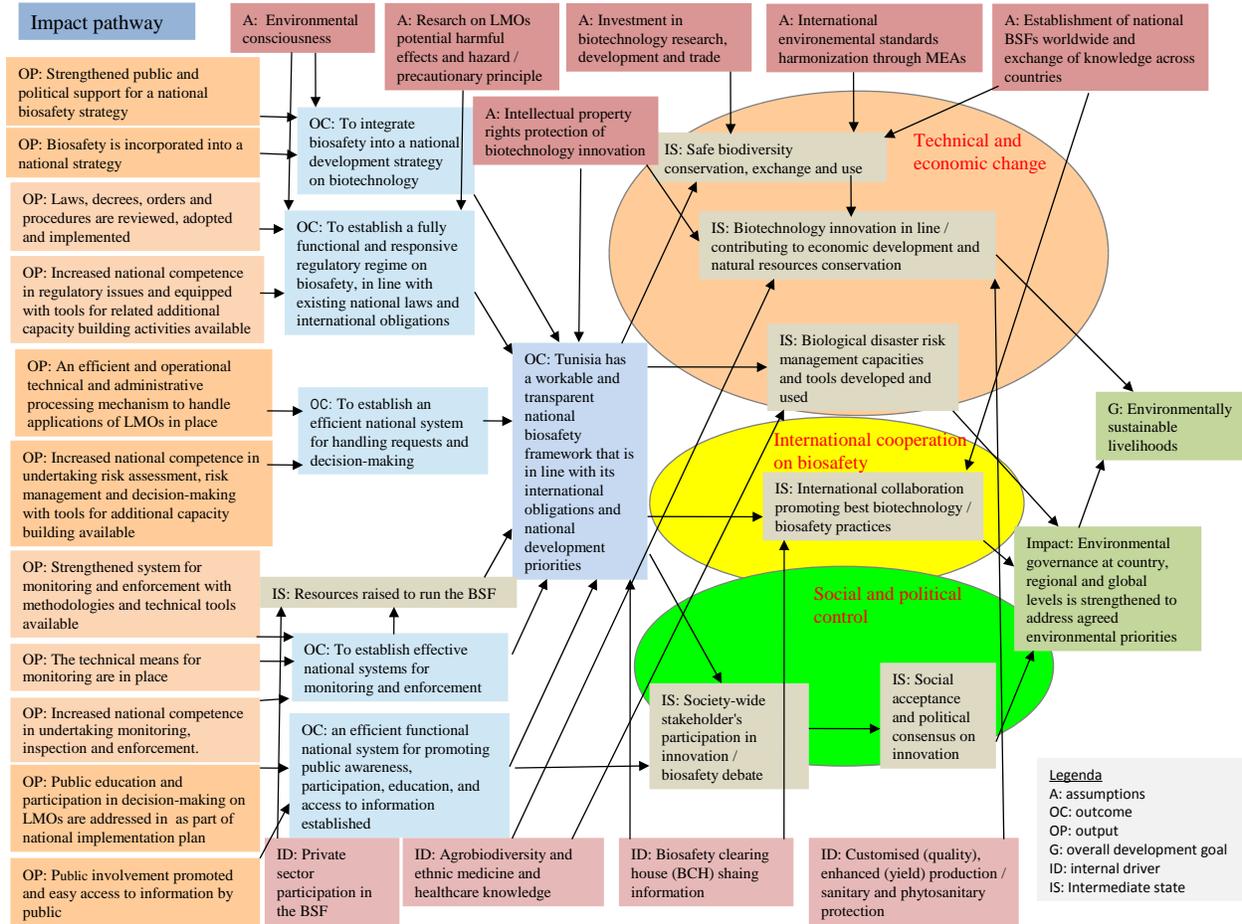
39. The execution of the project is expected to mobilize interest and resources supporting the functioning of the Biosafety framework. Private sectors interests are clearly related to the economic benefits coming from the sustainable exploitation of biodiversity and the services provided by the Biosafety regulatory framework in ensuring the safe release of LMOs.

40. The ToC intermediate states leading from outcome to impact are expected to occur after the project completion. They are clustered in three areas: (a) technical and economic changes leading to sustainable development of biotechnologies; (b) a greater integration of Tunisia in the international community in the field of biotechnology and biosafety, in order to foster the exchange of knowledge and limit the transboundary harmful effects of LMOs introduction; (c) building consensus on investing in biotechnology with the support of public awareness of its benefits and institutional controls on LMO development, safe use and handling.

41. The development process ongoing in Tunisia is an internal driver which may support investments in biotechnology. Knowledge generated in this field has the potential to reduce the environmental impact of development. According to the Project document, the Biosafety approach promoted by the project is expected to create confidence in biotechnology development and focus efforts in the achievement of sustainability.

42. The project approach is centered on the development of local knowledge and skills necessary to establish a biosafety mechanism and the integration of Tunisia in the international framework provided by the Cartagena Protocol on Biosafety. Diagram 1 illustrates this framework, and provides the basis for the systematic assessment of the project based on the Review of Outcomes to Impacts (ROtI) method.

Diagram 1. The Biosafety project reconstructed Theory of Change



## IV. Evaluation findings

43. The following sections present the assessment of the project based on the ToR evaluation categories and address the key issues listed in the Terms of Reference. Overall ratings for each criterion are summarized in Table 1.

### A. Strategic relevance

44. The *Convention on Biological Diversity* (CBD, 1992) provides a comprehensive framework that addresses all aspects of biodiversity. The *Cartagena Protocol on Biosafety* (CPB, 2000) to the CBD seeks to ensure the development of appropriate procedures to enhance the safety of biotechnology in the context of the CBD's overall goal of *reducing all potential threats to*

*biological diversity, taking also into account the risks to human health.* The CP fosters the establishment of an enabling context for the environmentally sound application of biotechnology, making it possible to derive maximum benefit from its use while minimizing the risks to the environment and to human health. The CP promotes biosafety by establishing practical rules and procedures for the safe transfer, handling and use of Living modified organisms (LMOs), with a specific focus on regulating movements of these organisms across borders. It features two separate sets of procedures, one for LMOs that are to be intentionally introduced into the environment, and one for LMOs that are to be used directly as food or feed or for processing. The project's objectives and implementation strategies are hereafter analysed with reference to:

*Sub-regional environmental issues and needs*

45. The target of this action is a topic critical for the African environment: the need to find a balance between innovation-driven economic development and the conservation of natural resources and biodiversity. Maghreb countries are experiencing extensive foreign investments in crops plantations for export and the local market involving mechanization, improved seed and chemical inputs as well as the delocalization of chemical industries and the emergence of a vibrant food and feed production. E.g., traders supply cereals, horticultural and forage seed to both plantation and smallholder farmers in the region. according to the Project document (section 25), due to its geographic position in the central Mediterranean region, Tunisia is part of an important area for species diversity – the Mediterranean region-, but the Tunisian government neither has sufficient resources to implement its obligations as a Party to the Cartagena Protocol on Biosafety nor the means to establish active and effective co-operation with other countries in the region.

46. The design of this initiative recognizes that biosafety concerns could hamper the benefits of biotechnology innovation and weaken the country's strategic commitment to economic development and the conservation and sustainable utilization of the national biological resources. According to the project document, concern for the environmental impact of LMOs introduction is high in the region due to its touristic vocation. Civil society's concerns about the possible threats to the environment and human health have grown.

*The UNEP mandate and policies at the time of design and implementation*

47. The cross-cutting thematic priorities listed in section III of the UNEP Medium-term Strategy 2010–2013 include strengthening Sub-Programme D on Environmental Governance, to address agreed environmental priorities, by supporting Governments in establishing, implementing and strengthening the necessary processes, institutions, laws, policies and programmes to achieve sustainable development, and Sub-Programme C on Ecosystems Management. Specifically, under the Environmental governance priority, the UNEP Expected Accomplishments (EAs) include assisting states to increasingly implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions. The Ecosystem Management EAs included increasing integration of an Ecosystem Management approach [e.g. compliance with the CBD] into development and planning processes.

48. The project is part of a set of National Biosafety Implementation Projects directly linked to Ecosystem management (UNEP EA-3: creating the enabling environment for the implementation of biodiversity-related Multilateral environmental agreements) and Environmental governance (UNEP EA-4: enhancing the capacity of countries to develop and enforce laws and strengthen institutions to achieve internationally agreed environmental objectives and goals and comply with related obligations). However, the project strategic relevance to UNEP's Programme of work (PoW) and Expected accomplishments is indirect as the relevant PoW and EAs did not include any specific mention of Biosafety. At the same time, the project documents did not establish a link with the relevant PoW outputs and EAs. Even though this was not a UNEP requirement at the time of project design, it further reinforces the fact that biosafety was not integrated in the PoW and EAs.

*The GEF Biodiversity focal areas, strategic priorities and operational programme(s)*

49. This project is strategically relevant to GEF as biosafety is one of the GEF cross cutting thematic issues. The project belongs to the Biodiversity Focal Area and specifically it is relevant to the following area: *(3) Capacity Building for the Implementation of the Cartagena Protocol on Biosafety, i.e. Developing systemic and institutional capacity building for biosafety: Provision of support to countries for the development and implementation of National Biosafety Frameworks including the Biosafety Clearing House and enabling activities including the development and training in risk assessment and management of modified living organisms with the participation of relevant government sectors such as agriculture, fisheries, forestry, industry, environment, education, manufacturing, trade and health as well as community and private sector stakeholders.* It is therefore most relevant to the implementation of GEF Operational Programs 1-4 and 13.

50. The GEF *Initial strategy for assisting countries to prepare for the entry into force of the Cartagena Protocol on Biosafety* (2000) proposes to assist countries to prepare for the entry into force of the Cartagena Protocol on Biosafety through the establishment of national biosafety frameworks, including strengthening capacity for risk assessment and management with a wide degree of stakeholder participation. This project assisted the government of Mauritius in implementing its National Biosafety Framework thus contributing to fulfilling the GEF *Initial strategy*.

Rating: moderately satisfactory

## **B. Achievement of outputs**

51. The project delivered most of its outputs, although re-planning – due to the 3 years interruption in decision making in the aftermath of the Arab spring – did involve the dropping of some activities. Furthermore, the lack of enactment of the GMO Laws resulted in the lack of formal appointment of the national BSC and approval of the NBF regulations and operationalization of procedures is still pending.

52. Under Components A, B and C, as far as completing the implementation of the NBF is concerned, the discontinuity at the political level caused major setbacks in the operationalization of the NBF. Not only in terms of lack of legally binding documents, but also in terms of structuring and integrating the contribution of different institutions to the running of the NBF. Lacking the legal basis for establishing the national Biosafety committee, in 2014 a National Technical Committee of Biosafety was created, by gathering the institutions and private parties involved in performing the project activities. No progress was recorded in the approval of the legal framework of the NBF, after the fine tuning of such documents.

53. The lack of approval of the GMO laws impeded the approval of the Biosafety regulations (Component B), making irrelevant the performance of the other activities contributing to orientating this sector (the biotech/biosafety strategy and action plans elaborated with the support of Component A) and implementing the NBF regulation (the Legal texts for Biosafety law and implementing regulations/guidelines elaborated to structure the decision making system supported by Component B). Workshops on biosafety and its regulatory regime were also organized under Component B.

54. Under Component C, the project was effective in formulating methodologies and creating technical skills by upgrading the partner organizations technicians on risk assessment / management and handling of GMO applications. Component D supported the capacity building of technicians in GMO monitoring and of the four reference laboratories in building GMO detection analytical skills and procuring equipment, although with delays. Some training events were dropped (see Table 1 below). Up to now, the GMO detection laboratories have not yet been accredited and hence are unable to perform official analyses.

55. Under Component E, key activities performed in the public awareness campaign were the development of documentation and its dissemination through events such as the Week on biosafety. Dissemination materials included a Booklet and interactive Compact Disk on GMOs for students and relevant stakeholders, a training guide and related materials for public information and sensitisation. The elaboration of documents related to biosafety to disseminate as outreach materials (in Arabic, French and English), the design of a website and the development of a strategy or communication plan for public awareness and education in relation with biosafety are expected to be completed by the end of 2014.

56. The most relevant discrepancies between planned and actual execution consist in (a) the failure to approve / enact the two draft Laws and regulations thereof and (b) the changes in the tuning and timing of technical training sessions and awareness workshops, as shown in Table 1.

Table 1. Planned vs actual training and workshop events

<i>n.</i>	<i>Planned training and workshops</i>	<i>Actual Training and workshops</i>
1.1	Three workshops with main stakeholders are organised to collect views and identify main elements of a biotech/biosafety strategy by 2007	3 meetings with government and main stakeholders (2008)

2.1	A workshops for decision-makers on "National Regulatory Framework" (2 days / 30 participants) to create awareness and speed up the review and approval process in Parliament w organised by 2007	2 workshops on Legal framework on biosafety for 30 members of the National Committee on Biosafety (2012 - 2014)
2.2	Two training courses for legal and administrative staff on the interpretation and application of the biosafety laws orders and decrees are held by 2008	Training course on Biotechnology & biosafety: regulatory regime, institutional, socioeconomics & ethics (2010). Training on GMO related risks evaluation, management, communication (2012). Training on authorization notification and request (2012)
3.2	Two workshops for the Biosafety Committee members as well as other personnel of the biosafety office involved in handling requests for the releases of LMOs into the environment, with a focus on risk evaluation and management taking into account Articles 15 and 16 of the Protocol, are organised by end 2007	2 Training courses on RA &RM – handling for request (Decembrer 2012)
4.3	Two intense courses for technicians to enable them to carry out laboratory inspection activities associated with LMOs (4 days / 25 participants) are organised by 2008	Training course on Methods of detection & quantification of GMOs. Work visit at Institut Scientifique de la Santé Publique Belge (2012).; at SLC laboratory, Strasbourg (2) on GMO detection and quantification (2012)
	Two four-day training for inspectors and custom officials on LMOs identification by 2008	Training course for monitoring and inspection
	An overseas training for inspectors and officers to improve their capacity/expertise in investigating on GMOs by 2008	Planned for the first half of 2015
5.2	At least 3 workshops on public information and participation organised by 2008	Biosafety week informing and making NGOs and other stakeholders aware: training on procedures manual (2013)
-	-	Workshop: elaboration of funding request to implement Biosecurity strategy and action plan (2012)

Rating: satisfactory

### C. Effectiveness: Attainment of project objectives and results

#### *Achievement of Direct outcomes as defined in the reconstructed ToC*

57. Components A, B and C. The major setback in implementing the NBF was the lack of approval of the GMO laws, a fact that, in turn, did not allow the approval of the BS regulations (Component B) and hence their operationalization through the institutional decision making system (Component C), along the orientation of the biotech/biosafety strategy and action plan (Component A). A Strategy for Biotechnology Use in industry and trade including Biosecurity and GMOs by the Ministry of commerce is under discussion and is expected to be released soon, a fact that may be positively contributing to re-launching the NBF implementation. Tunisia has developed a consistent trade with countries with very structured market regulations such as the European Union – i.e., requiring the compliance of strict product standards, including Biosafety. It also supplies semi-processed agricultural commodities and niche quality food to emerging economies such as the Gulf States and China. At the same time, import of human food and

animal feeding and low-cost goods from countries with low levels of GMO standards is on the rise. Investments in biotechnology innovation were hampered in recent years by political instability and economic crisis.

58. Furthermore most Tunisian entrepreneurs directly purchase GMO related services from companies based in the export countries. Therefore, they did not stimulate and back policy makers in having the Biotechnology/biosafety strategy and draft Laws and regulations approved and resources allocated to put in place the NBF. In short, the procedures for GMO release / introduction authorization and surveillance (Component C) are not in place and this sector is still deregulated.

59. Component D was extensively performed in creating the capacities of the GMO detection laboratories. However, due to the dropping of some training activities, and lack of approval of the GMO laws and BS regulations, the monitoring system was not operationalized. Component E was performed but its small size resulted in little impact on the public opinion and had no influence on decision makers and entrepreneurs, i.e. its reach outside the scientific community was minimal. Therefore, it did not contribute to create a dialogue among stakeholders that have a major impact on fostering the operationalization of the NBF, but it is still expected to do so in the long run through the use of communication materials created with the project support.

The achievement of direct outcomes is therefore rated as moderately satisfactory.

#### *Likelihood of impact using RoTI approach*

60. The conceptual frame highlighted in the project ToC – see Diagram 1 above – points to the fact that the NBF stakeholders concerns are multiple. The economic benefits of regulating GMO release / introduction concern the added value of export products as well as of the improvement of the population livelihood through the consumption of healthy food and conservation of biodiversity. Local investments are expected to make biotechnology an engine of development and justify the costs of running the NBF. A market in expansion and increasing customer's expectations and consciousness of their rights and bargaining power have stimulated investment in technical expertise that is now available to implement the NBF regulations. The implementation of the NBF was expected to generate success stories showcasing the opportunity to invest in this sector, along the BS regulations, in order to fulfill the high standard of product in foreign markets. Exporters of products of excellence – according to the representatives of the reference laboratories – in order to comply with the BS regulations in the importing countries, purchase BS related services (e.g., the release of GMO free certificates) abroad, as they are unavailable at home.

61. The project identification did not properly canvas such challenges in its diagnosis of the opportunities and threats of the BS regulations. Leverages such as the enforcement of intellectual property rights could have contributed in keeping the positive momentum ignited by the signature of the Biodiversity Convention and Cartagena Protocol on Biosafety. At the moment of the project identification, environmental concerns and opportunities for accessing exigent

markets were high and triggered a strong political support for the preliminary actions – such as drafting the GMO Law and other legal instruments.

62. Institutional changes, discontinuity in decision making and new market opportunities reduced the political interest in having such documents approved and made legally binding. On the other side, the scientific community has strongly adhered to the project goal and invested in raising the capacities of the 4 reference GMO detection laboratories. Uncertainty created by the Arab spring in the coordination of the economy has disrupted the value chains approach to export markets and hence entrepreneurs’ interest in implementing the NBF.

63. In short, the project did build on existing capacities, preparing the legal, and strengthening the technical, instruments needed for the implementation of the BSF. It was unable to streamline the precautionary principle into the development policies. In such respect, awareness raising was the project weakest component. Its ability to mobilize the economic vested interests to support the approval of the biotech/biosafety strategy and action plan (Component A) was minimal, thus negatively affecting the approval of the NBF legal provision and their operationalization.

The likelihood of impact is therefore rated as moderately unlikely and the achievement of the project goal and planned objectives is rated as moderately unsatisfactory.

64. The project’s achievements analysed above are synthesized in Table 2. This presents the Evaluation questions listed in the ToRs, with the value of the relevant indicators and the synthesis assessment of the achievement in the 5 components.

Table 2. Evaluation matrix

<i>Question</i>	<i>Criteria</i>	<i>Indicators</i>		<i>Sources</i>	<i>Answer to the question</i>
		<i>Target</i>	<i>Achievement</i>		
To what extent was the project able to support Tunisia in establishing a national biosafety framework in accordance with national development priorities and international obligations?	Impact	1. By 2008, biosafety is included in national biotechnology strategy	Biosafety strategy and action plan document elaborated in French and Arabic	Programme document, PIR, Programme terminal report, Interview of stakeholders	The draft Biosafety strategic documents approved by all stakeholders but not by the government yet
To what extent was the project able to assist Tunisia to establish and	Effectiveness	2. By 2008, a finalised regulatory regime reflecting	Biosafety regulatory regime documents (2 draft laws, 3 draft decrees and 3 draft orders) elaborated; Revision and translation (in English	Programme terminal report, Interview of stakeholders	The Biosafety regulatory regimes instruments and capacities

consolidate a fully functional and responsive regulatory regime in line with the Cartagena Protocol and national needs and priorities?		existing policies and defining all the elements of the NBF and related implementing procedures in line with CP and international obligations	and Arabic) of all technical guides on risk assessment, risk management, risk communication, notification request and Authorisation request; National Technical Committee of Biosafety and 3 subcommittees (legal framework, laboratories for GMO detection and quantification, communication, sensibilisation and public participation) established to follow up the project results		developed have not been operationalized yet
To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for handling request, perform risk assessment, testing of GMOs, decision-making and performing administrative tasks?	Effectiveness	3. Number of decisions made as a result of request within CP timeframe during project life	No decision taken as the law is still at draft stage	Direction of environment, Interviews of stakeholders	No decision taken as the law is still at a draft stage; interim measures are performed along the existing legal documents
To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for “follow-up”, namely monitoring of environmental effects and enforcement?	Effectiveness	4. Procedures for enforcement actions are in force by 2008	Methodologies for risk assessment and management developed; draft statutory forms for applications or requests; operational manuals for handling requests developed, draft of methodologies for monitoring of environmental effects of LMOs established; 2 draft procedures and forms for enforcement actions required with handling, transport, use, transit and release of LMOs; Guide for monitoring and inspection prepared in Arabic; training courses on (1) Methods of detection & quantification of	Direction of environment, Interviews of stakeholders	Monitoring skills and GMO detection capacities are not operationalized due to lack of deployment of the NBF procedures

			GMOs and (2) monitoring and inspection held; Most of the equipment purchased for Laboratories handling LMO Detection and national network between laboratories created; Draft database developed in synergy with BCH project		
To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for public awareness, education, participation and access to information?	Effectiveness	5. Number of nationals accessing the BCH 6. Targeted audience awareness	BCH establishment in process: data acquisition and the development of website ongoing; 3 meetings with government and main stakeholders (2008); training course on Biotechnology & biosafety: regulatory regime, institutional, socioeconomics & ethics (2010); Publishing of an interactive CD and booklet on GMO and dissemination among students and stakeholders; training guide on public information and participation drafted; Biosafety week informing and making aware NGO and other stakeholders (2013); creation of the communication and public awareness committee; workshop on Legal framework on biosafety for 30 members of the National Committee on Biosafety (2014)	Programme document, PIR, Programme terminal report, Interview of stakeholders	The BCH is not operational and awareness raising has reached a limited target being uninfluential in stimulating investments in biotechnology and decisions on the implementation of the draft Biosafety strategic documents

Rating: moderately unsatisfactory.

#### D. Sustainability and replication

65. The limited support by at the highest institutional level makes problematic the completion and sustainability of the project results. As shown in the ToC diagram, a plurality of conditions and patterns has to be fulfilled to ensure the full operation of the NBF and successfully replicate and up-scale the programme results. They are reviewed in the following sections.

### *Socio-political sustainability*

66. The Government of Tunisia identifies biotechnology as an instrument for development. To achieve that vision, it has formulated a strategy, which is aimed at creating a cluster of academic as well as Research and development institutions specializing in different areas of biotechnology. The project document (Section 2.1) recognizes that the impoverishment of agro-biodiversity arises from the expansion of intensive commercial agriculture, as well as from the use of new or more productive varieties. This has led to the marginalisation of local crops varieties to the extent of extinction. At the same time, this has created an opportunity for potential use of LMOs in agriculture through the import of seed of animal feeding crops such as maize and soybean. According to the project document, this situation has raised concerns among the public opinion about potential side effects to human health, environment, including risks to biological diversity and has led to socio-economic, cultural and ethical concerns. Mainstreaming the precautionary principle into development is critical for ensuring the sustainability of the economic development.

67. The project created expertise on biosafety in key institutions and technical bodies, the legal framework, as well as guidance and resources, are the NBF needs to be operationalised. As a result, up to the time of the evaluation, the project beneficiaries – institutions and professionals - have not been requested to use such capacities in performing tasks such as risk assessments / management, inspections and laboratory detection of GMO. The national technical committee on biosafety established in 2014 is facilitating the coordination of their efforts but has no legal status or mandate to promote the approval of the legal acts establishing the NBF. The sustainability of the project results is challenged at its roots by such legal and institutional vacuum.

### *Financial resources*

68. The project aimed at developing a systematic and reliable approach to Biosafety management in order to promote the trust of investors, users and other stakeholders in biotechnology innovation. As LMOs regulations also concern duties, levies and fees related to authorization and sanctions, the NBF has the potential to generate resources for the running and updating of the system. However, no calculation of the financial resources needed was done in the course of the identification of the project. This could not be properly done at the time of the project identification, but a policy gap analysis, including the assessment of the financial implications of the regulations, could have facilitated tackling such issue. The slow pace of investments in this sector, due to the lack of the legal framework, is preventing the financial benefits of the NBF from materialising.

69. The continuation of project results depends on the commitment of the private sector to experiment with and promote biotechnology innovation. Presently, the resources made available to implement and run the NBF – raised internally from the Government budget - are not adequate for the deployment of a satisfactory monitoring system and for performing the required laboratory GMO detection analyses, should the legal framework be approved and become operational.

### *Institutional framework*

70. The implementation of the NBF and enactment of the relevant policies and regulations are expected to exploit scientific, technical and administrative capacities being built in the beneficiary institutions. The DGEQV, as the BS focal point, coordinates the Government technical bodies contributing to the running of the NBF. The national technical commission on Biosafety – in absence of the Biosafety Committee - is expected to advise the MoE and other Ministries in taking decisions on Biosafety. Coordination at the decision making level was not directly addressed by the project and the non-approval of the legal framework curtailed the influence of the DGEQV on the regulation of this sector. The effectiveness of these bodies to make the institutional arrangements effective has to be tested once the NBF becomes operational.

### *Environmental sustainability*

71. The project results have the potential to positively impact on environmental governance and ecosystem management. Its activities created capacities and mobilize resources without causing any negative impacts on the environment. In the long term the project results are expected to enhance the compatibility between local development and natural resources conservation, i.e. to make the growth of the Tunisian economy more environmentally sustainable. However, for this to be realized, it is essential that the legal framework is adopted and operationalized.

### *Catalytic role and replication*

72. The project catalytic role has been jeopardized by the long delay in its implementation coupled with the change in the level of commitment by decision makers to promote value chains addressing consumers concerns about biosafety. The new capacities created are not yet being used to regulate the market. No authorization procedures exist to regulate molecular laboratories activities with respect to GMO research. Nor such laboratories are accredited with respect to GMO detection. Thus, the expansion of the project achievements faces the following constraints:

- (a) capacities exist in research, development and surveillance of the release / introduction / export of GMO, but the lack of approval of the biotech/biosafety strategy and action plan discourages investments; the lack of approval of the GMO laws has stopped the deployment of the NBF procedures and is keeping this sector deregulated;
- (b) the *incentives* to exploit local capacities do not exist, for the reason highlighted above, and the parties interested in GMO free certification access the services supplied by their export markets;
- (c) the *institutional changes* were achieved at the technical level, but no administrative or strategic direction has been built to use them; the creation of the national technical commission on biosafety only marginally improves this situation;
- (d) *policy changes* have to be expected from the development of value chains requiring BS compliance to supply markets demanding it; this favorable situation has to be complemented by incentives for the accreditation of the Tunisian organizations for performing risk assessment / management and analysis so that they become competitive with respects to the import markets competitors;

Rating: moderately unlikely.

## E. Efficiency

73. The strong technical skills in biotechnology research and laboratory analysis existing in Tunisia created the conditions for the local procurement of the human resources needed to implement the project activities. Upgrading of laboratories and development of skills in GMO detection filled in gaps by concentrating resources where they were more useful. However, the strong commitment in this field resulted in advances in this component which were unmatched in the other components of the project – especially in the structuring of the NBF legally, administratively and operationally. Coordination was easily achieved at the technical level through the eager collaboration of the technicians in partner institutions, while integration of the decision making procedures was blocked by the lack of a legal framework. Thus the results achieved in one component did not impact on the progress of the other ones.

74. The buildup of extremely strong technical capacities alone was not enough to establish success stories in monitoring GMOs, a critical point to convince decision makers to invest in the NBF. The actions concerning the BCH, the dissemination website, and awareness raising events were too limited to achieve a decided impact on the approval of the biotech/biosafety strategy and action plan. In short, the project coordination was effective in mobilizing the scientific community but not adequate to foster the involvement of the other stakeholders essential for the orientation of decisions concerning the NBF.

75. The long delay induced by the absence of decisions following the Arab spring also negatively affected the project efficiency. Discontinuity at the institutions apex disrupted the political support and appeal for private parties to integrate their action in value chains exploiting the opportunities of complying with the BS regulations in order to enter competitive markets. The project activities resumed in 2012, after 3 years. A new work plan was designed concentrating on technical training and awareness raising, whose completion is expected at the end of 2014. The national technical commission on biosafety is providing continuity to the project results in the technical field. However, it is not a full substitute for a national BSC which has been established and endorsed with a legal mandate.

Rating: satisfactory.

## F. Factors and processes affecting the project performance

### *Preparation and readiness*

76. The formulation of this project was started at the end of the pilot phase (project GF/1200-89-86). Identification of national and local stakeholders was carried out via a thorough process of consultation and dialogue. The project implementation was centred on the leading role played by the General Directorate of Environment and Quality of Life of the Ministry of Environment, which is the National Focal Point (NFP) to the Cartagena Protocol on Biosafety. Other institutions, directly and through the National Technical Commission for Biosafety – planned under the two LMOs Laws under approval at the time of the Project identification -, participated in the identification and design of the project, and were expected to contribute to its

implementation. Table 1 in the Project document specifies the individual role and task to be played by the stakeholders, including institutions, scientific community, civil society, private sector and development partners.

#### *Project implementation and management*

77. The implementation of the project activities was relatively smooth as it consisted in the national executing agency executing centralized activities and spending the GEF cash contribution along UNEP financial procedures. The national Executing agency coordinated the partners and implemented the project work plan. Local partners action consisted in the execution of tasks assigned by the national Executing Agency, in most cases the participation in workshops, training and collaboration in drafting technical (the guidelines) and administrative (the regulations) documents.

#### *Stakeholders' participation and public awareness*

78. Agri-food, biological research and industry institutions participated to the technical activities. Four first-rate laboratories participated to the project by building their capacities in GMO detection and related analyses. Involvement of education institutions was limited, as the awareness raising component was late and incompletely implemented. In absence of the National biosafety committee, coordination was effective only inside the scientific centers and testing laboratories.

#### *Institutional framework*

79. Tunisia elaborated the draft National Biosafety Regulatory Framework and established the Committee for Genetically Modified Organisms, a program of training and awareness in biosafety. This improved coordination between institutions on biosafety. A Biosafety Clearing House project has been approved, expanding the existing *Clearing House Mechanism (CHM)* for Biodiversity of the Ministry of the Environment to include the biosafety database and perform ancillary actions. Participation to the project was ensured by the existence of capacities and awareness in scientific and technical institutions. On the other side, high level representatives from the Ministries and private parties interested in biotechnology were little committed to the achievement of the project goal. The evaluator deems that they have been discouraged by the lack of effective development plans fostering the concentration of resources to achieve long term, shared results.

80. While waiting for the approval of the regulatory regime, the DGEQV has promoted, in collaboration with the project partners, the setting up of the National Technical Commission on Biosafety - including 3 sub-committees on legal issues, laboratories and accreditation, public awareness – to follow up on the project results. Such body represents the institutional consensus on the continuation of the project activities and intends to raise the policy makers awareness on the steps needed to complete the NBF implementation. However, it has little influence on the mobilization of the private sector and hence the promotion of value chains complying with GMO standards. These could provide success stories appealing to the politicians' sensibility for an immediate and practical impact of the NBF on development and are needed to stimulate decisions favorable to the implementation of the NBF itself.

### *Country ownership and driveness*

81. Tunisia has developed skills in biotechnology research. The scientific community is expecting that the implementation of the biosafety framework will enable their exploitation for development and natural resources conservation. The project was strongly supported by research institutions while the private economic sector, and general public were little involved in this initiative. This lack of ownership impacted negatively on the institutions that didn't fully take responsibility for its implementation. The change in leadership and political instability also affected the level of country ownership and driveness. Relevant institutions contributed to the deployment of technical resources to perform project activities, but were less committed to direct the project to the achievement of its development objective: implementing a NBF ensuring the reliable release / introduction of LMO to foster the economic development of Tunisia.

### *Financial planning and management*

82. The project adopted UNEP/GEF financial standards. The national Executing Agency (DGEQV) was in charge of the approval of expenditures, while the ANPE, an agency of the Ministry of Environment with greater financial flexibility, was in charge of their disbursement. Updated budgets were regularly uploaded in the Anubis database. Some delay in the disbursement of UNEP/GEF funds and the greater one due to the interruption of the project resulted in the dropping of some activities. The project budget was composed of the contributions from GEF-UNEP and the Tunisian government, amounting respectively to 48% and 52% of the total (see Annex 5.2). By June 30, 2014, the actual expenditure of GEF-UNEP contribution amounted to 99% of the planned expenditure, those of the Tunisian Government' in kind contribution reached 74% (see Annex 5.2). The completion of the project execution is expected by end of 2014.

### *UNEP supervision and backstopping*

83. Project supervision was ensured by the participation of UNEP and national coordinators in the Steering Committee. No major problems were faced in the exchange of information. Local partners action consisted in the execution of tasks assigned by the Executing agency, in most cases the participation to workshops, training and collaboration in drafting technical (the guidelines) and administrative (the regulations) documents. UNEP backstopping through the Biosafety unit consisted in the supply of technical advice (e.g., in the case of the technical appraisal of laboratory equipment) and monitoring of the execution of the activities. Monitoring concentrated on reporting on the delivery of activities (cfr. the next section). The project reporting was structured along UNEP procedures and produced information adequate to highlight the achievements and milestones of the project execution. The Anubis system provided an adequate filing and dissemination mechanism for reporting project activities.

### *Monitoring and evaluation design*

84. The Logframe (annex 1A) and Monitoring and evaluation (M&E) plan (Annex 1B) attached to the project document are the key elements describing the project M&E system. The M&E approach consists of the periodic reporting of the activities (e.g., through the PIRs) plus the

internal Midterm review and external Terminal evaluation, and financial audits. The UNEP task manager and Steering committee were in charge of reporting and hence of the monitoring function. The project did not allocate any specific budget line to implement the M&E plan, which is linked to the fact that UNEP did not require GEF 3 projects to budget for monitoring and evaluation. Thus, no specific resources were available to survey and collect the indicators, but the UNEP Task manager reported on the accomplishment of activities and their immediate objectives. The project allocated resources for the final evaluation from the technical support budget.

#### *Quality of the project logframe and indicators*

85. 63 indicators are listed in the Logframe, both internal and external, sometimes lacking a numeric target. The risks and constraints (corresponding in negative form to the assumptions) and risks management actions are extensively described, thus providing a detailed guidance to project decision making. As a whole, the extremely long list and description of indicators and risks concentrate on the immediate output of the action and do not provide a synthesis assessment of the project progress toward its overall objective.

86. Baseline data were included in the table: Logframe on Project against Key Performance Indicators, and Baseline and Methods of Data Collection (Annex 1C) of the project document. They are mostly qualitative and related to the execution of the project activities and their immediate impact.

#### *Monitoring and evaluation activities*

87. The arrangements for monitoring the project outputs and outcomes coincided with the activities reporting process. Data collection procedures are defined in the project document baseline data annex. No resources were available for surveys and data collections external to the project. No timeframe or grid for the logframe information collection was included in the work plan.

88. Evaluation arrangements consisted in the execution of an internal Midterm review by the UNEP Task manager and the external Terminal evaluation by the UNEP Evaluation office. The Midterm report was uploaded in Anubis website. The Evaluation office unit will track the implementation of recommendations at 6 months intervals.

Rating: moderately satisfactory.

### **G. Complementarity with UNEP strategies and programmes**

89. The project is in line with the UNEP commitment to assist developing countries in establishing a NBF along the GEF Initial strategy and follows the methodology developed by the UNEP Biosafety Unit (BSU). It is part of a batch of projects assisting developing countries to develop and implement their NBF, thus contributing to the international alignment of countries on biosafety issues. The implementation of the project activities follows GEF-UNEP past experience and is part of a coordinated effort to implement the provisions of the Cartagena

Protocol on Biosafety worldwide. Its implementation is complementary to the GEF project Building Capacity for Effective Participation in the Biosafety clearing house (BCH) of the Cartagena Protocol on Biosafety, supporting countries regarding their obligations to the CP. It exploits UNEP's established capacities in the field of capacity-building and technology support. For instance, it uses the training modules developed as tools to help countries understand their BCH obligations as Parties and to assist them to enter and use information in the BCH.

90. The project is consistent with the environmental governance and ecosystem management thematic priorities. The project contributes to UNEP's Expected Accomplishments and POW 2008-2009, 2010-2011 and 2012-2013 in relation to minimizing environmental threats to human well-being arising from the environmental causes (priority b) and consequences of human made disasters and strengthening environmental governance to address the Biosafety environmental priorities (priority d). However, due to the lack of data collection and the output oriented nature of the indicators in the Logframe, it is not possible to measure the contribution to the UNEP Expected Accomplishments.

91. The project was in line with the Bali strategic plan in fostering national participation ownership – the national executing agency being in charge of all major operational decisions -. The implementation of the NBF supports Tunisia in developing its own technology assessment capacities and in accessing sources of sustainable financing.

92. By building national skills in biosafety, the project created the conditions for further initiatives fostering South-South cooperation in this field – although it has not directly engaged in such field – as well as for dialoguing with centers of excellence in the North. A regional training on Biosafety is actually planned for the first half of 2015. Training activities held in Bruxelles and Strasbourg presented an opportunity to exchange experiences with European institutions in charge of GMO surveillance and detection. No initiative fostering the links with other emerging and developing economies was undertaken.

93. There was no specific gender component in the project design.

Rating: satisfactory.

## **H. Conclusions, lessons learnt and Recommendations**

### **1. Conclusions**

94. The project has been identified on the basis of the results of the previous biosafety initiatives. It did not achieve the approval and implementation of the GMO legal framework and biosafety strategy promoting the mainstreaming of biosafety into Tunisian economic development strategies. The national crisis and change in the country economic and institutional context has stopped the approval of the legal framework necessary for to the implementation of the NBF and endangers the sustainability of capacities built through the project activities.

95. The project was designed to operationalize the NBF by strengthening local biosafety related knowledge and skills. It concentrated resources on the development of GMO monitoring and detection and focused to a lesser extent on the components on awareness raising and supporting decision makers and administrators to structure the NBF.

96. Institutional changes delayed the project execution until a new institutional and economic context emerged, which turned out to be less favorable to the NBF implementation. Discontinuity in decision making and a lower interest in developing value chains targeting the needs of competitive markets stopped the approval of the GMO / NBF legal provision and biotech/biosafety strategy and action plan. Thus, the NBF regulations and procedures are still at the draft stage, the Biosafety committee has not been legally established, and the Biosafety Clearing House (BCH) – established with the support of another project – lacks the resources to become operational. The Ministry of Commerce is presently formulating a *Strategy for biotechnology use in industry and trade* including Biosecurity and GMO, an opportunity for creating a consensus favorable to re-launching the NBF implementation.

97. The project activities were mostly performed, with a greater execution rate in the component concerning the building of GMO detection capacities. The activities supporting the integration of biosafety in development strategies, the approval of regulations and deployment of the administrative system supervising the sector were partially successful as they were not backed by the private sector interest and political decisions. The awareness raising component was quite limited in its design.

98. The project supported the elaboration of the key tools for the deployment of the NBF (administrative and technical instruments), created capacities to assess challenges to biosafety and monitor and detect GMOs and established a technical coordination with the academic world. However, the project overall goal at the time of the evaluation had not been reached as the biosafety procedures had not been legally enacted or tested, reference laboratories had not been accredited, phyto-sanitary controllers working in the country customs offices were not legally enabled to monitor GMO.

99. The DGEQV effectively coordinated the project activities until the interruption due to the national crisis and institutional changes. With their resumption after over three years, a new work plan was designed concentrating resources on capacity building and awareness raising. The National Technical Commission on Biosafety was established in order to coordinate the local partners. The National Executing agency has agreed with them to complete all expenditures by the end of 2014.

100. The project partners are well connected with the international scientific community. They are involved in technology transfer initiatives contributing to the updating of the skills created with the support of the project. The 2012-2014 period of activities resumption was very intense in technical training and exchange of experience with European technical bodies. However, due to lack of resources, the GMO detection laboratories have not yet been internationally accredited. An interim process based on the existing draft legal documents has been used to develop training

and outreach material. The final approved legal instruments are expected to be in line with such documents, even if the *Arab spring* events resulted in slow progress on the development of the institutional framework and the adoption of relevant political arrangements.

101. The National technical commission on Biosafety and the molecular laboratory network are now well established. The Commission's three subcommittees (legal issues, laboratories and accreditation, public awareness) provide technical advice and services to the national Biosafety Focal Point and partner institutions. The BCH is still in the process of data acquisition and at the stage of developing a website.

102. UNEP played its role in streamlining the project design along the GEF Biosafety approach by facilitating the deployment of activities and in providing agile financial procedures for procurement of good and services.

## 2. Overall assessment

103. To what extent was the project able to support Tunisia in establishing a national biosafety framework in accordance with national development priorities and international obligations?

*The draft Biosafety strategic documents have not been approved yet*

104. To what extent was the project able to assist Tunisia to establish and consolidate a fully functional and responsive regulatory regime in line with the Cartagena Protocol on Biosafety and national needs and priorities?

*The Biosafety regulatory regimes instruments and capacities developed have not been operationalized yet*

105. To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for handling request, perform risk assessment, testing of GMOs, decision-making and performing administrative tasks?

*No decision taken as the law is still at a draft stage; interim measures are being taken based on the existing legal documents.*

106. To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for "follow-up", namely monitoring of environmental effects and enforcement?

*Monitoring skills and GMO detection capacities are not operationalized due to lack of deployment of the NBF procedures*

107. To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for public awareness, education, participation and access to information?

*The BCH is not operational and awareness raising has reached a limited audience, being uninfluential in stimulating investments in biotechnology and decisions on the implementation of the draft Biosafety strategic documents*

108. In synthesis: the project was effective in elaborating technical and administrative documents for running the NBF and in establishing technical capacities on GMO detection. Due to institutional changes, the draft policy and regulations implementing the NBF have not been approved yet.

109. The overall assessment of the project is summarizing below.

Table 3. Overall ratings of the project

<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating</b>
<b>A. Strategic relevance</b>	The project identification was a follow up of previous activities developing the draft law and regulatory documents and is in line with UNEP and GEF priorities. The link with UNEP priorities is indirect as the relevant PoW and EAs did not include any specific mention of Biosafety (such link was not mandatory at the time of the project design)	MS
<b>B. Achievement of outputs</b>	Most activities were performed although several concerning the operationalization of the NBF and establishing of monitoring capacities were dropped or ineffective due a long interruption in the project activities and change in the institutional setting after the Arab Spring	S
<b>C. effectiveness: Attainment of project objectives and results</b>	The project attained most of its planned results but due to the lack of decisions on the legal instruments establishing the NBF was unable to approve and operationalize the regulations	MU
1. Achievement of direct outcomes	The project attained most planned results but due to changes in the context – discontinuity in decision making - has not been able to operationalize the NBF	MS
2. Likelihood of impact	Due to changes in the context, project achievements have been limited to the technical issues having no impact on biotechnology innovation programmes and GMO surveillance	MS
3. Achievement of project goal and planned objectives	The NBF operationalization is still to be achieved as the regulatory framework has not been approved	MU
<b>D. Sustainability of project outcomes</b>	The project outcomes sustainability is challenged by the lack of coordination of the development sectors with the regulatory framework and dependence of the private sector on the BS services available in the export markets	MU
1. Financial	Due to the lack of requests for GMO release / introduction the NBF has not yet been able to raise resources to allow its own maintenance and updating	MU
2. Socio-political	The economic context is favorable to biotechnology innovation and biosafety although lack of commitment to sustainable value chains provides little opportunities for the exploitation of the NBF services	MU
3. Institutional framework	Institutional discontinuity negatively impacted on the NBF implementation, limiting its achievements to the technical components of the project. The delay in the operationalization of the system may lead to losses of trained and skilled personnel within key institutions	MU
4. Environmental	The project is expected to lead to positive environmental impacts, if the NBF is operationalized	HL
5. Catalytic role and replication	As the NBF has not been operationalized, there has not been a catalytic effect and replication	S
<b>E. Efficiency</b>	The project positively exploited local capacities in the technical field to implement its activities. Its efficiency was negatively impacted by changes in institutions and the economic development context (over 3 years of delay)	S

Criterion	Summary Assessment	Rating
<b>F. Factors affecting project performance</b>	Contingent problems resulted in delays and changes in the work plan, concentrating on technical more than structural / institutional issues; The executing agency effectively collaborated with technical partners, other stakeholders were little responsive	MS
1. Preparation and readiness	Institutions were actively involved in the project design and implementation	S
2. Project implementation and management	The execution mechanism performed well and was adequate to perform most of the planned activities	S
3. Stakeholders involvement	Strong participation of the technical institutions was not matched by an analogous involvement of decision makers, the private sector and civil society, due to concentration of resources in the technical component and changes in the socio-economic and institutional context	MS
4. Country ownership / driven-ness	Economic development stakeholders interested in innovation in biotechnology lacked the continuity of their institutional counterparts to appropriate the project technical achievements	U
5. Financial planning and management	The project financial management was effective although hampered by delays in funds disbursements due to the retard induced by the institutional crisis and lack of decisions following the Arab spring	S
6. UNEP supervision and backstopping	UNEP Biosafety unit provided valid and targeted supervision and backstopping of the project activities, effectively solving bottlenecks	S
7. Monitoring and Evaluation	The M&E deployment was limited to internal reporting on activities performance and their immediate outputs achievements	MS
a. M&E Design	The sketchy M&E system design provides an extensive list of immediate output indicators that do not provide a synthesis assessment of the project toward its overall objective. No budget for evaluation.	MS
b. M&E Plan Implementation	It was limited to the reporting of the project activities execution with little concern for the collection of indicators	MS
c. Budgeting and funding for M&E activities	No specific budget was assigned for collecting the indicators, UNEP project coordinator and steering committee were in charge of reporting with inputs supplied by the national coordinator	S
<b>Overall assessment</b>	The project was effective in elaborating technical and administrative documents for running the NBF and in establishing technical capacities on GMO detection. Due to institutional changes and changes in the development context, the draft policy and regulations implementing the NBF have not been approved yet. Planning of activities for the continuation of the project are still axed on the technical issues	MS

### 3. Lessons learnt and recommendations

110. The lessons learnt are organized along the list of conclusions highlighted in the previous section. Recommendations are distinguished from the lessons learnt by an *R* letter.

111. Biosafety has to be mainstreamed in sector development policies and plans aimed at achieving the satisfaction of the local and foreign consumers. The Ministry of Trade is developing a Strategy on Biotechnology and this provides an opportunity for developing consensus in such field.

*R. The Biosafety focal point has to explore, with representatives of the development sector, new ways to stimulate biotechnology innovation and strengthen the Biosafety approach. The Ministry of Trade's Biotechnology strategy represents an opportunity for stimulating the interest of the private sector in the implementation of the NBF and mainstreaming biosafety in economic development. This activity has to be coordinate between the BS focal point and the Ministry of*

*Trade. A policy gap analysis would help to systematically appraise the current situation, map the interests at stake in biotechnology innovation, help focus the debate and provide background documents concerning the implementation of the NBF and to identify challenges ahead in economic development and natural resources conservation. The National Technical Commission on biosafety has to establish a Steering Committee in charge of planning activities and to assist the BS focal point to communicate with institutions and stakeholders taking decisions on biotech/biosafety issues.*

112. The project activities concentrated resources on strengthening the local capacities in GMO detection.

*R. Training on risk assessment and GMO monitoring and international accreditation of the GMO detection laboratories have to be provided in order to complete the capacities needed to run the GMO release / introduction authorization and monitoring procedures. This activity has to be led by the BS focal point and coordinated with the collaboration of the National technical commission on biosafety and the national institution in charge of accreditation.*

113. Consensus on the role of the NBF in fostering sustainable development is hampered by institutional changes. The approval of strategic and legal documents establishing the NBF has been postponed due to such instability.

*R. Presentations on the NBF have to be developed by the DGEQV in collaboration with representatives of key economic development sectors (e.g., food industry, seed, environmental friendly chemical products, etc.) to present in a targeted way the opportunities and challenges of mainstreaming biosafety into economic development through the value chain approach. Such documents have to become part of the standard presentation of the NBF. Testing the implementation of the procedures for the release / introduction and monitoring of GMO – with non-GMO materials – has to be performed in order to show the functioning of the designed NBF mechanism to decision makers.*

114. The project design was strongly focused on channeling resources to the technical component, although the regulatory regime is mostly a coordination mechanism of different competencies and functions. The project education and awareness raising campaign was quite limited and partially implemented. It produced documentation that has been disseminated reaching a limited set of stakeholders.

*Awareness raising activities have to differentiate stakeholders with a decision making role from the general public and civil society organizations. The former group has to be addressed by presenting case studies and success stories from other countries, if they are not locally available, and by organizing exchanges of experiences with representatives of institutions / private sector from other countries.*

115. The national Executing agency has agreed with partners on a plan to commit assigned funds to complete expenditures along the project document and revised work plan.

*R. The completion of the project activities has to be integrated with the elaboration of the project exit strategy, in order to ensure that the three areas of interest (legal framework, laboratories and accreditation, awareness raising) converge to provide a road map to decision makers on*

*priority actions. This activity has to be led by the BS focal point, in collaboration with the National Technical Commission on biosafety.*

## Annexes

### 1. Evaluation TORs

#### TERMS OF REFERENCE

##### Terminal Evaluation of the UNEP/GEF projects

“Support for Implementation of the National Biosafety Framework for Tanzania”  
 “Support for the Implementation of the National Biosafety Framework for Mauritius”  
 “Support for Implementation of the National Biosafety Framework for Tunisia”

#### PROJECT BACKGROUND AND OVERVIEW

Project General Information

**Table 1. Project summary**

<p><b>GEF project ID:</b></p> <p><b>Focal Area(s):</b></p> <p><b>GEF Strategic Priority/Objective:</b></p> <p><b>UNEP approval date:</b></p> <p><b>Actual start date:</b></p> <p><b>Intended completion date:</b></p> <p><b>Project Type:</b></p> <p><b>PDF GEF cost:</b></p> <p><b>Expected MSP/FSP Co-financing:</b></p> <p><b>Mid-term review/eval. (planned date):</b></p> <p><b>Mid-term review/eval. (actual date):</b></p> <p><b>Date of last Steering Committee meeting:</b></p> <p><b>Disbursement as:</b></p> <p><b>Date of Completion:</b></p> <p><b>Total co-financing realized</b></p>	<p>3012</p> <p>2822</p> <p>2648</p> <p>BD1/BD-SP6</p> <p>Biodiversity</p> <p>October 13, 2006 December 04, 2006 January 22, 2007 May 01, 2007</p> <p>March 21, 2007 June 11, 2007</p> <p>October 12, 2010 December 12, 2010 December 2010</p> <p>MSP</p> <p>\$614,300 \$207,900 \$919,260</p> <p>May – June 2009 April 2009 June – July 2009 June 2009</p> <p>May 2009 October 2009 September 2013 September 28<sup>th</sup>, 2011 N/A</p> <p>\$777,300.00 (Tanzania)</p> <p>\$427,800.00 (Mauritius) \$697,590.26 (Tunisia)</p> <p>12/12/2013 30/09/2011 N/A</p> <p>\$673,753 (Tanzania) \$208,518 (Mauritius) \$746,645 (Tunisia as at 31/03/2014)</p>	<p><b>IMIS number:</b></p> <p><b>GEF OP #:</b></p> <p><b>GEF approval date:</b></p> <p><b>First Disbursement:</b></p> <p><b>Planned duration:</b></p> <p><b>Actual or Expected completion date:</b></p> <p><b>GEF Allocation:</b></p> <p><b>PDF co-financing*:</b></p> <p><b>Total Cost:</b></p> <p><b>Terminal Evaluation (actual date):</b></p> <p><b>No. of revisions:</b></p> <p><b>Date of last Revision:</b></p> <p><b>Date of financial closure:</b></p> <p><b>Actual expenditures reported as of:</b></p> <p><b>Actual expenditures entered in IMIS as 30 June 2013:</b></p>	<p>GFL/2328-2716-4951 GFL-2328-2716-4952 GFL-2328-2716-4953</p> <p>March 9, 2006 March 3, 2006 February 8, 2006 April 11, 2007 December 26, 2006 February 8, 2006</p> <p>48 months</p> <p>December 31, 2012 September 2011 July 21 2014 \$777,300 \$427,800 \$848,900</p> <p>\$1,391,600 \$635,700 \$1,768,160</p> <p>June 2014</p> <p>12 10 12 23/11/2013 17/09/2011 01/01/2014</p> <p>Financial closure will be done in IMIS when the Terminal Evaluation is done.</p> <p>Tanzania and Mauritius reported in full. Tunisia reported USD 714,661 by March 2014</p> <p>Co-finance is not recorded in IMIS</p>
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**Leveraged financing:**

Project rationale

**Tanzania:** The United Republic of Tanzania is one of the 41 countries that implemented their National Biosafety Framework as part of the UNEP-GEF project for the implementation of NBFs. The main outcomes of the implementation phase included, among others, the setting up of the National Biosafety Framework, while biosafety issues were enshrined in the Environmental Management Act 2004, Biosafety Regulations and Guidelines were developed, public awareness, education and information dissemination mechanisms and monitoring mechanisms were established. This project intended to help the United Republic of Tanzania to strengthen the existing institutional and technical structures and

infrastructure needed to meet the obligations of the Protocol and have a fully operational National Biosafety Framework. This project aimed to contribute to:

The development and implementation of Biosafety Regulations;  
The implementation of the United Republic of Tanzania's legislative framework on the safe use of biotechnology through decrees, orders, guidelines and manuals;  
The preparation of specific technical guidelines;  
The strengthening of appropriate institutional structures for risk assessment, risk management, detection of LMOs and decision making;  
The development and implementation of policies for biotechnology and biosafety;  
The training of regulators, decision makers, scientists, and administrative and technical staff on legal and technical matters relates to LMO application;  
The reinforcement of the existing infrastructures (laboratories) to strengthen monitoring and detection of LMOs';  
The setting up of a mechanism for monitoring and enforcement;  
The strengthening of communication and information exchange relating to biosafety both at the national level as well as through the global BCH; and  
Putting in place systems for strengthening public awareness, education and participation in decision making on LMOs.

**Mauritius:** The preparation of a regulatory regime for biotechnology in Mauritius started in 1997. In 1999, with the assistance of UNEP/GEF pilot project, Mauritius prepared its "National Biosafety Guidelines for the Safe Development and Introduction of Genetically Modified Organisms". The guidelines outlined the administrative and institutional procedures necessary for the safe application of genetic modification. The guidelines recommend practices based on the precautionary approach to ensure the safe application of GMOs for different uses (contained conditions, field trials, import, exports, transport, etc) so as to protect the country from any adverse effect to human and animal health or the environment. The scope of the guidelines included all use, development and release of GMOs. Following this, the then Ministry of Agriculture, Food, Technology and Natural Resources approved the Non-Sugar Sector Strategic Plan. This was a five-year plan for the years 2003- 2007 aimed at promoting the transition from traditional practices to a technology-based approach to agriculture.

A new plan for Food Security was initiated by the Government as a "Food Security Strategic Plan 2008-2015", with a dedicated Food Security Fund of Rs 1 billion over the project period with the main objective of increasing local food production of foodstuffs and to decrease import of food commodities. The approach includes the optimization of local food production through diverse government incentives, regional partnerships, promotion of public-private partnership, export of surplus and sensitising the public to healthy eating. In this context, the biosafety project aimed at strengthening capacity for the implementation of the Mauritius Biosafety Framework so as to meet its obligations under the Cartagena Protocol on biosafety. It was considered imperative that the necessary capacity is built in biosafety issues so that appropriate and timely decisions regarding the transboundary movement of Genetically Modified Organisms (GMOs) could be taken.

**Tunisia:** Tunisia was one of the 18 countries that participated in the pilot UNEP/GEF Project on the Development of the National Biosafety Framework (Project GF/1200-89-86 MEAT/GEF/UNEP). The draft National Biosafety Regulatory Framework was the main output of the pilot phase. Since the completion of the project, Tunisia made further progress by fine-tuning its National Biosafety Framework (NBF). More importantly, Tunisia ratified the Cartagena Protocol on Biosafety on January 22, 2003. As a Party to the Protocol, Tunisia needed to strengthen its existing institutional and technical structures and expertise to meet its obligations of the Protocol and have a fully operational NBF. The biosafety implementation project was intended to provide the necessary financial and technical assistance for Tunisia to:

Transform its National Biosafety Framework to a legally binding national biosafety regulatory regime through the enactment of Laws, and drafting of implementing regulations, decrees, orders;  
Prepare specific training guides and manuals;  
Train decision makers, scientists, administrative and technical staff on legal, scientific and technical matters;  
Enhance existing institutional facilities and infrastructure to undertake GMO detection and monitoring activities;  
Set up a mechanism for monitoring and enforcement;  
Strengthen channels of communication and information dissemination nationally, as well as through the Biosafety Clearing House (BCH);  
Promote public awareness and participation.

3. Project objectives and components

4. The overall **goal** of the project in Tanzania was to establish a functional and transparent national biosafety framework in accordance with national development priorities and international obligations by 2009. In Mauritius, the overall goal of the project was that a workable and transparent national biosafety framework, in line with its national development priorities and international obligations would be in place by 2010. The overall goal of this project for Tunisia was that the country would have a workable, responsive and transparent NBF by 2010, in line with its national development priorities, the Cartagena Protocol and other international obligations.

5. The project **objective** was to develop the national biosafety capacities required to establish functional, workable and transparent national biosafety frameworks in accordance with national development priorities and international obligations. Table 2 provides an overview of specific objectives by country.

**Table 2 – Specific objectives by country**  
**Country      Specific objectives**

Tanzania	<p>To assist The United Republic of Tanzania to establish and consolidate a fully functional and responsive regulatory regime in line with Cartagena Protocol and national needs and priorities.</p> <p>To assist The United Republic of Tanzania to establish and consolidate a functional national system for handling request, perform risk assessment, testing of GMOs, decision-making, perform administrative tasks.</p> <p>To assist The United Republic of Tanzania to establish and consolidate a functional national system for “follow-up”, namely monitoring of environmental effects and enforcement.</p> <p>To assist The United Republic of Tanzania to establish and consolidate a functional national system for public awareness, education, participation and access to information.</p>
Mauritius	<p>To assist Mauritius to have a fully functional and responsive regulatory regime in line with the CP, national needs and other international obligations.</p> <p>To assist Mauritius to have a functional national system for handling request, including risk assessment, decision-making and administrative processing.</p> <p>To assist Mauritius to have a functional national system for “follow-up” activities, especially monitoring of environmental effects and enforcement.</p> <p>To assist Mauritius to have a functional national system for public awareness, participation, education, and access to information.</p>
Tunisia	<p>To integrate biosafety into a national development strategy</p> <p>To establish and consolidate a fully functional and responsive regulatory regime in line with the CP, national needs and other international obligations.</p> <p>To enhance the existing administrative system on biosafety to be competent and efficient in handling requests for applications, including systems for risk assessments, decision-making and administrative processing.</p> <p>To strengthen the present national system for public awareness, participation, education and access to information on biosafety</p>

6. The project **purpose** was to contribute to the safe use of biotechnology and reduce the potential risk associated to LMO use on biodiversity, human and animal health.

7. The structure of this project comprised four **components** in Tanzania and Mauritius and five in Tunisia. Table 3 summarizes the components per country and lists the outputs the projects intended to achieve.

**Table 3 – Projects components/outcomes and outputs by country**

<b>Country</b>	<b>Components/outcomes and outputs</b>
Tanzania	<p>A. Establish and make fully operational the regulatory regime on biosafety in Tanzania by 2009</p> <p>Biosafety Regulations reviewed and finalized</p> <p>Four 2-day sensitisation workshops on regulatory regime for GMOs (CAs, NGOs, Private sector, civil society) conducted</p> <p>The NBF and Biosafety Regulations translated into <i>swahili</i> language</p> <p>Two, 3-days workshops for the Biosafety units of the Competent Authorities for sharing experience and information for effective enforcement of the regulatory regime carried out</p> <p>Operational manual for GMO inspectorates prepared</p> <p>Four, 3-day training workshops for Competent Authorities and Inspectorates on inspection procedures (2 workshops) and related legal issues (2 workshops) carried out</p> <p>Cessation or revocation order for non-compliance established</p> <p>GMO inspection facilities (field tool kits)</p> <p>B. Operational procedures to handle requests for permits, including systems for administrative processing, risk assessment and decision making, are in place by 2009</p> <p>National Biosafety Guidelines and training manuals on risk assessment and risk management developed.</p> <p>Two 3-day training workshops for 30 participants each from Competent Authorities and other biosafety regulatory personnel on risk assessment and risk management conducted</p> <p>Laboratory equipped with necessary facilities for risk assessment and risk management (it is already under component C) (see Annex 8)</p> <p>Two 5-day training workshops held for 30 participants each (NBC members, NBFP, private sector) on handling of requests conducted</p> <p>A 2-day workshop held for identification of socio-economic priorities for decision making conducted</p> <p>An internal manual on procedures for handling requests of GMOs in Tanzania prepared</p> <p>Specific biosafety units within the seven Competent Authorities (see Section A2 for the list of CAs) for handling GMO issues strengthened</p> <p>Two, 3-days training workshops on GMO administrative issues (responsible personnel within CAs, NGOs, Private sector) conducted</p> <p>A networking mechanism for cooperation and information exchange among CAs, NGOs, private sector etc. developed</p> <p>C. An operational system for monitoring of environmental effects and enforcement on biosafety is in place by 2009</p>

Three 2-days training workshops for 15 Inspectors from each CAs, 40 Custom officers and 20 Judiciary officials (dispute settlement, handling of court cases and enforcement) conducted

One of the potential laboratories into a centre of excellence for R&D on biosafety upgraded

Equipment for detection of GMOs (see Activity A1 (c)) purchased

GMO testing protocol developed

Two, 5-days training workshops for 8 laboratory technicians from each CAs for GMO detection conducted

On-the-job training provided to officials from different authorities with real case studies to make sure that the system for handling requests is functioning

Guidelines for monitoring (in cooperation with sector ministries) environmental effects developed

Guidelines and rules for emergency cases (including remediation) and TORs for responsible persons developed

Training for emergency operations for all principal actors (including high ranking officials – see risk management) provided

An updated inventory of emergency equipment and replacement/procurement of any additional requirements maintained

Emergency response procedures for NBF and Competent Authorities established

D. A functional national system for promoting public awareness and involvement in biosafety decision-making is in place by 2009

Government agency/responsible institutions for managing public awareness and education campaigns relating to Biosafety identified

Surveys for public opinion carried out

Public debates to create awareness organized

Public education and involvement plan prepared

Outreach material (e.g. leaflets, Newsletter, Biosafety website) developed and disseminated

Three 2-day awareness raising workshops for parliamentarians, media, NGOs and other stakeholders conducted

Public debates (biannual) and meetings (biannual), including educational competitions (annually) or events (annually) organized

Entry points for public participation in decision-making on GMOs identified and institutionalized

Institution/agency specializing in developing and delivering public service campaign identified

National website for dissemination of biosafety information established and updated regularly

Mauritius

A. A fully functional and responsive regulatory regime in line with CP and national needs exists

Implementing regulations needed to make the GMO Law fully operational drafted and submitted to concerned Ministries

35 policy makers, lawyers, Senior Government Officers, scientists, National Biosafety Committee members, University of Mauritius staff trained on the implementation of GMO Law and the Cartagena Protocol

B. A functional national system for handling request, performing risk assessment, decision-making, performing administrative tasks, handling, storing and exchanging information in line with the BCH requirements is in place

Technical guidelines on the handling of requests, transport, labelling of GMOs are finalised

35 persons from the Ministry of Agriculture, Food Technology and Natural Resources, Ministry of Environment, Ministry of Health and Quality of Life, Ministry of International Trade, State Law Office, Custom Departments, Research Organizations and University staff Workshop trained on procedures for the handling of applications for release of GMOs into the environment

10 officers/technical staff trained on risk assessment/risk management (two one-week training courses for 10 officers/technical staff)

10 officers/technical staff trained on handling, transport and packaging of GMOs

Application forms for LMOs permit available on the website

Operational manuals for regulators on handling requests, namely written procedures on administrative processing, risk assessment and decision making prepared

C. A functional national system for “follow-up”, namely monitoring of environmental effects and inspections is in place

Guidelines/Procedures on monitoring prepared

10 officers /inspectors/technical staff trained in LMOs testing and monitoring carried out (two one-week training courses)

Laboratory facilities adequately equipped for detection of GMOs

D. Mauritius has a functional national system for public awareness and participation

50 persons from the general public, media, NGOs, journalists, policy makers, and scientists and NGO representatives trained on “Public awareness and participation in the NBF of Mauritius”

Outreach material for main users developed and published

Lessons learnt and best practices documented and shared

Tunisia

A. Biosafety is integrated into the national biotechnology strategy of Tunisia

Two preparatory workshops to consult main stakeholders, collect views and identify salient points to develop a biotech/biosafety strategy are carried out

Biotech/biosafety strategy drafted

A workshop on the drafted strategy is carried out

The strategy is agreed upon and submitted for approval

B. A fully operational and responsive regulatory regime in line with existing national laws and other international obligations is in place

Two workshops for decision-makers to create awareness and to accelerate approval of the two draft Laws in Parliament are carried out

Review and final adoption of the biosafety regulatory regime

Identification of priority actions needed to implement the regulatory regime is carried out

Workshops for decision makers on identified priority actions

Training guides on the National Biosafety Regulatory Regime are prepared

Two training courses for legal and administrative staff on the interpretation and operation of the new National Biosafety Regime are carried out

C. An efficient national system for handling requests and decision-making is in place

Methodologies for RA/RM of LMOs are drafted and finalized

Statutory forms for applications or requests, including a review of the utility of these forms by selected experts carried out

Statutory forms are finalized and in use

Two workshops on risk assessment and risk management for members of the Commission for Biosafety and other administrative personnel carried out

Training guides on handling applications prepared and in use

D. An effective national system for follow-up activities, namely monitoring, inspections and enforcement is in place

Methodologies for monitoring of environmental effects developed, finalized and in use

Enforcement actions required for handling, transport, use, transit and release of LMOs developed, finalized and in use

Existing laboratories for LMO detection are equipped and certified

Two sets of training guides for monitoring and enforcement respectively are developed, finalized and in use

Two intensive courses for technicians to enable them to carry out laboratory inspections carried out

Two 4-day training workshops for inspectors and custom officials on LMOs identification carried out

An overseas study tour for inspectors and officers to counterpart agencies experienced in monitoring, inspection and enforcement activities carried out

E. An active national system for public awareness and participation is in place

Plans for public participation, awareness, education on biosafety and safe use of biotechnologies developed, finalized and implemented

Education materials on biosafety prepared

Public awareness raised via mass media

Homepage on biosafety created

Standards for producing and validating data related to LMOs to be entered in the national biosafety homepage developed

A training guide on public information and participation produced

A series of special workshops designed for different target audience such as government officials, journalists, scientists, NGO representatives and members of the public conducted

A series of training workshops for stakeholders, including the public, on public participation in the implementation of the Tunisian NBF carried out

Lessons learned and best practices identified, shared and disseminated

Source: project documents

#### 4. Executing Arrangements

8. The **Implementing Agency** for the three projects was the United Nations Environment Programme (UNEP). In this capacity, UNEP had overall responsibility for the implementation of the projects, project oversight, technical support and co-ordination with other GEF projects.

9. The Division of Environment (DoE) in Tanzania, the Food and Agricultural Research Council in Mauritius and the Division of Environment and Quality of Life in Tunisia were appointed **National Executing Agencies**. All three agencies are also the National Focal Points (NFP) to the Cartagena Protocol on Biosafety. The NEAs were responsible for the management of the project, ensuring that the objectives and activities would be realised. The NEA was also responsible to establish a National Coordinating Committee (NCC), appoint a full time National Project Coordinator (NPC) and to provide the necessary scientific, technical, financial and administrative support to the work of the NCC, working in close co-operation with relevant government agencies, the scientific community and the public and private sectors.

10. The **National Project Coordinator** was to be responsible for the overall co-ordination, management and supervision of all aspects of the National Project. He/she had to report to the National Co-ordinating Committee and UNEP, and liaise closely with the chair and members of the National Coordinating Committee and National Executing Agency in order to coordinate the work plan for the National Project. He/she was responsible for all substantive, managerial and financial reports from the National Project. He/she had to provide overall supervision for any staff in the NBF Team as well as guiding and supervising all other staff appointed for the execution of the various National Project components.

11. The **National Co-ordinating Committee** (NCC) was established by the National Executing Agency (NEA) to advise and guide the implementation of the National Biosafety Framework. This committee should have included representations of all government agencies with mandates relevant to the Cartagena Protocol on Biosafety and representations from the private and public sectors. This Committee was intended to be multi-disciplinary and multi-sectoral in fields relevant to the Cartagena Protocol on Biosafety.

Project Cost and Financing

12. The three projects fall in the Middle-size Project (MSP) category. They were expected to mobilize \$614,300 (Tanzania), \$207,900 (Mauritius) and \$919,260 (Tunisia) in co-financing, mostly from government sources. The estimated projects costs at design stage and associated funding sources are presented in Table 4, 5 and 6.

**Table 4. Estimated project cost in Tanzania**

<b>Component</b>	<b>GEF (US \$)</b>	<b>Government in-kind (US \$)</b>	<b>Total (US \$)</b>
Regulatory regime	110,000	76,000	186,000
Handling requests	102,500	87,500	190,000
Systems for follow up (Monitoring and evaluation)	252,000	303,000	555,000
Public education, awareness and participation	84,000	75,000	159,000
Project management and coordination	158,800	72,800	231,600
Technical support	70,000	0	70,000
<b>TOTAL</b>	<b>777,300</b>	<b>614,300</b>	<b>1,391,600</b>

**Table 5. Estimated project cost in Mauritius**

<b>Component</b>	<b>GEF (US \$)</b>	<b>Government (US \$)</b>	<b>Total (UD \$)</b>
Regulatory regime	18,000	12,000	30,000
Handling applications	63,000	27,100	90,100
Monitoring for environmental effects and Inspection	95,000	37,000	132,000
Public awareness and participation	27,000	9,500	36,500
Project coordination and management	124,800	102,300	227,100
Consultancy (regulations, operational manuals guidelines, etc)	30,000	20,000	50,000
Technical support	70,000		70,000
<b>TOTAL</b>	<b>427,800</b>	<b>207,900</b>	<b>635,700</b>

**Table 6. Estimated project cost in Tunisia**

<b>Component</b>	<b>GEF (US \$)</b>	<b>Government (US \$)</b>	<b>Total (UD \$)</b>
Biosafety strategy	34,300	15,000	49,300
Regulatory regime	59,600	30,000	89,600
Handling applications	71,600	22,000	93,600
Monitoring and Inspection	352,100	565,500	917,600
Public participation and information	76,500	71,000	147,500
Project coordination	96,800	200,760	297,560
Technical support	70,000		70,000
Other project support	88,000	15,000	103,000
<b>TOTAL</b>	<b>848,900</b>	<b>919,260</b>	<b>1,768,160</b>

**Implementation Issues**

13. The Mid Term Reviews (MTRs) were originally scheduled for April in Mauritius, and June 2009 in Tunisia and Tanzania. In all three cases, internal reviews were carried out by the UNEP Task Manager. The review for Tunisia took place in October 2009 and it concluded that the project

should have been put on a higher priority by Tunisia and that it was important to make an effort to deliver the intended results based on the set time targets. Delays and under-utilisation of funds were identified and a revised work plans developed accordingly. In Mauritius, the review was carried out in May 2009 and it noted that the achievement of the project outputs was possible, except for the adoption of a GMO Act, which was being delayed. Several recommendations were issued to try to achieve the adoption of the act within the original time frame of 2010. In Tanzania, the review was carried out in June 2009 and it proposed a revised work plan. It also mentioned that the network of centres of excellence was going to be extremely dependent on the commitment of Government and the designated institutions to provide technical support to regulatory decisions, which seemed to emerge as a crucial point for the long term sustainability of the project outcomes.

14. All the projects suffered delays ranging from one year in Mauritius to almost four in Tunisia. In some cases, this seems to have been partially due to causes of force majeure, including, for example, major flooding in Tanzania, which delayed the procurement process through UNDP by approximately nine months. In Tunisia, the Arab Spring seems to have played a role in the delay of the project delivery. In any case, it seems relevant for the evaluations to carefully consider the full range of reasons and whether any actions could have been taken by UNEP and the national partners to avoid protracted delays. This is especially relevant for Tunisia as the project suffered significant delays.

15. In Tanzania, several outputs were not delivered and a number of reasons are mentioned throughout the PIR reports and final reports, which seem to justify this outcome. These include budgetary constraints, non-alignment with national priorities and the fact that certain issues were in fact already covered by the existing legislation and by a parallel national project, the Environment Management Law Support program, and by other bilateral biosafety projects, including the USAID funded Program for Biosafety Systems. Tunisia and Mauritius seems to have been able to deliver most of the required outputs. However, it was noted in the last available PIR report that the regulatory framework had still not been adopted in Tunisia, probably due to a lack of political will. Equally, at the time of the final report, Mauritius did not seem to have established a Biosafety Office. The evaluations should therefore pay careful attention not only to the delivery of outputs, but also to the likelihood of long term sustainability and institutional change. It should also look at whether the project design correctly identified the needs and priority for action.

## TERMS OF REFERENCE FOR THE EVALUATIONS

### Objective and Scope of the Evaluation

16. In line with the UNEP Evaluation Policy, the UNEP Evaluation Manual, and the Guidelines for GEF Agencies in Conducting Terminal Evaluations, the Terminal Evaluations of the Projects “Support for Implementation of the National Biosafety Framework for Tanzania”, “Support for the Implementation of the National Biosafety Framework for Mauritius”, “Support for Implementation of the National Biosafety Framework for Tunisia” will be undertaken upon completion of the project (Tanzania, Mauritius) or immediately before the completion of the project (Tunisia) 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 evaluations have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners – the National Executing Agencies and the national partners in particular. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the projects’ expected outcomes, which may be expanded by the consultants as deemed appropriate:

To what extent were the projects able to support Tanzania, Mauritius and Tunisia in establishing a national biosafety framework in accordance with national development priorities and international obligations?

To what extent were the projects able to assist Tanzania, Mauritius and Tunisia to establish and consolidate a fully functional and responsive regulatory regime in line with the Cartagena Protocol and national needs and priorities?

To what extent were the projects able to assist Tanzania, Mauritius and Tunisia to establish and consolidate a functional national system for handling request, perform risk assessment, testing of GMOs, decision-making and performing administrative tasks?

To what extent were the projects able to assist Tanzania, Mauritius and Tunisia to establish and consolidate a functional national system for “follow-up”, namely monitoring of environmental effects and enforcement?

To what extent were the projects able to assist Tanzania, Mauritius and Tunisia to establish and consolidate a functional national system for public awareness, education, participation and access to information?

### Overall Approach and Methods

The Terminal Evaluations of the Projects “Support for Implementation of the National Biosafety Framework for Tanzania”, “Support for the Implementation of the National Biosafety Framework for Mauritius”, “Support for Implementation of the National Biosafety Framework for Tunisia” will be conducted by an independent consultant under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP Task Manager (Nairobi), and the UNEP Fund Management Officer at UNEP/DEPI (Nairobi). They will be in-depth evaluations using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

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

A **desk review** of project documents and others including, but not limited to:

Relevant background documentation, inter alia UNEP and GEF-3 policies, strategies and programmes pertaining to biosafety at the time of the project’s approval;

Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;

Project reports such as progress and financial reports from the executing partners; National Coordination Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;

Documentation related to project outputs;

Relevant material published, e.g. in journals and books

### Interviews with:

UNEP Task Manager and Fund Management Officer and other relevant staff in UNEP as necessary;

Interviews with project management, National Coordination Committee and key partners to the extent possible;

Stakeholders involved with this project, including NGOs, private sector, academia, national organizations and institutes, including National Competent Authorities, regional and international organizations and civil society representatives, including rural communities to the extent possible;

Relevant staff of GEF Secretariat and

Representatives of the government and other organisations (if deemed necessary by the consultant).

**Country visits.** The evaluation consultant will schedule a visit to each country to interview relevant stakeholders and the project team. To the extent possible, the visits should take place back to back to limit the amount of travel required.

Key Evaluation principles

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

The evaluation will assess the project with respect to a **minimum set of evaluation criteria** grouped in six categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) Complementarity with the UNEP strategies and programmes. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

**Ratings.** All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

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

As these are terminal evaluations, particular attention should be given to learning from the experience. Therefore, the “*Why?*” question should be at front of the consultant’s minds all through the evaluation exercise. This means that the consultant needs to go beyond the assessment of “*what*” the project performance was, and make a serious effort to provide a deeper understanding of “*why*” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “*why things happened*” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of “*where things stand*” today.

Evaluation criteria

Strategic relevance

The evaluations will assess, in retrospect, whether the projects’ objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the GEF Biodiversity focal area, strategic priorities and operational programme(s).

The evaluations will also assess whether the projects’ objectives were realistic, given the time and budget allocated to the project, the baseline situation and the institutional context in which the project was to operate.

Achievement of Outputs

The evaluation will assess, for each component, the project’s success in producing the programmed results as presented in Table 3 above, both in quantity and quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the projects in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project objectives).

Effectiveness: Attainment of Objectives and Planned Results

The evaluations will assess the extent to which the project’s objectives were effectively achieved or are expected to be achieved.

The evaluations will reconstruct the Theory of Change (ToC) of the project based on a review of project documentation and stakeholder interviews. The ToC of a project depicts the causal pathways from project outputs (goods and services delivered by the project) over outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called intermediate states. The ToC further defines the external factors that influence change along the pathways, whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control).

The assessment of effectiveness will be structured in three sub-sections:

Evaluation of the **achievement of direct outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs.

Assessment of the **likelihood of impact** using a *Review of Outcomes to Impacts* (ROtI) approach as summarized in Annex 8 of the TORs.

Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of the project’s direct outcomes, and the likelihood of those changes in turn leading to changes in the natural resource base, benefits derived from the environment and human living conditions.

Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project’s own results statements as presented in original logframe and any later versions of the logframe. This sub-section will refer back where applicable to sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) of the project, adding other relevant indicators as appropriate. Briefly

explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F.

#### Sustainability and replication

Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability.

Four aspects of sustainability will be addressed:

*Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? To what extent was the project able to reach out to the stakeholders identified in the design phase (academia, private sector, civil society including rural communities etc)?

*Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

*Institutional framework.* To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?

*Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

**Catalytic role and replication.** The *catalytic role* of GEF-funded interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has: *catalyzed behavioural changes* in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at national and regional level; provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour; contributed to *institutional changes*. An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the regional and national demonstration projects; contributed to *policy changes* (on paper and in implementation of policy); contributed to sustained follow-on financing (*catalytic financing*) from Governments, the GEF or other donors; created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).

*Replication*, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluations will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

#### Efficiency

The evaluations will assess the cost-effectiveness and timeliness of project execution. They will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its programmed budget and (extended) time. They will also analyse how delays have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the projects will be compared with that of other similar interventions and to each other's. The evaluations will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency, all within the context of project execution.

The projects suffered from moderate to significant delays. To what extent were the projects efficiently managed and what lessons can be learnt for future projects? To what extent did these challenges have an impact on the delivery of project outcomes and the achievement of the project objective?

Factors and processes affecting project performance

**Preparation and readiness.** This criterion focusses on the quality of project design and preparation. Were project stakeholders adequately identified? Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were GEF environmental and social safeguards considered when the project was designed? Were sufficient components integrated into the project design to ensure the obtaining of commitment of

government representatives? Were sufficient provisions integrated into project design to minimise delays in implementation? Were the projects designed with the needs of the countries in mind and to what extent were they aligned to national priorities?

**Project implementation and management.** This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

Evaluate the effectiveness and efficiency of project management by the National Executing Agencies and how well the management was able to adapt to changes during the life of the project.

Assess the role and performance of the units and committees established and the project execution arrangements at all levels.

Assess the extent to which project management, as well as national partners, responded to direction and guidance provided by the National Coordination Committee and UNEP supervision recommendations.

Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems. How did the relationship between the project management team and the national coordinators develop?

Assess the extent to which MTR recommendations were followed in a timely manner.

Assess the extent to which the project implementation met GEF environmental and social safeguards requirements.

**Stakeholder participation and public awareness.** The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The TOC analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and outcomes to impact. The assessments will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities.

The evaluations will specifically assess:

the approach(es) used to identify and engage stakeholders in project design and implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project?

the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;

how the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders in decision making.

**Country ownership and driven-ness.** The evaluation will assess the performance of national partners involved in the project, as relevant:

In how far has the national partner assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project and the timeliness of provision of counter-part funding to project activities?

To what extent has the national and regional political and institutional framework been conducive to project performance?

How responsive were the national partners to the National Executing Agencies coordination and guidance, and to UNEP supervision?

**Financial planning and management.** Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;

Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

Present to what extent co-financing has materialized as expected at project approval (see Table 1, 4, 5 and 6). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluations will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).

Describe the resources the projects have leveraged since inception and indicate how these resources are contributing to the projects' ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

Analyse the effects on project performance of irregularities (if any) in procurement, use of financial resources and human resource management, and the measures taken by the National Executing Agencies or UNEP to prevent such irregularities in the future. Appreciate whether the measures taken were adequate.

**UNEP supervision and backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

The adequacy of project supervision plans, inputs and processes;

The emphasis given to outcome monitoring (results-based project management);

The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);

The quality of documentation of project supervision activities; and

Financial, administrative and other fiduciary aspects of project implementation supervision.

**Monitoring and evaluation.** The evaluations will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

*M&E Design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:

Quality of the project logframe (original and possible updates) as a planning and monitoring instrument; analyse, compare and verify correspondence between the original logframe in the Project Document, possible revised logframes and the logframe used in Project Implementation Review reports to report progress towards achieving project objectives;

SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?

Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?

Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?

Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?

Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

*M&E Plan Implementation.* The evaluation will verify that:

the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;

annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;

the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

*Use of GEF Tracking Tools.* These are portfolio monitoring tools intended to roll up indicators from the individual project level to the portfolio level and track overall portfolio performance in focal areas. Each focal area has developed its own tracking tool to meet its unique needs.

Agencies are requested to fill out these forms at CEO Endorsement (or CEO approval for MSPs) and submit these tools again for projects at mid-term and project completion. The evaluation will verify whether UNEP has duly completed the relevant tracking tool for this project, and whether the information provided is accurate.

Complementarities with UNEP strategies and programmes

UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluations should present a brief narrative on the following issues:

*Linkage to UNEP's Expected Accomplishments and POW 2008-2009, 2010-2011 and 2012-2013.* The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ToC/ROTI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy 2010-2013 (MTS) would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist and it is still useful to know whether these projects remain aligned to the current MTS.

*Alignment with the Bali Strategic Plan (BSP).* The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.

*Gender.* Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?

*South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

The Consultants' Team

For this evaluation, the evaluation team will consist of one consultant. The consultant should have experience in project evaluation. A Master's degree or higher in the area of environmental sciences or a related field and at least 15 years' experience in environmental management, with a preference for specific expertise in the area of biosafety and biodiversity is required. Fluency in French is necessary.

By undersigning the service contract with UNEP/UNON, the consultants certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

The evaluation consultant will prepare an evaluation for each country. The evaluator will start by preparing three **inception reports** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

The review of design quality will cover the following aspects (see Annex 9 for the detailed project design assessment matrix):

Strategic relevance of the project

Preparation and readiness (see paragraph 25);

Financial planning (see paragraph 30);

M&E design (see paragraph 33(a));

Complementarities with UNEP strategies and programmes (see paragraph 34);

Sustainability considerations and measures planned to promote replication and upscaling (see paragraph 23).

The inception reports will also present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC *before* the most of the data collection (review of reports, in-depth interviews, observations on the ground etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

The evaluation framework will present in further detail the evaluation questions under each criterion with their respective indicators and data sources. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified.

The inception reports will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.

The inception reports will be submitted for review and approval by the Evaluation Office before the evaluation team travels to the field.

**The main evaluation reports** should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The evaluator will deliver high quality reports in English by the end of the assignment. The team will also provide the executive summary and the conclusions, lessons learned and recommendations section in French or the Tunisia project. The reports will follow the annotated Table of Contents outlined in Annex 1. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The reports will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The reports should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the reports, the author will use numbered paragraphs and make cross-references where possible.

**Review of the draft evaluation reports.** The evaluation consultant will submit the zero draft reports latest two weeks after conducting the field visits to the UNEP EO and revise the drafts following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft reports with the UNEP Task Manager, who will ensure that the report does not contain any blatant factual errors. The UNEP Task Manager will then forward the first draft report to the other project stakeholders, in particular the national partners, for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report.

The evaluation consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The consultant will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.

**Submission of the final Terminal Evaluation report.** The final report shall be submitted by email to the Head of the Evaluation Office, who will share the report with the Director, UNEP/GEF Coordination Office and the UNEP/DEPI Task Manager. The Evaluation Office will also transmit the final report to the GEF Evaluation Office.

The final evaluation report will be published on the UNEP Evaluation Office web-site [www.unep.org/eou](http://www.unep.org/eou). Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

As per usual practice, the UNEP EO will prepare a **quality assessment** of the first draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 4.

The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UNEP Evaluation Office ratings are the final ratings that will be submitted to the GEF Office of Evaluation.

Logistical arrangement

This Terminal Evaluation will be undertaken by an independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize field visits (if any), and any other logistical matters related to the assignment. The UNEP Task Manager and local partners will, where possible, provide logistical support (introductions, meetings, transport etc.) for the country visit, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

Schedule of the evaluation (tentative)

Activity	Date (s)
Start of the evaluation	29 June 2014
Inception reports	25 July 2014

Comments from Evaluation Office	8 August 2014
Field visits	11– 22 August 2014
Zero Draft reports	26 September 2014
Comments from Evaluation Office	10 October 2014
First draft reports	17 October 2014
Comments from stakeholders	31 October 2014
Final reports	15 November 2014

The consultant will be hired under an individual Special Service Agreement (SSA). There are two options for contract and payment: lumpsum or “fees only”.

**Lumpsum:** The contract covers both fees and expenses such as travel, per diem (DSA) and incidental expenses which are estimated in advance. The consultants will receive an initial payment covering estimated expenses upon signature of the contract.

**Fee only:** The contract stipulates consultant fees only. Air tickets will be purchased by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

The payment schedule for the consultant will be linked to the acceptance of the key evaluation deliverables by the Evaluation Office:

Final inception report: 20 percent of agreed total fee

First draft main evaluation report: 40 percent of agreed total fee

Final main evaluation report: 40 percent of agreed total fee

If the consultant fails to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Submission of the final evaluation report:

The final report shall be submitted by email to:

Mr. Michael Spilsbury, Chief

UNEP Evaluation Office

Email: [michael.spilsbury@unep.org](mailto:michael.spilsbury@unep.org)

The Head of Evaluation will share the report with the following persons:

Brennan Van Dyke

Director

UNEP/ GEF Coordination Office

Email: [brennan.vandyke@unep.org](mailto:brennan.vandyke@unep.org)

Shakira Khawaja

UNEP/DEPI Fund Management Officer

Email: [shakira.khawaja@unep.org](mailto:shakira.khawaja@unep.org)

Alex Owusu Biney

Task Manager

UNEP/DEPI

Email: [alex.owusu-biney@unep.org](mailto:alex.owusu-biney@unep.org)

The final evaluation report will be published on the UNEP Evaluation Office web-site [www.unep.org/eou](http://www.unep.org/eou) and may be printed in hard copy.

## 2. Chronogramme of the evaluation and list of people met

### 2.1 Chronogramme of the field visits

<i>Date</i>	<i>place</i>	<i>Activities</i>
29/7/2014	Home based	Interview of UNEP task manager
6/8	Travel to Tunis	

8/8	Tunis	Briefing at DGEQV with Mr Abdelhakim Issaoui, Mme Haazar Belli, Mr Hatem ben Belguacem Meeting Youssef Gerbi, ANPE
9/8	Tunis	Meetings at Banque nationale de genes: Mr Maher Chaouachi, Institut Supérieur de Biotechnologie de Monastir; Mr Olfa Saddoud Debbabi, Mr Maher Medini, Ms Neila Jellouli, Ms Hellal Raoudha, Laboratoire central d'analyses et d'essais Centre technique agro-alimentaire, Narjas Masah Hammar Boudali Hichem, Mme Afef Saffar Bouzouita, Seed testing laboratory
10/8	Tunis	Meeting at DGEQV with the Steering committee (13 participants)
11/8	Travel from Tunis	

## 2.2 List of people met

	<i>surname</i>	<i>name</i>	<i>Organization</i>	<i>Task</i>	<i>email</i>
Mme	Belli	Hazar	DGEQV, MdE, Bld de la Terre, Centre Urbain Nord Tunis, Tunisia, 1080 Cedex	Ingénieur Principal, Chef de service	pfn.cbd@mineat.gov.tn, bel_hazar_2000@yahoo.com
M.	ben Belgacem	Hatem	DGEQV, MdE, Bld de la Terre, Centre Urbain Nord Tunis, Tunisia, 1080 Cedex	Chef de Service	hatem_medd@yahoo.fr
Mlle	Bouzouita	Afef Saffar	Seed testing laboratory, MoA	responsable qualité	afef.saffar@gmail.com
M.	Chaouachi	Maher	Laboratoire de Genetique et valorization des Bioressources, Institut Supérieur de Biotechnologie de Monastir	M. charge Enseignement Supérieur et de la Recherche Scientifique	Maher-chaouachi@gmail.com
Mme	Debbabi	Olfa Saddoud	Banque Nationale de Gene de Tunisie, Laboratoire d arboriculture fruitiere	Researcher	olfa.lf@gmail.com
M.	Hammar	Narjas Masah	Centre technique agro-alimentaire. 12, rue de l'usine, Z.I. Chargaia II	director	narjes,hammar@topnet.tn, badiklibi@gnet.tn, ctaa@topnet.tn

M.	Hamada	Nabil	DGEQV, MdE, Bld de la Terre, Centre Urbain Nord Tunis, Tunisia, 1080 Cedex	director of ecology and natural habitats	pfn.cbd@minciat.gov.tn
Mme	Helal	Raoudha	Laboratory Central of Analysis & Essay / Ministry of Industry	responsable du laboratoire des produits d'origine vegetale	Helal_raoutha@yahoo.fr, Hella_raoutha@yahoo.fr
M.	Hichem	Boudali	Seed testing laboratory, MoA	senior head, ISTA member	ishemus@gmail.com
Mme	Issaoui	Abdel Hakim	Ministry charged of Environment / NPC	Project coordinator	hakissaoui@yahoo.fr
Mme	Jaballah	Sana	Technical Center of food / Ministry of Industry	Responsible du laboratoire	Sana.jaballah@topnet.tn, janasun@yahoo.fr
Mme	Jellouli	Neila	Banque Nationale de Gene de Tunis, Laboratoire de controle des OGM	Technicienne	jel_neil@yahoo.fr
M.	Jerbi	Youssef	ANPE / financial project agency	finance officer	kelibois@yahoo.fr
M.	Medini	Maher	Banque Nationale de Gene de Tunisie, Laboratoire de Biotechnologie vegetale	Researcher	mahermedini@yahoo.fr

### 3. Synthesis of the Interviews

Date	29/8/2014 h. 17 00 – 17 40	8/9/2014 h. 9 30 - 11 00	8/9/2014 h. 14 15 – 16 00
Person/organization	Alex Owusu-Biney, UNEP Task Manager (skype interview)	Abdelhakim Issaoui, BS focal point, Haazar Belli, BCH focal point, Hatem ben Belguacem, project assistant. DGEQV	Youssef Gelbi, financial manager of the project, ANPE
Context			

Threats to human health and biodiversity	Both Mauritius and Tunisia took part in the GEF Pilot Biosafety project managed by UNEP. The project was focused on stocktaking and inventory of biotechnology and biosafety status. For Mauritius a major outcome was the Biosafety Act (GMO Act 2004) and Tunisia a biosafety policy/draft law. – Pilot phase was for 18 countries - <a href="http://www.unep.org/biosafety/Pilot_project.aspx">www.unep.org/biosafety/Pilot_project.aspx</a> . Tanzania from Global development project to implementation – Outcome a final draft National Biosafety Framework with an Environment Management Plan which recommends the development of specific biosafety regulation. <a href="http://www.unep.org/biosafety/Development_Projects.aspx">www.unep.org/biosafety/Development_Projects.aspx</a> . The current projects for all the three countries are follow up implementation projects to the earlier interventions	Environmental and human / animal / plant health risk: GMO, pathogens, toxins also for human health, pharmaceutical products excluded	
Changes in the natural resource base, benefits in the environment and human living conditions	Each project is to support implementation of the Cartagena Protocol on Biosafety for which the GEF is the financial mechanism to provide funding for capacity building support. The interventions are to support the development of a regulatory framework to support the safe use and transboundary movement of Living Modified Organisms and to manage potential adverse impacts on biodiversity and human health	Biotechnology impact on human health and livelihood expected	
Concurrent actions in the Biosafety sector	The three countries had mechanisms in place, Tunisia had policy, the other two had law; Mauritius has developed at laboratory level capacity for development of GMOs and needed capacity to assess risk and detect GMOs and also develop mechanisms to be able to deal with commercial / release of LMO; idem in Tanzania for cotton	Bioprotect with EU funds with Centre de biotechnologie de Sfax (CBS); project EU CBRN CoE project 3: knowledge development and transfer of best practice on biosafety, biosecurity & biorisk management	
Framework			

Policies, strategies and plans in the Biosafety sector	They changed orientation in the three countries and speed up the project; in Tanzania broad environmental law, no regulations, generic law. The project did make specific regulations and set up a network of centers of excellence to provide technical and material support across several key stakeholder institutions including the regulatory agencies, universities and research institutions; in Mauritius some national resources from University, Agriculture and the Sugar Research Institute, to have national laboratory to monitor LMO; Tunisia had capacities strengthened through collaborative support from Agriculture, Environment, Universities and Biotechnology Center in Sfax	Draft law, orders & decrees for Biosafety developed in Arabic and French to be adopted by the government Draft Guidelines on the implementation of the national regulatory regime for biosafety was developed Training course on Biotechnology & biosafety held: regulatory regime, institutional, socioeconomics & ethics (2010) Workshop on Legal framework on biosafety for 30 members of the National Biosafety Committee: stimulating reflection, brainstorming and concentration about the new draft of legal framework on biosafety	
Institutional commitment and arrangements	Tunisia national gene bank and national reference laboratory and Ministry of Agriculture provided support to the coordination agency, Tanzania through the network of centers of excellence enhanced national commitment to the process in addition to the higher level coordination from the Division of Environment which is under the Office of the Vice President; in Tunisia and Tanzania environment leads the sector, in Mauritius agriculture leads National coordination with support from the University, regulatory institutions and the Sugar Research Institute and national capacities were enhanced in the three countries	Coordination through the national technical commission on biosafety and the three sub-commissions: A. Legal framework commission; B. Network laboratories for GMO detection and quantification; C. Communication, sensibilisation and public participation	
Biosafety regulatory framework coordination, mobilization of resources, information exchange	Tanzania centre of excellence capacity development was key achievement. Most of Mauritius key players are in the same compound; close institutions; willingness joined. In Tunisia gene bank and national reference laboratory did lead the process, in addition volunteering support of national experts helped to achieve results at a lower cost. Many changes after the project in the information exchange. All the three countries did participate to the global biosafety clearing house project which supported information exchange	Subcommittee of legal framework established to continue activities with different stakeholder's groups. Biosafety Law with implementation Decree and 3 Orders	
Procedures			

Risk assessment, notifications procedures	Tunisia is still ongoing; in Tanzania the development of these tools was successful; in Mauritius the material developed supported decision making	Draft texts of application Forms based on the draft regulatory regime was prepared for stakeholder, review & finalized (2012) Elaboration of operational manuals for Staff of Biosafety Office Elaboration and adoption of Methodologies for Risk Assessment and Risk Management based on the draft regulatory regime (2012)	
Follow-up / M&E procedures	Monitoring was done at project level and Steering committee level with supervisory follow up and Technical support by UNEP. The project did go through evaluations processes; the monitoring was done through the adoption of guiding tools. M&E plan were implemented in all three countries, in Tanzania some delays due to the death of the national project coordinator and also flooding of the UNDP office who UNEP had requested to facilitate the procurement of equipment	Elaboration of methodologies / procedures for monitoring and enforcement Elaboration of training guidelines for monitoring and inspection Three conventions for the creation of a national laboratories network for GMO detection and quantitative analysis signed by the Central analysis laboratory, the Technical center of food analysis and the Laboratory of seeds at the Ministry of agriculture. Overseas training for stakeholders to improve their capacity expertise in investigating on GMO	
Biosafety clearing house mechanism	Embedded, changes are going on, they know how to assess information and share	Training workshops for different groups of stakeholders (participation in the project BCH I & BCH II)	
Assets			

Technical facilities / field access	<p>UNEP provided Technical support to the countries; to help them to assess equipment; training in risk assessment, gene detection, administrative systems, Biosafety Decision making and monitoring and enforcement, additional support was client specific. Annual project coordinators meetings was used to create a platform for sharing experiences.</p> <p>Technical facilities are working now; they made requests in areas they wanted support, and they received them</p>	<p>Purchased equipment &amp; laboratory consumables: biology molecular consumable (Kit GMO detection and quantification)</p> <p>Reception and testing of some equipment purchased for the national gene bank, the central analysis laboratory, the Technical center of food analysis and the Laboratory of seeds at the Ministry of agriculture.</p> <p>Training sessions and practical activities on detection and control of GMO' s</p> <p>Creation of Network Laboratoires Commission (GMO détection &amp; quantification)</p>	
Sources of financial resources	<p>Tanzania and Mauritius have laws which provides mechanisms for funding, that has to be put in place; laboratories have to charge for analyses in the three countries; laws obliged applicants to pay for permits, law also mandates governments to provide budgetary support in addition to grants from within and donor support. As parties to the Cartagena Protocol on Biosafety the countries also have access to support from the GEF</p>	<p>Sources of budget UNEP/ GEF &amp; the national budget</p>	
Human resources and external collaborations	<p>Human resources from countries, from capacity building by UNEP team, from experts (national and international). They can request GEF support and have national programs and other ones (Usaid Program on Biosafety Systems, ABNE and AATF Africa Projects in Tanzania; EU TAEIX project support for Tunisia), aside of GEF and Government support. RAEIN-Africa Biosafety support for Mauritius. Regional collaborations through Sadc, Comesa, EAC in science, biotechnology and biosafety specifically</p>	<p>Training of different groups of stakeholders (workshop &amp; training sessions in Tunisia and abroad)</p>	
Awareness			

Perception by the decision makers' and public opinion	People involved in biotechnology have understanding, general public has different consciousness; there are mechanisms at institutional level for continuous engagement of public opinion in the three countries; documents have been made available through the project to support public awareness interventions	Organization of several meetings on relation with biosafety Publishing and dissemination of an interactive CD on GMOs distributed at national events Week of biosafety held in May 2013 informing and making aware NGOs and other stakeholders Communication and public awareness committee established	
Participation by the scientific community	Very satisfactory participation of the broad scientific community, in Mauritius, Tanzania and Tunisia for civil society, farmers, that contributed	Center of Biotechnology of Sfax (CBS), Center of Biotechnology Borj Cedria (CBBC), Institute of Biotechnology Sidi Thabet (IBST), National Institute of Agronomy in Tunisia (INAT) participated to a series of workshops and training sessions	
Project			
Implementing agency role	All three were well positioned, in Mauritius the sugar sector well endowed. They brought stakeholders, talked to high level government in all countries.	DGEQV is the technical implementing agency of the project: national & international collaboration, preparing the technical & financial reports, preparing Tor, national & international consultations. ANPE is the financial implementing agency of the project: it is in charge of all the payments	The statute of ANPE permits to spend money in the account established for the Unep budget, without high level and national treasury authorization. Financial management easier than that of the government, faster and simplified procedure. He checks the validity of documents to pay along the project manager request. Expenditures prepared by the technical task manager, Receipts paid directly without his intervention. Late disbursement of funds by Unep due to change in personnel delayed payments. Agreement on committed funds to complete expenditures

Logframe / indicators	Original projects had proper indicators, they were reviewed and adapted in the three countries to ensure monitoring and evaluation activities are factored into all the project interventions and were used to check the progress, and used in annual meetings for steering them. Final documents in Tunisia not yet finalized, but advance draft available. All three countries had clear logframes with indicators refer to Annex 1 of the project document. Project activities were adapted to ensure that monitoring of indicators and results were properly assessed and revised where necessary		
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Cont.

Date	9/9/2014 h. 9 00 - 13 00	9/9/2014 h.15 45 - 17 00	10/9/2014 h. 9 30 - 12 00
Person/organization	<p>Maher Chaouachi, Assistant Professor, Laboratoire de Genetique et valorization des Bioressources. Olfa Saddoud Debbabi, Researcher. Maher Medini, Researcher, Neila Jellouli, Technician. Banque nationale de genes. Hella Raoudha, responsable du laboratoire des produits d' origine vegetale. Laboratoire central d'analyses et d'essais Narjas Masah Hammar, director, Centre technique agro-alimentaire</p>	<p>Boudali Hichem, senior head of the Seed testing laboratory, MoA, Afef Saffar Bouzouita, quality head</p>	<p>MoE debriefing, 13 participants</p>
Context			
Threats to human health and biodiversity	Importers in the USA has to fill in the biosecurity certificates		

Changes in the natural resource base, benefits in the environment and human living conditions	Laboratoire central d'analyses et d'essais Laboratoire central d'analyses et d'essais has 5 laboratories, 2 in Tunis, 1 in Sousse, 1 in Sfac, 1 in Gerba. Tunisian exporters often certify GMO products in European countries	New young seed producers make agreements with US, Australia and European companies to produce seed to export; they need the Ista orange certificate label for GMO. Oecd catalogue is not considering GMO varieties – no special certification of approved varieties -. Upov register is about plant protection	There are more importers than exporters concerned by GMO, exporters of olive and dates are not concerned as they get certificates from European laboratories. Honey exported to Gulf countries, not yet exigent in GMO. Livestock feeding is based on imported soybeans and maize concentrates
Concurrent actions in the Biosafety sector			
Framework			
Policies, strategies and plans in the Biosafety sector		Draft GMO law	Draft Biosafety law concerns control and traceability and labeling. Ministry of commerce is preparing the biotechnology strategy use in industry and trade, by October 2014, including Biosecurity and GMO
Institutional commitment and arrangements	Convention of the network of 4 laboratories. Collaboration with the European GMO network	The DG protection and control of seed and agricultural products depends on their inputs. Official Seed and plants laboratory getting 5,500 samples of seed, and 1,800 of plants and 15,000 analyses; they have 4 laboratory sections: Germination, Physical properties, Diseases, Pests They are Fao quarantine organization registered. Accreditation along Ista rules for GMO	National commission of biosecurity is made also of representatives of the private sector and civil society but has no legal power as the law is not yet enacted. 3 commissions put in place in 2013, after interruption: 1. Revision of the law framework to be enacted, 2. laboratories, they established 4 GMO labs, 3. sensibilization; one offer for the training
Biosafety regulatory framework coordination, mobilization of resources, information exchange			
Procedures			
Risk assessment, notifications procedures		Materials for GMO analysis laboratory from project	Decision on the strengthening of the laboratories. Central laboratory has to build the building of the molecular laboratory

Follow-up / M&E procedures		Phytosanitary controllers present at the custom, at every border place (27 frontier places), collaborating with custom; lack of legislation they are not enabled to control GMO – not yet a procedure -. The system is ready, not implemented	Not yet tested mechanism, some importers and exporters have analyses done in France and Spain – local laboratories are not yet accredited, they make fast analyses and not yet certifications – Accreditation will take about 2 years yet, it's expensive and needs clear cut decisions
Biosafety clearing house mechanism		Training on BCH / biodiversity in Brussels in 2012, they need some more equipment	
Assets			
Technical facilities / field access	Training in Belgium, and in Strasbourg on GMO detection, consumable materials. Materials for GMO analysis laboratory from project. Laboratory And human resources in kind contribution by government. They are going to create molecular analysis laboratory	3 technicians participation to Strasbourg training on GMO analysis; Training has to be extended to keep the pace with technical evolution	Training plan by project Steering committee
Sources of financial resources			
Human resources and external collaborations			Regional capacity building is needed to update on Biosafety
Awareness			
Perception by the decision makers' and public opinion			Before 2011 no decision by policy makers; later civil society started to participate
Participation by the scientific community		All stakeholders participated to the project	
Project			

Implementing agency role			They built Biosafety capacities 2002-2004, did the study for the Biosafety law; the Unep project supported development of the Biosafety framework in 2007-2014. A third phase is needed to reach the decision making level and achieve fund raising to complete and follow up the results achieved to date
Logframe / indicators			

#### 4. Evaluation matrix

<i>Question</i>	<i>Criteria</i>	<i>Indicators</i>		<i>Sources</i>	<i>Answer to the question</i>
		<i>Target</i>	<i>Achievement</i>		
To what extent was the project able to support Tunisia in establishing a national biosafety framework in accordance with national development priorities and international obligations?	Impact	1. By 2008, biosafety is included in national biotechnology strategy	Biosafety strategy and action plan document elaborated in French and Arabic	Programme document, PIR, Programme terminal report, Interview of stakeholders	The draft Biosafety strategic documents have not been approved yet
To what extent was the project able to assist Tunisia to establish and consolidate a fully functional and responsive regulatory regime in line with the Cartagena Protocol and national needs	Effectiveness	2. By 2008, a finalised regulatory regime reflecting existing policies and defining all the elements of the NBF and related implementi	Biosafety regulatory regime documents (2 draft laws, 3 draft decrees and 3 draft orders) elaborated; Revision and translation (in English and Arabic) of all technical guides on risk assessment, risk management, risk communication, notification request and Authorisation request; National Technical Committee of Biosafety and 3 subcommittees (legal framework, laboratories for	Programme terminal report, Interview of stakeholders	The Biosafety regulatory regimes instruments and capacities developed have not been operationalized yet

and priorities?		ng procedures in line with CP and international obligations	GMO detection and quantification, communication, sensibilisation and public participation) established to follow up the project results		
To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for handling request, perform risk assessment, testing of GMOs, decision-making and performing administrative tasks?	Effectiveness	3. Number of decisions made as a result of request within CP timeframe during project life	No decision taken as the law is still at draft stage	Direction of environment, Interviews of stakeholders	No decision taken as the law is still at a draft stage; <i>interim measures are performed along the existing legal documents</i>
To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for “follow-up”, namely monitoring of environmental effects and enforcement?	Effectiveness	4. Procedures for enforcement actions are in force by 2008	Methodologies for risk assessment and management developed; draft statutory forms for applications or requests; operational manuals for handling requests developed, draft of methodologies for monitoring of environmental effects of LMOs established; 2 draft procedures and forms for enforcement actions required with handling, transport, use, transit and release of LMOs; Guide for monitoring and inspection prepared in Arabic; training courses on (1) Methods of detection & quantification of GMOs and (2) monitoring and inspection held; Most of the equipment purchased for Laboratories handling LMO Detection and national network between laboratories created; Draft database developed in synergy with BCH project	Direction of environment, Interviews of stakeholders	Monitoring skills and GMO detection capacities are not operationalized due to lack of deployment of the NBF procedures

To what extent was the project able to assist Tunisia to establish and consolidate a functional national system for public awareness, education, participation and access to information?	Effectiveness	5. Number of nationals accessing the BCH 6. Targeted audience awareness	BCH establishment in process: data acquisition and the development of website ongoing; 3 meetings with government and main stakeholders (2008); training course on Biotechnology & biosafety: regulatory regime, institutional, socioeconomics & ethics (2010); Publishing of an interactive CD and booklet on GMO and dissemination among students and stakeholders; training guide on public information and participation drafted; Biosafety week informing and making aware NGO and other stakeholders (2013); creation of the communication and public awareness committee; workshop on Legal framework on biosafety for 30 members of the National Committee on Biosafety (2014)	Programme document, PIR, Programme terminal report, Interview of stakeholders	The BCH is not operational and awareness raising has reached a limited target being uninfluential in stimulating investments in biotechnology and decisions on the implementation of the draft Biosafety strategic documents
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## 5. Summary co-finance information and a statement of project expenditure by activity

### 5.1 Project costs by component

Component/sub-component	Estimated cost at design (US\$)	Actual Cost (US\$)	Expenditure ratio (actual/planned)
Regulatory regime	18,000	18,000	100%
Handling applications	63,000	63,000	100%
Monitoring for environmental effects and Inspection	95,000	95,000	100%
Public awareness and participation	27,000	27,000	100%
Project coordination and management	124,800	124,800	100%
Consultancy (regulations, operational manuals guidelines, etc)	30,000	30,000	100%
Technical support	70,000	70,000	100%
<b>TOTAL</b>	<b>427,800</b>	<b>427,800</b>	<b>100%</b>

## 5.2 Co-financing repartition

Co financing (Type / Source)	IO own Financing (US\$)		Government (US\$)		Other (US\$)		Total (US\$)		Total Disbur sed (US\$)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants	427,800	427,800					427,800	427,800	
– Loans									
– Credits									
– Equity investments									
– In-kind support			207,900	207,900			207,900	207,900	
– Other									
Totals							635,700	635,700	

## 6. Quality of project design

The following table summarizes the assessment of the overall quality of this design.

Relevance		Evaluation Comments	Prodoc reference
Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives?		Yes, they enhance the national environmental governance & international integration	project document
Does the project form a coherent part of a UNEP-approved programme framework?		yes, it matches the medium term strategy of UNEP	project document, UNEP medium term strategy
Is there complementarity with other UNEP projects, planned and ongoing, including those implemented under the GEF?		yes, the UNEP-GEF project on building capacity on BCH, the UNEP-GEF Project on Development of National Biosafety Frameworks and other UNEP-GEF Biosafety Unit initiatives	project document, UNEP medium term strategy, UNEP-GEF project on building capacity on BCH, the UNEP-GEF Project on Development of NBF
Are the project's objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?	yes, the sub-region is developing capacities in biotechnology innovation and using it for the economic development	project document
	ii) the UNEP mandate and policies at the time of design and implementation?	yes, it fulfill the UNEP mandate to implement the CBD and Cartagena protocol	UNEP medium term strategy
	iii) the relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate)	yes, the economic governance focus area and the biosafety strategy	UNEP medium term strategy

	iv) Stakeholder priorities and needs?	yes, the consultation of stakeholders provided inputs for the project design	project document
<b>Overall rating for Relevance</b>			<b>HS</b>
<b>Intended Results and Causality</b>			
Are the objectives realistic?		Yes, the project design tackles immediate needs and the achievement of the immediate objectives is realistic	project document
Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?		The intervention logic of the project is realistic in relation to the achievement of the immediate objectives; the casual pathway is rational, notwithstanding the private sector participation is limited	project document
Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?		The timeframe matches the needs of the technical delivery approach even if it doesn't consider the longer time needed for political decision on critical issues such as the build-up of consensus on biosafety strategy and enactment of the regulatory framework; the project document makes reference to the long term impact even if it is not structured in a fully developed ToC	project document
Are the activities designed within the project likely to produce their intended results		yes, they contribute in a comprehensive way in enhancing the NBF	project document
Are activities appropriate to produce outputs?		yes, they contribute to the implementation of the NBF	project document
Are activities appropriate to drive change along the intended causal pathway(s)		yes, they are appropriate to the achievement of the project impact and success of the control of LMO release and introduction	project document
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?		the table of the role and tasks of the stakeholders is included in the project document, although it doesn't describe a structured analysis of their interaction	project document
<b>Overall rating for Intended Results and causality</b>			<b>S</b>
<b>Efficiency</b>			
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?		The management of the activities is performed by the national execution agency, without putting in place a structured management unit; the in kind resources of the counterpart are expected to be made available but no work plan for their mobilization exists	project document
Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?		yes, this initiative is embedded in the Ministry of environment and completes the strategizing and development of the NBF; no reference to similar initiatives by other donors is included in the project document	project document
<b>Overall rating for Efficiency</b>			<b>S</b>

Sustainability / Replication and Catalytic effects			
Does the project design present a strategy / approach to sustaining outcomes / benefits?		the objectives of this initiative is to operationalize the NBF; the project benefits will provide resources for sustaining its outcomes / benefits but don't extensively mobilize the private resources and participation supporting the NBF functioning	project document
Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?		yes, these factors are a reason for the identification of the project, but are illustrated in a summary, possibly due the fact that the pilot project and other initiatives leading to the development of the environmental act and NBF have taken into consideration such topics	project document
If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?		the NBF regulation and enhancement of the inspection capacities will create the conditions for funding the NBF; no explicit economic action to fulfill such goal is included in the project document	project document
Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?		yes, the economic informality of wide sectors of the production and limited field deployment of the NBF capacities can jeopardize the sustainability of results	project document
Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?		yes, even if partially; reference to other donors' initiatives (sector wide approach) and challenges of the informal sector role in trade and innovation delivery are absent from the project document	project document
Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?		This initiative deals with the implementation of the environmental legal framework; no direct interventions in the field are foreseen, although the regulatory framework will contribute to preserve and make sustainable the use of natural resources	project document
Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):	i) technologies and approaches show-cased by the demonstration projects;	yes, notwithstanding the fact that they are uneven to match the size of the challenge and national authorities have inadequate resources; it is expected to achieve its immediate objectives and create conditions for further behavioral change	project document
	ii) strategic programmes and plans developed	This initiative creates the regulatory framework for Biosafety;	project document
	iii) assessment, monitoring and management systems established at a national and sub-regional level	yes, it has a component supporting the creation of a monitoring framework for LMO release and introduction in the country	project document
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]		yes, the project has the objective to reinforce the institutional framework and its alignment to the Cartagena protocol approach	project document

Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)?	It is the output of political decisions not yet finalized; its success will foster such process; awareness raising activities contribute to sensibilizing the public opinion thus promoting public consensus backed decisions	project document
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors?	it doesn't specifically include measures supporting financial sustainability; in fact its success is expected to promote political support and greater private investment in biotechnological innovation	project document
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions ("champions") to catalyze change (without which the project would not achieve all of its results)?	Assistance is delivered through the national executing agency; it benefits a wide range of institutions and individuals thus creating the conditions for the emergence of champions	project document
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?	yes, the national institutions participation in the coordination mechanism, capacity building and awareness raising actions enhancing local ownership in putting in place the Cartagena protocol in the country	project document
<b>Overall rating for Sustainability / Replication and Catalytic effects</b>		<b>HS</b>
Risk identification and Social Safeguards		
Are critical risks appropriately addressed?	the analysis of the risks is comprehensive although it doesn't consider those related to the complex political framework in charge of policy making and balancing divergent interests (e.g., farmers and tourist industry)	project document
Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project?	its assumptions are properly defined as they are part of the environmental legal framework and NBF already designed at the time of the project inception; the economic dimension of such challenges is not assessed	project document
Are potentially negative environmental, economic and social impacts of projects identified	The project document identifies negative economic and social impacts but there is no specific analysis of their interaction under the project activities	project document
<b>Overall rating for Risk identification and Social Safeguards</b>		<b>MS</b>
Governance and Supervision Arrangements	the National focal point for CP and UNEP biosafety unit supervise the project; the National coordinating committee advises and guides its implementation	project document

Is the project governance model comprehensive, clear and appropriate?	yes, it is expected to become part of the environmental policy making at the highest level once the national biosafety strategy will have been approved: the National focal point for CP and UNEP biosafety unit supervises this initiative	project document
Are roles and responsibilities clearly defined?	yes, the roles and tasks of the stakeholders are described in table 1 of the project document; decisions are concentrated in the Implementing agency and national executing agency, while the National Biosafety committee advises the execution of activities by coordinating the contribution of the other key stakeholders of the project	project document
Are supervision / oversight arrangements clear and appropriate?	yes, the hierarchy of the project is directly linked to the policy making level, although such relation is not structured in an explicit way	project document
<b>Overall rating for Governance and Supervision Arrangements</b>		<b>HS</b>
Management, Execution and Partnership Arrangements		
Have the capacities of partner been adequately assessed?	yes, this initiative enhances the partner institutions' capacities following the assessment of the needs for the implementation of the NBF	project document
Are the execution arrangements clear?	yes, the project concentrates decisions in the hands of the key institution; this gets inputs from the other ones directly and through the Biosafety coordination committee	project document
Are the roles and responsibilities of internal and external partners properly specified?	Table 1 of the project document defines roles and tasks of each partner; but it is not structured as decisions making is fully in the hands of the national executing agency	project document
<b>Overall rating for Management, Execution and Partnership Arrangements</b>		<b>S</b>
Financial Planning / budgeting		
Are there any obvious deficiencies in the budgets / financial planning	yes, the project budget is structured along the GEF activity based modality; it is in line with the execution needs	project document budget plan
Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential	the use of resources concentrates on Monitoring and inspection and Project coordination; it is difficult to assess cost effectiveness in the absence of detailed cost estimates	project document, budget plan
Financial and administrative arrangements including flows of funds are clearly described	yes, financial and administrative arrangements are in line with the project execution structure	project document, budget plan
<b>Overall rating for Financial Planning / budgeting</b>		<b>HS</b>
Monitoring		

Does the logical framework: <ul style="list-style-type: none"> <li>capture the key elements in the Theory of Change for the project?</li> <li>have 'SMART' indicators for outcomes and objectives?</li> <li>have appropriate 'means of verification'</li> <li>adequately identify assumptions</li> </ul>	The Project Logframe illustrates activities and uses indicators concerning their execution and immediate effects. They are both internal and external, often qualitative, and in several cases have no numerical target; assumptions are extensively identified and related to the risks	project document
Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?	Appropriate milestones have been identified while performance indicators are greatly related to the immediate outputs of the project activities	project document
Is there baseline information in relation to key performance indicators?	The indicators are mostly qualitative, baseline data have been included in annex 1C of the project document	project document
Has the method for the baseline data collection been explained?	baseline data are annexed to the project document	project document
Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline??	Several targets values of the indicators are not included from the Logframe as they are mostly qualitative	project document
Has the time frame for monitoring activities been specified?	The M&E plan focuses on reporting project activities and financial disbursements, no provisions are made for the collection of the indicators	project document
Are the organisational arrangements for project level progress monitoring clearly specified	UNEP task manager and National coordinating committee execute the monitoring plan	project document
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?	in the project document there is no budget line for funding for monitoring (data collection) activities; this is mostly relevant in the case of the external indicators	project document
Overall, is the approach to monitoring progress and performance within the project adequate?	The lack of a structured data collection mechanism makes the independent collection of baseline and progress quantitative indicators in a systematic way difficult	project document
<b>Overall rating for Monitoring</b>		<b>MS</b>
<b>Evaluation</b>		
Is there an adequate plan for evaluation?	The evaluation process consists in the performance of project progress, mid-term and final evaluation reporting; in the project document there is no specific provision for the mobilization of resources for data collection / survey	project document
Has the time frame for Evaluation activities been specified?	yes, they correspond to the reporting schedule	project document
Is there an explicit budget provision for mid term review and terminal evaluation?	In the project document there are no budget lines concerning the funding of mid-term review and terminal evaluation	project document
Is the budget sufficient?	There was no budget for evaluation originally included at design phase, however the amount subsequently made available at the end of the project is sufficient	budget plan

## 7. RoTI results score sheet

Results rating of project entitled:		Support for Implementation of the National Biosafety Framework for Tunisia					
		R a t i n g  ( D - A )	Intermediary	R a t i n g  ( D - A )	Impact (GEBs)	R a t i n g  ( + )	O v e r a l l
Outputs	Outcomes						
To integrate biosafety into a national development strategy on biotechnology To establish a fully functional and responsive regulatory regime on biosafety, in line with existing national laws and international obligations To establish an efficient national system for handling requests and decision-making	Tunisia has a workable and transparent national biosafety framework that is in line with its international obligations and national development priorities	C	Safe biodiversity conservation, exchange and use	B	Environmental governance at country, regional and global levels is strengthened to address agreed environmental priorities	C	BC
		C	Biotechnology innovation in line / contributing to economic development and natural resources conservation Biological disaster risk management capacities and tools developed and used	B  C			
			Resources raised to run the NBF	D			

An efficient and operational technical and administrative processing mechanism to handle applications of LMOs in place		C	International collaboration promoting best biotechnology / biosafety practices	B			
To establish effective national systems for monitoring and enforcement		B	Society-wide stakeholder's participation in innovation / biosafety debate	B			
			Social acceptance and political consensus on innovation	B			
			<b>Rating justification:</b>		<b>Rating justification:</b>		
	The project execution was delayed due to institutional changes; the adoption of the regulatory framework due to a lack of consensus on development priorities		The expectation is that the Intermediary states will be continued although this initiative didn't fully exploit the participation of the private sector to the sustainability of the NBF		It is conducive to enhancing environmental governance of the safe release and introduction of LMOs. The challenge to sustainability comes from the limited involvement of the private sector in the coordination mechanisms and resources mobilization for the NBF running		

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Elaboration d'une stratégie et d'un plan d'action national sur la biosécurité

## 9. Brief CVs of the evaluator

Mr *Giorgio V. Brandolini* has received an *MSc in agriculture* at *Milan university*, Italy, in 1986, and specialized in the evaluation of natural resources with *Istituto agronomico per l'oltremare* in Florence in 1991. At the beginning of his career he tackled the development challenges from a rural community, environmental sustainability and technology transfer perspective. He managed field projects fostering rural development and food security in a participatory way. With the time his areas of interest became broader encompassing community development, inclusiveness and local governance in line with the evolution of the development cooperation priorities.

His full time commitment to M&E started with the assessment of the micro-realization programme in the Comoros islands in 2006. His field assignments as an evaluator involved the recruitment of monitors and organization of team work (induction, training and coaching of evaluators and counterparts M&E staff) as well as coordination of field deployment, surveying, data management, statistical processing and presentation of findings and recommendations to stakeholders. In performing these tasks he adopted and innovated M&E strategies and practices developed by UN agencies and other organizations, e.g., by adapting the highly structured WFP approach in structuring the evaluation questions, indicators and survey tools to logistic and cultural constraints (Côte d'Ivoire 2008-09) and by cross-checking sources of information and field data in situations dominated by difficult access to the beneficiaries (Afghanistan 2010-11).

He is active in the formulation of policies and strategies aimed at streamlining environmental issues into development policies and agricultural strategies, in the identification and formulation of strategies and programmes

addressing natural resources conservation, non wood forestry product use, food security and community development, and in and in the project cycle management of International biodiversity conservation and forest governance programmes. His field work tackles agro-forestry, natural resources conservation & use, community ownership. He is acquainted with EU Biodiversity Policy as well as with international environmental policies such as REDD+, FLEGT, CBD, Kyoto protocol, CITES, Bern Convention, Ramsar Convention.

Team leader of missions assessing needs and performing participatory M&E of environmental and development programs as well as elaborating environmental profiles of tropical countries rich in biodiversity. He is active in conducting the evaluation of environmental programmes (ex-ante, mid-term, ex-post), as well as the assessment of community dynamics and women participation in the conservation of agricultural biodiversity and traditional knowledge and contribution to household income generation and community governance.

He provides his advice on strategies and design of work plans tackling institutional aspects of agricultural biodiversity conservation and use for the Ministries of Agriculture and Forestry of Afghanistan, Iraq, Eritrea, Kosovo, Peru, etc. his field experience in integrating environmental issues into development policies, strategies and programmes covers Africa, the Middle East, South Asia, Eastern Europe and Latin America.

As a team leader he developed integrated packages of M&E participatory survey and analysis tools intended to expand, diversify and speed up the access to information, by interrogating beneficiaries and other stakeholders, cross-checking their feedback and statistically processing huge amount of data. He developed integrated systems of data collection and verification of data reliability through the cross-checking of project output with the beneficiaries / implementing partners' perception in order to assess the linkages among delivery mechanisms and outcome. He has expanded his M&E approach to include learning and accountability (upstream and downstream) in shaping evaluation strategies. While performing these tasks in challenging contexts he developed a deep understanding of the fundamentals of socio-economic development that he addressed by assembling and managing the diversified expertise of expat / national experts and local field monitors / facilitators working in multidisciplinary teams.

He published on a wide range of topics: project & evaluation methodology agriculture & biodiversity, local economic development & social cohesion, traditional health care & cultural heritage. He has excellent negotiation and communication skills and is accustomed to deal with international donors, Government officials, civil society representatives and community leaders. He is creative and acquainted to swiftly address emerging and hidden issues while working under pressure and across cultural barriers. He is fluent in English, French and Spanish.

## **10. Comparative analysis of the Tunisian Biosafety framework with those of Mauritius and Tanzania**

This section presents the comparative advantages of the Tunisian Biosafety framework with those of Mauritius and Tanzania.

The implementation of the NBF has revealed the existence of external conditions and internal conditions that impact on its sustainability. The projects have been designed by the representatives of the institutions involved in the operationalization of the NBF, although participation of high level decision makers has been quite limited. As a follow up to former initiatives elaborating the BS approach, the project identification gave for granted and so did pay little attention to the challenges of:

- the economic development context and linkage with the precautionary principle,
- the political consensus on biosafety and decision makers' commitment to operationalize the NBF,
- private parties contribution to BS decision making.

The 4-5 components of the project addressed key elements of the NBF, but did it mainly at the technical level and, typically, provided inputs to the decision makers but did not strengthen the decision making processes. The awareness raising campaign and strategic documents

elaboration/approval had little impact on the people in charge of orientating / directing the NBF in contributing to economic development and natural resources conservation. The substantial absence of private parties from the decision making process – they being key players in creating the activities to be regulated under the NBF - contributed to create a decision making vacuum that hampered the operationalization of the NBF. Further hurdles consisted in the decreasing importance of the agricultural and food sector in Mauritius, the lack of human resources in Tanzania, the integration with / appeal of the import market framework in Tunisia.

The projects were effective in developing strategies, regulatory and technical knowledge, in building capacities, in coordinating institutions – especially the technical ones. Although political support for the frameworks varied from country to country, all projects faced challenges in the orientation of the NBF because they did not attempt to mediate conflicting interests, strengthen political and institutional processes and ensure the mobilization of sufficient resources.

The capacities built face the challenge of being updated and utilized or being lost, especially in Mauritius and Tanzania. The implementation of the NBF is expected to rely heavily on information collection, systematization and sharing. The projects concentrated on the elaboration of regulations and guidelines and gave little space to the development of the ICT tools (software programmes) for sharing information, but in Tunisia where several tools using social media were developed and deployed, including facebook and twitter. A further challenge is presented by the operationalization of GMO monitoring. As it is expected to be integrated within the ongoing inspection systems, its implementation will face the same hurdles already hampering the reliability of existing systems, for example the great extension of Tanzania and the comparative advantages of NBF services supplied in the import markets.

The mechanisms raising awareness supported by the projects were effective but to a limited extent. The easier to reach stakeholders are now aware of the challenges related to biotechnologies but they represent a small group in the context of public opinion.

The interest of private parties to invest in biotechnology based production and import is crucial for the execution of the BS monitoring procedures. Their willingness to abide to the formal market rules – and specifically the BS regulations – depends on how much this is effective in creating enabling conditions for economic initiatives.

The projects' design took for granted the participation of the private sector and the strength of the decision making processes. Achievements were notable at the technical level but had minimal impact on the economic and political context orienting the NBF over the long term. Such approach hampered the operationalization of the NBF and threatens their sustainability.

The following grid (Table 3) compares the key elements of this analysis through the Strengths – Weaknesses – Opportunities – Threats (SWOT) approach.

Table 3. SWOT analysis of the Biosafety frameworks

<i>Feature</i>	<i>Mauritius</i>	<i>Tanzania</i>	<i>Tunisia</i>
Strengths	Highly qualified professionals resources	High level / effective institutional coordination of the NBF	Highly qualified professionals resources
	Strong connection NBF – academia	Strong connection to Academia through the the Network of the Centers of excellence	Strong connection NBF - academia
	Well established economic / trade monitoring system		Strong skills in GMO detection analysis
	Awareness of the public opinion on Biosafety		Well established economic / trade monitoring system
	Cluster approach to research and development		
Weaknesses	Limited involvement of the private sector	Limited involvement of the private sector	Limited involvement of the private sector
	Sector lead institutional coordination of the NBF	Limited size of the professional pool	Lack of a BS legal framework
	Limited establishment of the BS legal framework	Lack of financial resources	Dispersion of research and development initiatives
	Prevalence of administrative concerns	Weak economic / trade monitoring system	Prevalence of technical concerns
	Limited financial resources	Weak research and development system	Limited contribution of ICT in the running of the NBF

	Limited contribution of ICT in the running of the NBF	Limited contribution of ICT (software tools for data exchange) in the running of the NBF	
	Drain of BS capacities by other sectors / activities	Drain of BS capacities by other sectors / activities	
Opportunities	High technology based development	Natural resources based development	High value markets integrated development
	Limited extension of the country	Political consensus on natural resources protection	Value chain of high value products
	Availability of financial resources	Regional integration of development	
Threats	Small scale of the economy	Informal economy	Comparative advantages of NBF services supplied in the import markets
	Decreasing role of agriculture and food in economic development	Large extension of the country	Weak coordination of the economic development
		Technology dependence from neighbor countries	
		Prevalence of low value goods production	

## Annex 11: UNEP Evaluation Quality Assessment

Evaluation Title:

Evaluation of the Project: National Biosafety Framework for Mauritius, Tanzania and Tunisia

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final evaluation report is assessed and rated against the following criteria:

	UNEP Evaluation Office Comments	Draft Report Rating	Final Report Rating
<b>Substantive report quality criteria</b>			
A. <b>Quality of the Executive Summary:</b> Does the executive summary present the main findings of the report for each evaluation criterion and a good summary of recommendations and lessons learned? (Executive Summary not required for zero draft)	<b>Final report:</b> Summary presents main findings and conclusions		4
B. <b>Project context and project description:</b> Does the report present an up-to-date description of the socio-economic, political, institutional and environmental context of the project, including the issues that the project is trying to address, their root causes and consequences on the environment and human well-being? Are any changes since the time of project design highlighted? Is all essential information about the project clearly presented in the report (objectives, target groups, institutional arrangements, budget, changes in design since approval etc.)?	<b>Draft report:</b> Project context provided, although some repetitions and overlaps among the three reports had to be eliminated (most notably in cases when the same circumstance could not apply to all three reports) <b>Final report:</b> Improved consistency and flow	3	4
C. <b>Strategic relevance:</b> Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention in terms of relevance of the project to global, regional and national environmental issues and needs, and UNEP strategies and programmes?	<b>Draft report:</b> Analysis based on information provided by EOU and UNEP TM <b>Final report:</b> Same as above	4	4
D. <b>Achievement of outputs:</b> Does the report present a well-reasoned,	<b>Draft report:</b> Not in detail, only general overview	3	4

	complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?	<b>Final report:</b> More details added for final version		
E.	<b>Presentation of Theory of Change:</b> Is the Theory of Change of the intervention clearly presented? Are causal pathways logical and complete (including drivers, assumptions and key actors)?	<b>Draft report:</b> ToC was of good quality, good analytical analysis <b>Final report:</b> Same as above	5	5
F.	<b>Effectiveness - Attainment of project objectives and results:</b> Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives?	<b>Draft report:</b> Yes, although at times difficult to follow in terms of logical sequence and flow, some repetitions in the three reports which were not based on the same conditions <b>Final report:</b> Improved consistency and repetitions eliminated	3	4
G.	<b>Sustainability and replication:</b> Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects?	<b>Draft report:</b> Partially, sometimes including sections which were not dealing with S and R and needed more accurate substantiation <b>Final report:</b> Sections revised	3	4
H.	<b>Efficiency:</b> Does the report present a well-reasoned, complete and evidence-based assessment of efficiency? Does the report present any comparison with similar interventions?	<b>Draft report:</b> Efficiency of the projects was analysed <b>Final report:</b> Same as above	4	4
I.	<b>Factors affecting project performance:</b> Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management?	<b>Draft report:</b> This section needed major rework, initially it did not present a discussion of all points and in several cases, it presented repetitions from one report to the other without taking into account the differences in background <b>Final report:</b> Eliminated repetitions and improved analysis	2	4
J.	<b>Quality of the conclusions:</b> Do the conclusions highlight the main strengths and weaknesses of the project, and connect those in a compelling story line?	<b>Draft report:</b> Conclusion are ok <b>Final report:</b> Same as above	4	4
K.	<b>Quality and utility of the recommendations:</b> Are recommendations based on explicit	<b>Draft report:</b> R needed work and fine tuning <b>Final report:</b>	3	4

evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can they be implemented?	Improved		
L. <b>Quality and utility of the lessons:</b> Are lessons based on explicit evaluation findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable?	<b>Draft report:</b> Lessons needed work and fine tuning <b>Final report:</b> Improved	3	4
<b>Report structure quality criteria</b>			
M. <b>Structure and clarity of the report:</b> Does the report structure follow EO guidelines? Are all requested Annexes included?	<b>Draft report:</b> Repetitions and overlaps between reports required accurate cross-checking and made it sometimes difficult to follow the logical flow, sketchy list of abbreviations, occasional use of the wrong country name <b>Final report:</b> Consistency improved after substantial revision	2	4
N. <b>Evaluation methods and information sources:</b> Are evaluation methods and information sources clearly described? Are data collection methods, the triangulation / verification approach, details of stakeholder consultations provided? Are the limitations of evaluation methods and information sources described?	<b>Draft report:</b> Yes good description <b>Final report:</b> Same as above	4	4
O. <b>Quality of writing:</b> Was the report well written? (clear English language and grammar)	<b>Draft report:</b> Writing style needed major editing, many sections convoluted and hard to follow, use of words which do not actually exist and missing verbs etc increased the difficulty or reading the report <b>Final report:</b> After major editing efforts, quality has improved but it is still not excellent	2	3
P. <b>Report formatting:</b> Does the report follow EO guidelines using headings, numbered paragraphs etc.	<b>Draft report:</b> No numbers of paragraphs <b>Final report:</b> Paragraphs introduced, but layout still not perfect	4	4
<b>OVERALL REPORT QUALITY RATING</b>		3.3	4

The quality of the evaluation process is assessed at the end of the evaluation and rated against the following criteria:

	UNEP Evaluation Office Comments		Rating
<b>Evaluation process quality criteria</b>			
Q. <b>Preparation:</b> Was the evaluation budget agreed and approved by the EO? Was inception report delivered and approved prior to commencing any travel?	Yes		4
R. <b>Timeliness:</b> Was a TE initiated within the period of six months before or after project completion? Was an MTE initiated within a six month period prior to the project's mid-point? Were all deadlines set in the ToR respected?	No, Mauritius projects was terminated years ago, but was not submitted to EOU for evaluation		3
S. <b>Project's support:</b> Did the project make available all required documents? Was adequate support provided to the evaluator(s) in planning and conducting evaluation missions?	Yes		4
T. <b>Recommendations:</b> Was an implementation plan for the evaluation recommendations prepared? Was the implementation plan adequately communicated to the project?	Yes, R provided to the extent possible considering that some of the projects closed a long time ago		4
U. <b>Quality assurance:</b> Was the evaluation peer-reviewed? Was the quality of the draft report checked by the evaluation manager and peer reviewer prior to dissemination to stakeholders for comments? Did EO complete an assessment of the quality of the final report?	Yes		5
V. <b>Transparency:</b> Were the draft ToR and evaluation report circulated to all key stakeholders for comments? Was the draft evaluation report sent directly to EO? Were all comments to the draft evaluation report sent directly to the EO and did EO share all comments with the commentators? Did the evaluator(s) prepare a response to all comments?	Yes, only minor comments received in all cases		4
W. <b>Participatory approach:</b> Was close communication to the EO and project	Yes		5

maintained throughout the evaluation? Were evaluation findings, lessons and recommendations adequately communicated?			
X. <b>Independence:</b> Was the final selection of the evaluator(s) made by EO? Were possible conflicts of interest of the selected evaluator(s) appraised?	Yes		5
<b>OVERALL PROCESS RATING</b>			4.375

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1

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