



United Nations Environment Programme

**Terminal Evaluation  
of the Project**

**“Support the implementation of National Biosafety for Lao PDR”**

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Final Report

Evaluation Office

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**Project Identification Table**  
**Terminal Evaluation of the Project**  
**“Support the implementation of National Biosafety for Lao PDR”**

GEF project ID:	3642	IMIS number:	GFL/2328-2716-4A85
Focal Area(s):	BD3 –SP6 (Biosafety)	GEF OP #:	SOP 3
GEF Strategic Priority/Objective:	Environmental governance	GEF approval date:	22/06/2009
UNEP approval date:	08/09/2009	First Disbursement:	17/09/2009
Actual start date:	01/10/2009	Planned duration:	48 months
Intended completion date:	07/09/2013	Actual or Expected completion date:	30/11/2014 (12 m ext. + Amendment n.1 to PCA of 29/10/2013)
Project Type:	MSP	GEF Allocation:	\$995,000
PDF GEF cost:		PDF co-financing*:	
Expected MSP/FSP Co-financing:	\$505,000	Total Cost:	\$1,500,000
Mid-term review/eval. (planned date):	30/09/2011	Terminal Evaluation (actual date):	24-27 October 2014
Mid-term review/eval. (actual date):	30/09/2012	No. of revisions:	7
Date of last Steering Committee meeting:	12/07/2012	Date of last Revision:	29/10/2014
Disbursement as:	\$944,265.00, (25/02/2014)	Date of financial closure:	na
Date of Completion:		Actual expenditures reported as of:	\$ 944.191 (30/09/2014)
Total co-financing realized	\$505.000 (17/11/2014)	Actual expenditures entered in IMIS as 30 June 2014:	
Leveraged financing:			

## **List of Acronyms and Abbreviations**

ANUBIS	UNEP Biosafety Information System
ASEAN	Association of South-East Asian Nations
BCH	Biosafety Clearing House
BEI	Biotechnology and Ecology Institute
CBD	Convention on Biological Diversity
CPB	Cartagena Protocol on Biosafety
EA	Expected Accomplishments (of UNEP)
EO	Evaluation Office (of UNEP)
GEB	Global Environmental Benefit
GEF	Global Environmental Facility
GMO	Genetically Modified Organism
Lao PDR	Lao People's Democratic Republic
LMO	Living Modified Organism
NBC	National Biosafety Committee
NBF	National Biosafety Framework
NCA	National Competent Authority
NCC	National Coordinating Committee
NEA	National Executing Agency
NPC	National Project Coordinator
MEA	Multilateral Environmental Agreement
MOST	Ministry of Science and Technology
MTS	Medium Term Strategies (of UNEP)
NAST	National Authority for Science and Technology
PCA	Project Cooperation Agreement
PIR	Project Implementation Review
PoW	Programme of Work (of UNEP)
ProDoc	Project Document
RA	Risk Assessment
RM	Risk Management
TOC	Theory Of Change
TOR	Terms Of Reference
UNEP	United Nations Environmental Programme

## Executive Summary

1 This is the final report of the Terminal Evaluation of the Project “Support the implementation of National Biosafety for Lao PDR” (GFL/2328-2716-4A85). The Project was approved in 09/2009 for a duration of 4 years (2009-13), successively extended for one year until 07/09/2014 and eventually granted a supplementary extension until 30/11/2014. The total budget of the Project is USD 1.500.000, the 66% of which is the GEF allocation (USD 995.000), with the remaining 34% (USD 505.000) being provided by the Government of Lao PDR. The Evaluation took place in the period between September and November 2014 and included a mission in Lao PDR from 24/10/2014 to 27/10/2014.

2 Lao PDR acceded to CPB in 2004 and participated to the GEF/UNEP project to develop a national Biosafety Framework (NBF), also completed in 2004, through which a draft NBF was prepared. The current Project was regarded as a crucial tool to make significant advancements in the implementation of the NBF, mainly creating a critical mass of human resources able to set up Biosafety policy, legislative, administrative, monitoring and enforcement systems, and integrate them into the country’s development plans and decision-making processes.

3 The National Authority for Science and Technology (NAST), under the Prime Minister’s Office, was originally appointed as the National Competent Authority (NCA) and the national focal point for CPB, as well as the National Executing Agency (NEA) of the Project. However, since June 2011, the Government of Lao PDR underwent an internal restructuration and established some new ministries, among them the Ministry of Science and Technology (MOST). In 2012, the Biotechnology and Ecology Institute (BEI) of the MOST was appointed as the new National Competent Authority (NCA) for the CPB and the National Executing Agency (NEA) of the Project. A new Project Steering Committee was established in June 2012 and a new project team was established in February 2013. Due to those major institutional changes and subsequent delays, an extension of 12 months was agreed upon in 2013, shifting the final date of the Project, firstly, to 07/09/2014 and eventually to 30/11/2014.

4 The particular socio-political and institutional conjuncture brought about the protracted lack of a stable institutional anchorage of the Project, which actually turned completely functional and effective just for the last two years. Moreover, as discussed in chapter 4.4.1 (Socio-political sustainability), the smooth implementation of the NBF has been hampered by the complex institutional framework of the country, with a weighty bureaucracy and convoluted decision-making processes. The process of elaboration of the Biosafety Law, started in 2004, went through various and recurrent stages of discussion, revision and decision, eventually receiving a strong impulse from the Project and culminating with the promulgation of the Law, early in 2014.

5 Thanks to a tight partnership with the Ministry of Justice and the technical support of a legal adviser from UNEP, the Biosafety regulatory framework has been completed with the preparation of three draft Regulations (Secondary Law) on a) LMOs Contained use, b) Environment release of LMOs and c) Food-feed biosafety. In addition, a draft National Biotechnology Strategy and Action Plan (NBSAP) has been prepared and discussed with a large participation of national stakeholders, which will permit to insert Biosafety into national plans and policies. In addition, biosafety guidelines, manuals and technical procedures are in preparation and will be substantive tools to support decision making. Their achievement will represent one of the key and final technical tasks under the project.

6 Capacity and Institution building have also remarkably improved: a laboratory for LMOs’ detection has been equipped and the national staff trained; national officers, particularly those related to the Inspection and Customs Agencies have been trained on inspection, risk assessment and risk monitoring, and a very high number of public officers have been exposed to activity of information, awareness raising and training on Biosafety and decision-making processes on LMOs. Information material has been produced for awareness raising purposes and used in wide communication campaigns for the general public and for the schools, as well as for more targeted audiences (University, stakeholders, and decision-makers). Biosafety Curriculum has been developed by the University of Lao PDR with financial support from the project and technical support from UNEP as one of the last tasks of the project.

7 Overall, and despite the problems mentioned above, it can be concluded that the Project has undoubtedly contributed to the setting and implementation of the Biosafety agenda in the country. Nonetheless, as discussed under Effectiveness (Chapter 4.3), direct Outcomes have been too recently and often partially achieved, so that the country is still far from having functional administrative systems able to manage applications, to assess and monitor risks, to enforce the new law and the regulations.

8 The current situation, at the end of the Project, seems promising due to the momentum that the activities have gained in the last part of project life-time. This is mainly due to the strong driving force, motivation and “championing” role of the NCA (Ministry of Science and Technology - MOST) directorate and of MOST and BEI’s project team, that have to be maintained and reinforced, if continuity and sustainability are to be achieved. Under that assumption, the National Biosafety Framework can move forward, provided that continuity is also given to external assistance, so that capacity and institution building can be enhanced and consolidated.

9 As requested by the TOR, twenty-two different evaluation criteria have been rated<sup>1</sup>, as shown in the Table of Chapter 5.1 of the Report (Conclusions). As a whole, the Project can be rated as Moderately Satisfactory (MS). The summary assessment and the rating of some of the main evaluation criteria are synthesized here below:

Criterion	Summary Assessment	Rating
<b>A. Strategic relevance</b>	The Project confirms all its relevance in addressing challenging and crucial issues and needs in the area of biodiversity’s sustainable use, in achieving internationally agreed environmental objectives and goals and in contributing to fulfil UNEP’s mandate and policy, as well as GEF priorities and strategies.(see 4.1)	<b>S</b>
<b>B. Achievement of outputs</b>	The Project has partially delivered the expected outputs.(see 4.2 and Table 1)	<b>MS</b>
<b>C. Effectiveness: Attainment of project objectives and results</b>	Main Project Outcome (A workable and transparent National Biosafety Framework) is in its way to be achieved, yet relevant components are still at an initial stage, despite the undeniable efforts of the national team in the last two years. (see 4.3)	<b>MS</b>

1. <sup>1</sup> Using a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).

<b>D. Sustainability and replication</b>	The existence of the Biosafety Law can dramatically improve socio-political sustainability of Biosafety agenda. National ownership is high, due to the strong commitment of the NCA which is currently the main driving force to socio-political sustainability (see 4.4.1). Institutional sustainability depends on the effective functioning of the two main coordinating bodies created by the Law: the National Committee for Biotechnology Safety and the Technical Coordination Committee, which are at an early stage (see 4.4.3). The approval of the Law is a necessary condition, now fulfilled, for financial sustainability, yet not a sufficient one. In the short term, external support is indispensable to put forward the Biosafety agenda in the country. (see 4.4.2)	<b>ML</b>
<b>E. Efficiency</b>	Reform organisation and stakeholders participation are usually time consuming processes. That also occurred in Lao PDR case, hampering project efficiency and timeliness of results. Tremendous efforts have been done in the last two years to put project activities on the right track (see 4.5)	<b>MU</b>

10 The Evaluation has presented four main Recommendations:

Recommendation 1: to MOST / BEI and MOST / BEI Biosafety Team

**Recommendation 1:**

In order to consolidate the positive achievements so far and to enable the achievement of the Outcomes not yet fully attained, it is strongly recommended:

a) to follow up and support the swift completion of the approval process of the three draft Regulations and of the NBSAP.

Recommendation 2: to UNEP, NCA (MOST / BEI), NBC

**Recommendation 2:**

In order to consolidate the positive achievements so far and to enable the further achievement of the Outcomes not yet fully attained, it is recommended to give continuity to GEF/UNEP assistance in the framework of the new round of GEF funding for Lao PDR, namely through:

- a) Technical and methodological support of UNEP to the NCA (MOST / BEI), particularly through coaching and targeted trainings of the Biosafety Team in place;
- b) Training needs assessment and targeted, intensive training to key human resources responsible for and/or directly involved in Risk Assessment and Monitoring, with particular reference to the members of the Technical Coordinating Committee;
- c) Finalisation, in collaboration with the National University, Faculty of Science, of the Biosafety Curriculum and its implementation in the Education programme



Recommendation 3: to MOST / BEI and NBC

**Recommendation 3:**

In order to put in value the national human resources involved so far and to foster continuity and sustainability of activities and results, it is strongly recommended:

- a) to maintain and consolidate the current BEI Biosafety national team, to match them with a targeted training and coaching (see Rec.1) and to explore forms of staff’s motivation according to national policies on Human Resources management.

Recommendation 4: to MOST / BEI, NBC and UNEP

**Recommendation 4:**

In order to consolidate networking allowing cost-sharing and service-sharing among countries of the Region, it is recommended:

- a) to prepare and implement, with the support of UNEP and ASEAN, a joint programme of human resources upgrading and of mutual technical assistance in specific areas, by building on the comparative advantage of each country of the region.

## **1 Introduction**

1. In its capacity as an Implementing Agency of the Global Environmental Facility (GEF), UNEP has been providing administrative and technical assistance to countries participating in the Cartagena Protocol on Biosafety (CPB) for the development and implementation of National Biosafety Frameworks (NBF). The frameworks are a combination of policy, legal, administrative and technical instruments enabling the countries to manage the safe transfer, handling and use of living modified organisms (LMOs) from modern biotechnology<sup>2</sup>.
2. This is the final report of the Terminal Evaluation of the Project “Support the implementation of National Biosafety for Lao PDR” (GFL/2328-2716-4A85). The Project was approved in 09/2009 for a duration of 4 years (2009-13), successively extended for one year until 07/09/2014 and eventually granted a supplementary extension until 30/11/2014, through an Amendment to PCA of 29/10/2013. The total budget of the Project is USD 1.500.000, the 66% of which is the GEF allocation (USD 995.000), with the remaining 34% (USD 505.000) being provided by the Government of Lao PDR.
3. The Evaluation took place in the period between September and November 2014 and included a mission in Lao PDR from 24/10/2014 to 27/10/2014. The Evaluation Team consisted of one consultant specialist of projects evaluation in environmental sector (See Annex 6) working under the methodological guidance of the Evaluation Office (EO) of UNEP.

## **2 The Evaluation**

4. In line with the UNEP Evaluation Policy and Evaluation Manual and following the Guidelines for GEF Agencies on Conducting Terminal Evaluations, the Terminal Evaluation has been undertaken immediately before the completion of the Project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation had two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners – the National Executing Agency (the Biotechnology and Ecology Institute, BEI of the Ministry of Science and Technology, MOST) and the national partners.
5. According to the UNEP evaluation methodology, most criteria of evaluation have been rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).
6. As requested by the UNEP’s methodology for Terminal Evaluations, an Inception Report was produced at the beginning of the mission, containing a review of the project context, of project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.
7. According to the TOR received, a participatory approach has been used since the preparation of the field mission, through a preliminary exchange of evaluation tools with the National Project Coordinator and the joint preparation of the agenda for the country visit. Once fielded, the mission, despite time

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<sup>2</sup> In this Report, the terms LMO (Living Modified Organism) and GMO (Genetically Modified Organism) are considered synonymous and indifferently used.

limitations, provided the opportunity to meet with relevant stakeholders and to collect and discuss first-hand information, opinions and suggestions or recommendations.

8. Quantitative and qualitative methods and indicators have been used, taking into account that the Project was expected to mostly deliver institutional and capacity building outputs and outcomes. Being so, quantitative outputs were also assessed against their quality and effectiveness, particularly their capacity to drive and sustain changes at the level of objectives.
9. As far as possible, the information received has been triangulated among the stakeholders and with the existing written reports available in the ANUBIS platform. Triangulation, especially interviews with project managers, partner institutions, trainers and trainees, has been particularly useful in assessing training effectiveness.. A joint meeting involving different stakeholders was also held, trying to capture the highest number possible of opinions and concerns during the limited timeframe of the country-visit.
10. The main methods and tools used in the Evaluation have been:
  - The Desk Review of all project documents and tools the consultant has access to (see Annex 4), including the ANUBIS platform.
  - Exchanges with Project Management Team at UNEP, namely the Task Manager and the Fund Management Officers.
  - The Country Visit. The interviews in the country visit included the Project Team, the National Executing Agency (NEA), namely its Director (also National Focal Point for CPB and National Project Director) and the technical staff, the Vice-Ministry of Science and Technology (MOST), also Chairman of the Project Steering Committee, and national consultants of the Project<sup>3</sup>.
11. Due to budget constraints, the time available for the country visit has been quite short (2.5 days). The succession, back to back, of three different terminal evaluations of analogous projects in three countries (Mongolia, Lao PDR, Bhutan) permitted some interesting comparison and was obviously more resource efficient (time and travel costs)<sup>4</sup>.

### **3 The Project**

#### **3.1 Context**

12. Lao PDR is richly endowed with biodiversity (8100 species of flora and fauna) and hosts the second largest collection of rice germoplasm in the world (after India), with more than 15.000 types of rice deposited in the International Rice Genebank of IRRI (International Rice Research Institute, [www.irri.org/lao](http://www.irri.org/lao)). Considering that Lao PDR is a landlocked country with porous borders, concerns exist that the uncontrolled introduction of Genetically Modified crops (particularly rice) could enhance the risks of contamination from transgenic crops to traditional varieties and of endangering priceless genetic resources.
13. Lao PDR acceded to CPB in 2004 and participated to the GEF/UNEP project to develop a national Biosafety Framework (NBF), also completed in 2004, through which a draft NBF was prepared. However, as pointed out in the ProDoc, there was, at that time, still “low appreciation for biotechnology and biosafety in Lao PDR” and that was one of the main reasons for delaying the country’s progress on the Biosafety agenda. According to the ProDoc, the insufficient number of human resources prepared to scientifically cope with the different legal, administrative, technical and socio-economic aspects of

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<sup>3</sup> See list of people met in Annex 3

<sup>4</sup> Annex 7 presents some elements for a comparative analysis of the three Projects

biosafety largely hampered the evolvement of the draft NBF into a practical and comprehensive instrument for LMOs management in the country.

14. That is why Lao PDR regarded the current project as a crucial tool to make significant advancements in the implementation of the NBF, mainly creating a critical mass of human resources able to set up Biosafety policy, legislative, administrative, monitoring and enforcement systems, and integrate them into the country’s development plans and decision-making processes. The National Authority for Science and Technology (NAST), under the Prime Minister’s Office, was originally appointed as the National Competent Authority (NCA) and the national focal point for CPB, as well as the National Executing Agency (NEA) of the Project. However, relevant institutional changes, including a new NCA and NEA occurred in Lao PDR during the project life.

### **3.2 Objectives and components**

15. The Project Objective defined in the ProDoc is “To assist Lao PDR, to have a workable and transparent National Biosafety Framework by 2010, to fulfill its National Socio-economic Development Plan and implement its obligations as a Party to the Cartagena Protocol on Biosafety to the CPB”. The Project has been conceived with eight (8) components, as follows:
  1. Stocktaking analysis;
  2. National plan (policy) consolidation;
  3. Regulatory regime;
  4. Handling requests;
  5. System for ‘follow-up’ activities;
  6. Public education, awareness and participation;
  7. Project Review & Evaluation, and Audit;
  8. Regional Networking .

### **3.3 Target areas/groups**

16. The Project is essentially an Institution & Capacity Building Project aiming at strengthening national capacities to fulfil the national and international obligations of the Cartagena Protocol on Biosafety (CPB). Main target groups are the national institutions involved in the implementation of the NBF, particularly the former and the current National Competent Authority (NCA), i.e., respectively, the National Authority for Science and Technology (NAST) and the Biotechnology and Ecology Institute (BEI) of the Ministry of Science and Technology. A large programme of capacity building targets the national Human Resources that have the responsibility for decision-making and policy making, detection and inspection tasks, risk assessment and risk monitoring.

### **3.4 Milestones/key dates in project design and implementation**

17. The Project was approved by GEF on the 22/06/2009 and by UNEP on the 08/09/2009, for a duration of 48 months (4 years). The first disbursement occurred on the 17/09/2009. The National Coordinating Committee (NCC) for Biosafety was established by Minister decree in January 2011.
18. Since June 2011, however, the Government of Lao PDR underwent an internal restructuration and established some new ministries, among them the Ministry of Science and Technology (MOST). A new Project Steering Committee was established in June 2012, which held the first meeting in September 2012. A Mid-term Review of the Project was also carried out in September 2012. A new project team was established in February 2013.
19. Due to the above institutional changes and subsequent delays, a note was addressed by the Government to UNEP and eventually an extension of 12 months was agreed upon in 2013, shifting the final date of

the Project to 07/09/2014. Eventually, through the Amendment No.1 to the PCA of 29/10/2013, the completion date of the Project was fixed for the 30/11/2014.

### **3.5 Implementation arrangements**

20. The National Authority for Science and Technology (NAST), under the Prime Minister’s Office, originally identified as National Executing Agency (NEA), has been replaced, since 2012, by the Biotechnology and Ecology Institute (BEI) of the newly created Ministry of Science and Technology (MOST). The BEI is also the National Competent Authority (NCA) for the CPB.

### **3.6 Project financing**

21. The Project had an estimated cost of USD 1.500.000, the 66% of which was to be covered through the GEF allocation (USD 995.000), while the remaining 34% (USD 505.000) was to be provided by the Government of Lao PDR, through in-kind co-financing.

### **3.7 Project partners**

22. The Ministry of Justice and the Law Department of the National Assembly have been key partners for the elaboration and approval of the Biosafety Law and related Regulations, while other institutions involved are the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Forestry, the Ministry of Public Health and the National University of Laos, the latter involved in developing some of the key outreach materials and totally in charge of developing Biosafety Curriculum.

### **3.8 Changes in design during implementation**

Despite the no-cost extension of twelve months mentioned above, no major changes in planned activities and results were introduced after the institutional re-setting of the Project. Seven Budget Revisions were so far approved, as discussed later on in the report (4.6.5).

### **3.9 Reconstructed Theory of Change of the project**

23. In the Inception Report of the mission<sup>5</sup>, the consultant presented a reconstructed Theory of Change (ToC) of the Project, based on the project design, other UNEP-GEF Biosafety Unit documents and the comments received from the UNEP Evaluation Office. As a result, the mapping of the possible pathway of change from the projects outputs to the expected outcomes, up to the intended impact, was produced. The reconstructed ToC has been a valuable instrument of analysis all along the evaluation exercise and its design has been tested by the consultant during the evaluation. It has particularly contributed to assess the effectiveness and the sustainability of the project’s results, as well as the likeliness to achieve the intended impact, as discussed in Section 4 (Evaluation findings) of this report.
24. As mentioned above (3.2), the project’s objective is “to assist Lao PDR to have a workable and transparent National Biosafety Framework by 2010, to fulfil its National Socio-economic Development Plan and implement its obligations as a Party to the Cartagena Protocol on Biosafety to the CPB”. Therefore, “a workable and transparent National Biosafety Framework” can be considered as the main Project Outcome<sup>6</sup> to be achieved.
25. The National Biosafety Framework (NBF) is a comprehensive institutional instrument that guides the country towards the achievement of the objective of the Cartagena Protocol on Biosafety (CPB) stated in

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<sup>5</sup> Inception Report of the Terminal Evaluation of the Project “Support the implementation of National Biosafety for Lao PDR” C. Risoli, September 2014

<sup>6</sup> Outcomes: the short to medium term behavioural or systemic effects that the project makes a contribution towards, and that are designed to help achieve the project’s impacts (“the ROtI Handbook”, GEF, 2009)

the art. 1 of the Protocol<sup>7</sup>, and eventually towards the Global Environmental Benefit (GEB) representing the Intended Project Impact: the “Enhanced conservation and sustainable use of biological diversity in Lao PDR”.

26. The exercise of reconstruction of the Theory of Change has permitted to streamline the Results Framework of the Project avoiding duplications and overcoming some inconsistencies and shortcomings. As a result, the very high number (40) of expected Outputs<sup>8</sup>, has been re-organized, reduced in number (avoiding repetitions) and assembled in three main groups, which, in turn, were expected to contribute to five (5) Direct/Immediate Outcomes (instead of the eleven foreseen in the ProDoc) and, eventually, to the main Project Outcome defined above. Chapter 4.3.2 and Diagram 1 describe and illustrate the causal logic of the Project from Outputs to Outcomes.
27. The TOC also depicts the pathway from Outcomes to Impact and any intermediate change required between them, called intermediate states. It permits to appreciate to what extent the project has to date contributed, and is likely in the future to further contribute, to changes in stakeholders behaviour as a result of the project’s direct outcomes, and the likelihood of those changes in turn leading to environmental benefits (impact). The pathway is described and discussed in chapter 4.3.3 and Diagram 2. The TOC further defines the external factors that influence change along the pathways, called drivers (when the project has a certain level of control) or assumptions (when the project has no control).

## 4 Evaluation Findings

### 4.1 Strategic relevance

#### *4.1.1 Sub-regional environmental issues and needs*

28. Concerns are growing about food and livelihood security throughout Asia, currently home to nearly 60% of the world’s population. After a spectacular rise during 1970s and 1980s, the region has experienced a slow down or even stagnation in food production during recent years. Several countries are increasingly resorting to imports either because domestic production is too low or because there are growing demands for food and feed grain. Actually, it is predicted that countries in Asia will account for half of the increase in global demand for the cereals by the year 2020.
29. As a matter of fact, according to the UN Common Country Assessment (CCA), “food security is still a pressing concern for the Lao PDR. Geographic and seasonal pockets of hunger persist, non-timber forest products are decreasing and many communities still lack adequate coping mechanisms”. Therefore, increased rice productivity among traditional farmers is surely a country’s priority, together with the increase of cash-crops production. As a consequence, Lao PDR is a potential net importer of products of biotechnology and it is imperative that the country is prepared to handle import of LMOs, particularly for planting and release into the market, according to international standards and procedures. In spite of the productive benefits from biotechnologies, there are, however, legitimate concerns about the likely risks to the rich biodiversity of the country, as discussed under Context (chapter 3.1), hence confirming the need of appropriate forms of risk control, assessment and management.

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<sup>7</sup> Art. 1 of CPB: “Adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements”.

<sup>8</sup> Outputs : the goods and services that the project must deliver in order to achieve the project outcomes (“the ROtI Handbook”, GEF, 2009)

#### 4.1.2 UNEP mandate and policies

30. UNEP has a rich history of assisting governments in advancing national and regional implementation of environmental objectives, enhancing global and regional environmental cooperation, as well as developing and applying national and international environmental law. Biosafety has become an increasingly relevant sector of UNEP intervention since the first group of Pilot Biosafety Enabling Projects started in 1997 in 18 countries. From 2000 onward, UNEP has supported around 140 countries to develop and implement their National Biosafety Framework (NBF) and/or to participate and benefit from the Biosafety Clearing House (BCH).
31. At the time of Project design, Biosafety was one of the main areas where UNEP was playing its strategic role of Implementing Agency of the Global Environmental Facility (GEF). However, Biosafety was not formally and explicitly recognized as a thematic priority in any of UNEP’s instruments of strategic planning that were, in those years, also in a phase of progressive restructuring. In this regard, it has to be observed that Biosafety, as such, is not mentioned in any of UNEP’s Expected Accomplishments (EA) of its more recent Medium Term Strategies (MTS). It only comes to appear in the biennial PoW for 2012–2013 as one of the five potential areas mentioned in one of the Outputs of the Sub-Programme Environmental Governance.
32. All the same, the relevance of Biosafety can be reconstructed through its evident insertion in some EAs of two strategic cross-cutting areas of UNEP’s intervention: Ecosystem Management and Environmental Governance, as more widely discussed in Chapter 4.7 (Complementarity). Moreover, the Project is absolutely instrumental to the achievement of the five strategic objectives of the Strategic Plan for the Cartagena Protocol on Biosafety for the Period 2011-2020: 1. Facilitating the establishment and further development of effective biosafety systems for the implementation of the Protocol; 2. Capacity-building; 3. Compliance and review; 4. Information sharing; 5. Outreach and cooperation.
33. The Project presents a regional dimension, as clearly expressed by one of its expected outcomes. Therefore, it makes part of UNEP’s regional and sub-regional support for the coordination of regional strategies on Access and Benefit Sharing (ABS), National Reporting, and Liability & Redress, hence contributing to the reform of the International Environmental Governance addressing the complex and fractured system of MEAs, including the biodiversity-related MEAs.

#### 4.1.3 GEF Biodiversity focal area, strategic priorities and operational programme(s)

34. As the financial mechanism of the Convention on Biological Diversity (CBD), the Global Environment Facility (GEF) is also called upon under the Biosafety Protocol to serve as its financial mechanism. At its meeting in November 2000, the GEF adopted the “Initial Strategy for Assisting Countries to Prepare for the Entry into Force of the Cartagena Protocol on Biosafety”, the main objectives of which are: to assist countries in the establishment of national biosafety frameworks; to promote information sharing and collaboration (in particular at the regional and sub-regional level); and, to promote collaboration with other organisations to assist in capacity building for the implementation of the Protocol.
35. The Strategy for Financing Biosafety was approved by the GEF Council on an interim basis in December 2006 and became part of the GEF Focal Area Strategies and Strategic Programming for GEF-4 approved by the GEF Council in June 2007. Under GEF-5, the strategy for the Biodiversity Focal Area contemplates as its Objective 3: “Build Capacity for the Implementation of the Cartagena Protocol on Biosafety (CPB)”. To achieve this Objective, a comprehensive Projects Support has been established, including three types of Projects: Single-country project, Regional or sub-regional projects, Thematic projects.

36. The Project under current evaluation is therefore strategically relevant to GEF priorities. According to data in the GEF web site, the Biodiversity portfolio (including Biosafety) represented in 2013 almost 60% of the GEF Portfolio in the country. According to information received during the country visit, the Lao PDR allocation in GEF 6 will still contemplate Biosafety as a substantive part of Biodiversity area.

#### *4.1.4 Overall Strategic Relevance*

37. As discussed here above, the Project, in retrospect, confirms all its relevance in:

- addressing challenging and crucial issues and needs in the area of biodiversity’s sustainable use in the country and the region;
- achieving internationally agreed environmental objectives and goals, in compliance with the country’s obligations towards Cartagena Biosafety Protocol;
- contributing to fulfil UNEP’s mandate and policy, as well as GEF priorities and strategies.

As a whole, the strategic Relevance is rated S (Satisfactory).

## **4.2 Achievement of outputs**

38. The Evaluation has assessed the delivery of Project Outputs against the planned Outputs of the Results Framework (App. 4 of the ProDoc), in close collaboration with the team of the Project and of the National Executing Agency (BEI). The revision of the outputs produced (e.g. trainings report, training material, awareness material, etc.), as well as the interviews with different stakeholders have also permitted to assess the quality and adequacy of the outputs.
39. Table 1, produced by the team of the Project<sup>9</sup>, has been widely discussed and revised during the country visit and synthesizes the main findings on Outputs delivery, by each of the expected Outcomes of the of the Results Framework of the Project. As showed in the Table, the Project, though experiencing a considerable delay due to substantive governmental changes in its first period of execution (as mentioned in 3.4), has nonetheless contributed to deliver some relevant Outputs. It has to be stressed, among others:
- the adoption of the Biotechnology Safety Law (2014), which was for long awaited;
  - the preparation of Secondary Regulations on Biosafety;
  - the preparation of the National Biotechnology Strategy and Action Plan (NBSAP);
  - the equipment of the first GMO laboratory of the country;
  - capacity building and awareness raising of national stakeholders.
40. It is widely recognized that the main key-drivers have been the high dedication of the project team and the strong institutional support of the NCA (the Biotechnology and Ecology Institute/BEI of the Ministry of Science and Technology), which, in fact, have worked as a single team, in a fruitful and cooperative work environment.
41. Considering the baseline situation encountered by the Project and the difficult institutional context in which the Project has been implementing its activities, the Evaluation has rated the Outputs delivery as Moderately Satisfactory (MS).

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<sup>9</sup> Based on a format that the Consultant had shared with the team of the Project before the country visit.



**Table 1: Assessment of Outputs Delivery** (based on App.4 / Results Framework) **Project “Support the implementation of National Biosafety for Lao PDR”**

<i>Expected Outputs</i> <sup>10</sup>	<i>Indicators</i> <sup>11</sup>	<b>Outputs delivered by the Project (October 2014)</b>	<b>Evidence</b>	<b>Comments</b>
<b>Outcome A:</b> <i>information is updated on status and capacity for biotechnology R&amp;D and biosafety management in the country</i>				
<p>1) <i>A clear national policy encompassing biotechnology, biosafety and national development is developed within the first year of project initiation by the NEA and line agencies.</i></p> <p>2) <i>A status and strategy paper on biosafety cum biotech. R&amp;D in Lao PDR prepared by the National Coordination Committee (NCC) and NEA, within 6 months after completion of stocktaking exercise.</i></p>	<p>➤ <i>The new policy is based on the needs assessment paper on strengthening national capacity in biotechnology, biosafety management.</i></p> <p>➤ <i>An enabling strategy paper on how biosafety will be integrated into biotechnology R&amp;D is circulated to relevant authorities.</i></p>	<p>➤ Relevant government stakeholders are informed on biotechnology and biosafety, especially the local status;</p> <p>➤ Survey on status and capacity of Biotechnology and biosafety.</p>	<p>➤ The National Focal Point of CPB and the project team are invited to talk on biotechnology and biosafety in related national workshops;</p> <p>➤ Report on Status and Capacity for Biotechnology and Biosafety Management (January 2010).</p>	<p>➤ Good interaction between the project team and concerned stakeholders is necessary to receive productive comments.</p>

<sup>10</sup> As stated in the Results Framework (App. 4) of the Project Document

<sup>11</sup> As stated in the Results Framework (App. 4) of the Project Document

<b>Outcome B1:</b> biosafety is integrated into national development policy and plans				
<p>1) A National Biotechnology Strategy and Action Plan (NBSAP) for 2011-2015 is jointly developed by NEA and partners to implement the Biotech. &amp; Biosafety policy by 2010.</p> <p>2) Biosafety &amp; biotech. are executed in national and sectoral plans and strategies by line agencies by 2011.</p>	<ul style="list-style-type: none"> <li>➤ NBSAP is formulated and adopted by Government.</li> <li>➤ NBSAP has a timeframe for implementation.</li> <li>➤ NBSAP includes plan for human resource development and institutional strengthening in biosafety</li> <li>➤ Impact of biotechnology on national development</li> </ul>	<ul style="list-style-type: none"> <li>➤ Biosafety is included in sectoral plan and strategies;</li> <li>➤ A first draft of NBSAP 2011-2015 had been developed and discussed in 2010,</li> <li>➤ A new draft NBSAP to 2030 and an Action Plan to 2020 has been prepared taking into account the new Biosafety Law approved in January 2014.</li> </ul>	<ul style="list-style-type: none"> <li>➤ GMOs criteria are included in the application forms of the Ministry of Agriculture for the import of agricultural products;</li> <li>➤ The new draft NBSAP is under discussion and revision. The latest consultation meeting took place in June 2014 with 34 participants.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Relevant government agencies have been involved and their participation was relevant for the formulation of the draft NBSAP</li> <li>➤ The first draft (2010) became impractical due to the governmental changes of 2011</li> </ul>
<b>Outcome C1:</b> By 2012, Laos PDR will have a regulatory regime to complement other national Laws and is compliant with CPB.				
<p>1) Biosafety Law which is supported by other national Laws and is compliant with CPB is adopted by 2012.</p> <p>2) Legal personnel are trained in the operation of the Biosafety regulatory regime by 2010.</p>	<ul style="list-style-type: none"> <li>➤ Biosafety Law is adopted by Lao National Assembly and implemented by President's Decree.</li> <li>➤ Other national Regulations are modified to be consistent with the Biosafety Law.</li> <li>➤ At least 5 national legal experts are trained in the implementation of Biosafety regulatory regime</li> </ul>	<ul style="list-style-type: none"> <li>➤ Biotechnology Safety Law was adopted by the National Assembly and entered into force in January 2014</li> <li>➤ Capacity building provided on the operationalisation of the Law, namely: <ul style="list-style-type: none"> <li>- Legislation Department of the Min. of Justice received Technical Support by UNEP international consultant</li> <li>- More than 150 officers from</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>➤ Publication of Biosafety Law in the official gazette of Ministry of Justice;</li> <li>➤ Printed Biosafety Law (Lao-English);</li> <li>➤ Uploaded on BCH</li> </ul> <p>No Consultant's report on Anubis</p>	<ul style="list-style-type: none"> <li>➤ The official adoption of the Biosafety Law No. 017 from National Assembly was on 18 December 2013 and Promulgation of the president No. 058/PD was on 28 January 2014. The law was drafted with the support of the UNEP international Consultant to the Min. of Justice and to the project team. In order to ensure national ownership, the</li> </ul>

		scientific and governmental authorities informed on Biosafety Law and on related responsibilities and administrative tasks		process of government consideration and public consultation took very long and the approval of the bill was delayed; ➤ Regularly update information to leaders with decision powers play an important role to move task activities forward .
<b>Outcome C2:</b> By 2012, a consolidated and strengthened regulatory regime is in place.				
<p>1) By 2012, the Prime Minister's Decree will ensure that the legally-binding Biosafety Regulations will come into force.</p> <p>2) By 2011, voluntary instruments like guidelines and manuals are developed by NEA and relevant agencies.</p> <p>3) By 2010, legal personnel are trained in at least 2 workshops organized by the NPC and NEA on drafting secondary and tertiary legislations.</p>	<p>➤ Biosafety regulations are adopted by Government and promulgated by Prime Minister's Decree.</p> <p>➤ Secondary Biosafety Regulations published in gazette</p> <p>➤ Secondary Biosafety Regulations published on BCH</p> <p>➤ Voluntary guidelines and manuals are developed.</p> <p>➤ A significant increase in legal capacity to draft biosafety legislations.</p>	<p>➤ Secondary biosafety Regulations on a) Contained use, b) Environment release and c) Food-feed biosafety have been drafted (by national and international consultants) and are in the process of being reviewed by the Ministry of Justice</p> <p>Not yet produced, waiting for the approval of the Regulations</p>	<p>➤ Regulations drafts</p>	<p>➤ Based on the local system, the secondary regulations are just approved by Decree of the Ministry, then adopted by the National Biosafety Committee</p>
<b>Outcome D1:</b> By 2009, an efficient administrative structure for biosafety is established.				

<p>1) <i>By 2009, institutional arrangement for handling requests is made functional by NCC/NEA and relevant line agencies.</i></p> <p>2) <i>By 2009, the Scientific Advisory Committee (SAC) for RA and RM is appointed with trained members by NEA.</i></p> <p>3) <i>By 2009, technical tools &amp; documents to assist decision making are developed by NCA.</i></p> <p>4) <i>By 2009, responsibilities of various agencies are clearly defined by NCA and National Authorities on Biosafety.</i></p>	<p>➤ <i>Scientific Advisory Committee for RA and RM is established</i></p> <p>➤ <i>RA&amp;RM and decision making procedures are transparent</i></p> <p>➤ <i>Clear definition of roles and responsibilities for different agencies on applications.</i></p> <p>➤ <i>Training manuals for handling applications published and made available to all stakeholders.</i></p>	<p>➤ Two Biosafety committees are identified by the Law:</p> <ul style="list-style-type: none"> <li>- National Committee for Biotechnology Safety (NBC);</li> <li>- Technical Coordination Committee (TCC)</li> </ul> <p>➤ Roles and responsibilities of scientific and management authorities are clearly defined by the Law</p> <p>➤ Training manuals not yet produced</p>	<p>➤ NBC and TCC are being established</p>	<p>➤ NBC is approved by the Prime Minister, while TCC is appointed by NBC president</p>
<p><b>Outcome D2:</b> <i>By 2010, institutional capacity to handle requests will be enhanced.</i></p>				
<p>1) <i>A functional and integrated administrative system at institutional level is in place for handling requests within first 12 months of project life.</i></p> <p>2) <i>Members of all SACs are appointed by NCA/NEA and trained by 2009.</i></p> <p>3) <i>A transparent decision making process is established</i></p>	<p>➤ <i>Training manuals for handling applications published and made available to all stakeholders.</i></p> <p>➤ <i>Guidelines, manuals and procedures for handling all aspects of requests are prepared and made available.</i></p>	<p>➤ Draft application forms have been prepared for different uses of GMOs (food &amp; feed, environment and contained used);</p> <p>➤ 43 staffs trained (2013) on administrative task and handling application</p> <p>➤ Guidelines, manuals and</p>	<p>Report of the trainings</p>	<p>➤ Before its closure, the project is planning a training on administrative tasks and handling application with the assistance of UNEP and Consultants from Malaysia. TOR are drafted and waiting for comments from UNEP.</p>

<p><i>within first year of project by NEA/NCA.</i></p> <p>4) <i>By 2009, tools, training manual and technical documents are developed by NEA/NCA.</i></p> <p>5) <i>By 2009, clear procedures are in place for dealing with confidential information.</i></p> <p>6) <i>By 2009, a mechanism for public participation in decision making is established within the NEA/NCA.</i></p>	<ul style="list-style-type: none"> <li>➤ <i>Application forms for different uses of LMOs are available and readily accessible.</i></li> <li>➤ <i>Risk assessment and decision making of handling request is considered and approved by scientific and management authorities.</i></li> <li>➤ <i>Decision-making bodies have representatives from the public.</i></li> </ul>	<p>procedures not yet produced</p>   <ul style="list-style-type: none"> <li>➤ The NBC does not contemplate representatives from the public</li> </ul>		
<p><b>Outcome E1:</b> By 2011, national capacity for monitoring, enforcement and inspection will be strengthened.</p>				
<p>1) <i>By 2011, human and infrastructural resources for monitoring, inspection, enforcement and LMO detection are strengthened in Lao PDR by NCAs.</i></p> <p>2) <i>By 2010, an effective monitoring strategy comprising methodology, workflow and schedule is set up by NCAs.</i></p> <p>3) <i>By 2011, relevant staff are trained and equipped with</i></p>	<ul style="list-style-type: none"> <li>➤ <i>A functional system for ‘follow-up’ activities is set up.</i></li> <li>➤ <i>Relevant enforcement agencies have clear roles and responsibilities.</i></li> <li>➤ <i>Availability of training manuals and technical documents for monitoring and inspection.</i></li> <li>➤ <i>Infrastructure is improved to enable LMO detection to assist in inspection,</i></li> </ul>	<ul style="list-style-type: none"> <li>➤ Agencies, contents and elements of inspection are identified and published in the Biosafety Law;</li> <li>➤ 52 staffs from concerned agencies and authorities (BEI, Inspection and Customs) were trained in 2014 on monitoring, enforcement and inspection (10 days course);</li> <li>➤ A functional GMO testing laboratory in place at Biotechnology and Ecology Institute (BEI) with functional equipment and</li> </ul>	<ul style="list-style-type: none"> <li>➤ Biosafety law</li> <li>➤ Laboratory in BEI premises</li> <li>➤ Training reports</li> <li>➤ Training material (manuals, CDs) prepared by the International Consultants (from Austria)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Need more capacity in relation to RA, RM and GMO detection. For instance, only qualitative analysis was provided from the international consultant in the hands-on training on detection of LMO (July 2014).</li> </ul>

<p><i>appropriate tools by NCAs.</i></p> <p>4) <i>Technical guidelines and checklists are developed by NEA/NCAs and distributed to relevant personnel by 2010.</i></p>	<p><i>enforcement and compliance.</i></p>	<p>staff trained in 2014 (10 days training)</p>		
<p><b>Outcome E2:</b> <i>By 2011, enforcement and compliance to national regulatory regime will be improved.</i></p>				
<p>1) <i>By 2010, information is compiled on the biology and distribution of rice and other important crops in Lao PDR by NEA/NCAs.</i></p> <p>2) <i>By 2011, indicator organisms and parameters are identified for monitoring environmental impact caused by planting GM-rice by SAC.</i></p> <p>3) <i>Strategy to apply GM-rice with minimal negative impact on the environment is devised by SAC by 2011.</i></p> <p>4) <i>By 2010, emergency response plan (ERP) is developed by SAC/NCA for accidental or unauthorized release.</i></p>	<p>➤ <i>The biology of important agricultural crops is gathered.</i></p> <p>➤ <i>A comprehensive map on the distribution of wild and cultivated important cash crops is created.</i></p> <p>➤ <i>A strategic plan is developed to support monitoring for environmental impact.</i></p> <p>➤ <i>List of indicator organisms and parameters are part of monitoring plan of relevant enforcement agencies.</i></p>	<p>➤ <i>List of organism indicators is in the process of drafting;</i></p> <p>➤ <i>49 government staffs trained on Emergency response in case of accident management.</i></p>	<p>➤ <i>There is an ongoing work on indicators for monitoring which is carried out by a national consultant</i></p>	
<p><b>Outcome F1:</b> <i>By 2010, public awareness in biotechnology and biosafety matters will be</i></p>				

<i>enhanced.</i>				
<p>1) By 2009, a public-friendly information access system is set up by NEA.</p> <p>2) By 2010, biosafety education and awareness materials are developed by NEA and partners.</p> <p>3) By 2011, secondary and tertiary educational curricula contain biosafety.</p> <p>4) By 2010, a platform for 2-way public participation is set up by NEA/NCAs.</p> <p>5) By 2010, strategy for public awareness, education and participation is developed by NEA/NCAs.</p>	<p>➤ The biosafety is part of the Environment Education Curriculum at all levels of formal and informal education.</p> <p>➤ Outreach materials on biosafety are in local language.</p> <p>➤ Active feedback from the public on biosafety matters.</p> <p>➤ Number of ‘hits’ per month on the nBCH.</p> <p>➤ Number of articles published in the local press on biosafety.</p>	<p>➤ More than 100 gov. staffs, university lecturers and stakeholders trained on risk communication</p> <p>➤ Biosafety Curriculum has been prepared by a team of 6 lecturers of the National University, Faculty of Science. The draft has been presented to the Committee of the University and, when approved by the Min. of Education, it will be officially contemplated in the Curriculum of the University</p> <p>➤ Biosafety is introduced into higher education curricula (Faculty of Science, National University of Laos)</p>	<p>➤ Increased awareness on biotechnology and Biosafety among stakeholders;</p> <p>➤ Public awareness materials:</p> <ul style="list-style-type: none"> <li>- Q&amp;A booklet for students and concerned stakeholders;</li> <li>- 3 newsletter issues</li> <li>- DVD/Video on Biosafety (students, stakeholders, general public and policy makers)</li> <li>- LMO Poster (general public)</li> <li>- BCH and Biosafety website</li> <li>- Brochures (academic, researchers and stakeholders)</li> <li>- Handbook on Biosafety for higher education students</li> <li>- Training handbooks for accessing BCH and scenario of interactive CPB.</li> </ul>	<p>➤ Poster of LMOs is very popular</p> <p>➤ Involving university lecturers plays an important role in wider communication;</p> <p>➤ Some guidance handouts and manuals provided are very useful for raising awareness, however some adaptation to local situation and experiences is required.</p>
<b>Outcome F2: Active public participation in decision making</b>				
<p>1) By 2010, platform for public participation in decision-making is developed by NEA.</p> <p>2) By 2010, entry points are identified by NCC/NEA/SAC for feedback from the public in decision making.</p>	<p>➤ Platform for public participation is active.</p> <p>➤ Public representatives are members of decision making bodies.</p> <p>➤ Public opinions are considered in decision</p>	<p>➤ BCH focal point appointed;</p> <p>➤ All government bodies and over 300 officers informed on biosafety and decision making processes on LMOs</p>	<p>➤ Website BCH format is running;</p> <p>➤ Stakeholders understand procedures of making decision on LMOs;</p>	<p>➤ Workshops and seminars create opportunities to share relevant information;</p> <p>➤ BCH portal might not be the most effective tool to channel public inputs in the Lao context;</p>

3) <i>By 2010, decisions on LMOs are publicized and accessible to the public by NEA via nBCH.</i>	<i>making</i> ➤ <i>Decisions are available to the public.</i>			➤ There is no case of LMO decisions during the project implementation.
<b>Outcome G:</b> <i>Enhanced regional cooperation on biosafety matters</i>				
1) <i>By 2010, formats for info. Exchange on RA&amp;RM will be agreed between ASEAN countries.</i> 2) <i>Lessons and best practices will be identified and shared between ASEAN countries throughout project cycle and beyond.</i>	➤ <i>Template for information sharing is agreed among ASEAN countries.</i> ➤ <i>Lessons learned and best practices are documented.</i>	➤ Attendance of national staff at regional workshops	➤ NPC Meeting Asia, 1st -5th July 2013, Ulaanbaatar, Mongolia; ➤ 1 NPC Meeting in Thimphu, Bhutan on 9-13 June 2014; ➤ Lao PDR hosted the 11th Meeting of ASEAN GMO Food Testing Network (August 2014)	➤ Lesson learnt and best practices should be shared among ASEAN countries ➤ RA&RM formats or standards are required between ASEAN;



### **4.3 Effectiveness: Attainment of project objectives and results**

42. The Evaluation has assessed to what extent the delivery of the Outputs (see Table 1) has produced the short to medium term institutional changes and systemic effects (Outcomes) designed to achieve higher level of results (Impact). The achievement of the planned Outcomes of the Projects has been analysed and discussed with the Project Team and the National Director of BEI (also National Focal Point for CPB and National Project Director) during the country visit, by using Table 2<sup>12</sup> (sub-chapter 4.3.1), which describes in detail the achievements at Outcomes level.
43. Sub-chapter 4.3.2 presents a qualitative analysis and interpretation of the Outcomes achieved in the light of the reconstructed Theory of Change (TOC) from Outputs to Outcomes depicted in Diagram 1, whereas Diagram 2 illustrates the TOC from Outcome to Impact and sub-chapter 4.3.3 discusses and makes an assessment of the Likelihood of Impact.
44. Overall, based on the assessment contained in the following three sub-chapters (4.3.1, 4.3.2 and 4.3.3), the Evaluation considers that the attainment of project objectives and results (Effectiveness) of the Project has been Moderately Satisfactory (MS).

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<sup>12</sup> Based on a format that the Consultant had shared with the team of the Project before the country visit.

#### 4.3.1 *Achievement of direct Outcomes*

This sub-section presents in detail the achievements at Outcomes level. Achievements are considered Moderately Satisfactory (MS).

**Table 2: Assessment of Outcomes Achievement** (based on App.7 / M&E Framework)<sup>13</sup> **Project “Support the implementation of National Biosafety for Lao PDR”**

<i>Outcome</i>	<i>Outcome indicator</i>	<i>Baseline Conditions</i>	<b>Target Achieved October 2014 (evidence-based) and comments</b>
<b>Outcome A:</b> <i>Information is updated on status and capacity for biotechnology R&amp;D and biosafety management in the country</i>	<i>A needs assessment paper on strengthening national capacity in biotechnology, biosafety management and national development is developed</i>	<i>No needs analysis carried out since the initiation of the UNEP/GEF NBF Development project in 2001.</i>	Baseline information on the local status and capacity for biotechnology was drafted and used as a first window to identify relevant biotechnology policy and strategy.
<b>Outcome B:</b> <i>Biosafety will be integrated into national development policy and plans</i>	<ul style="list-style-type: none"> <li><i>Biosafety Action Plan on biosafety approved by Government</i></li> <li><i>Biosafety integrated into national development plans</i></li> </ul>	<i>A draft Biosafety Policy was prepared under the NBF Dev. Project, but it needs an action plan to integrate this into National Development Plans</i>	NBSAP (National Biotechnology Strategy and Action Plan) is in process of development ( Biosafety Law has been recently approved)

<sup>13</sup> The first three columns reflect the content of the M&E Framework of the ProDoc, the last (forth) column reports the finding of the Evaluation

<b>Outcome C1:</b> <i>A regulatory regime that complements other national Laws and is compliant with CPB.</i>	<ul style="list-style-type: none"> <li>• <i>Biosafety Law is approved by government and National Assembly.</i></li> <li>• <i>Biosafety Law is accessible through the nBCH.</i></li> </ul>	<i>Draft Biosafety Law to be approved.</i>	Biosafety Law is approved and promulgated (January 2014)
<b>Outcome C2:</b> <i>Regulatory regime is strengthened and consolidated.</i>	<i>Biosafety regulations are adopted by Government and promulgated by Prime Minister's Decree.</i>	<i>No supporting regulations for biosafety.</i>	Secondary regulations (food and feed, contained use and environment release) are being reviewed by the Department of Legislation, Ministry of Justice.
<b>Outcome D1:</b> <i>An efficient administrative structure for biosafety.</i>	<i>National Competent Authorities on Biosafety in place.</i>	<i>No Administrative structure for Biosafety Implementation</i>	MOST (Ministry of Science and Technology) is the NCA, through its Biotechnology and Ecology Institute (BEI), while other institutions are contemplated in the law with roles and responsibilities.
<b>Outcome D2:</b> <i>Enhanced institutional arrangement for handling requests.</i>	<ul style="list-style-type: none"> <li>• <i>All members of Scientific Advisory Committees are trained.</i></li> <li>• <i>Guidelines, manuals and procedures for all uses of LMOs are available.</i></li> </ul>	<i>No Scientific Committee for Biosafety exists.</i>  <i>No technical documents for various uses of LMOs available in Laotian language.</i>	The Technical Coordinating Committee is foreseen in the Law and in the process of its constitution. Training was provided to administrative and scientific authorities at both central and local levels. There are not yet available guidelines, manuals and procedures for handling requests. (Assistance from Department of Biosafety, Ministry of Natural Resources and Environment, Malaysia, through UNEP, is expected to prepare and conduct a training on administrative tasks and handling application). A consultancy has been initiated through UNEP to prepare guidelines and manuals to support the national Biosafety decision making process
<b>Outcome E1:</b> <i>Strengthened capacity for monitoring, enforcement and inspection.</i>	<ul style="list-style-type: none"> <li>• <i>Training manuals and technical documents for monitoring and inspection are available.</i></li> <li>• <i>Improved infrastructure for LMO detection.</i></li> </ul>	<i>No training materials are available.</i>  <i>No adequate infrastructure to carry out LMO detection.</i>	GMO lab is in place Some preliminary training material is available.

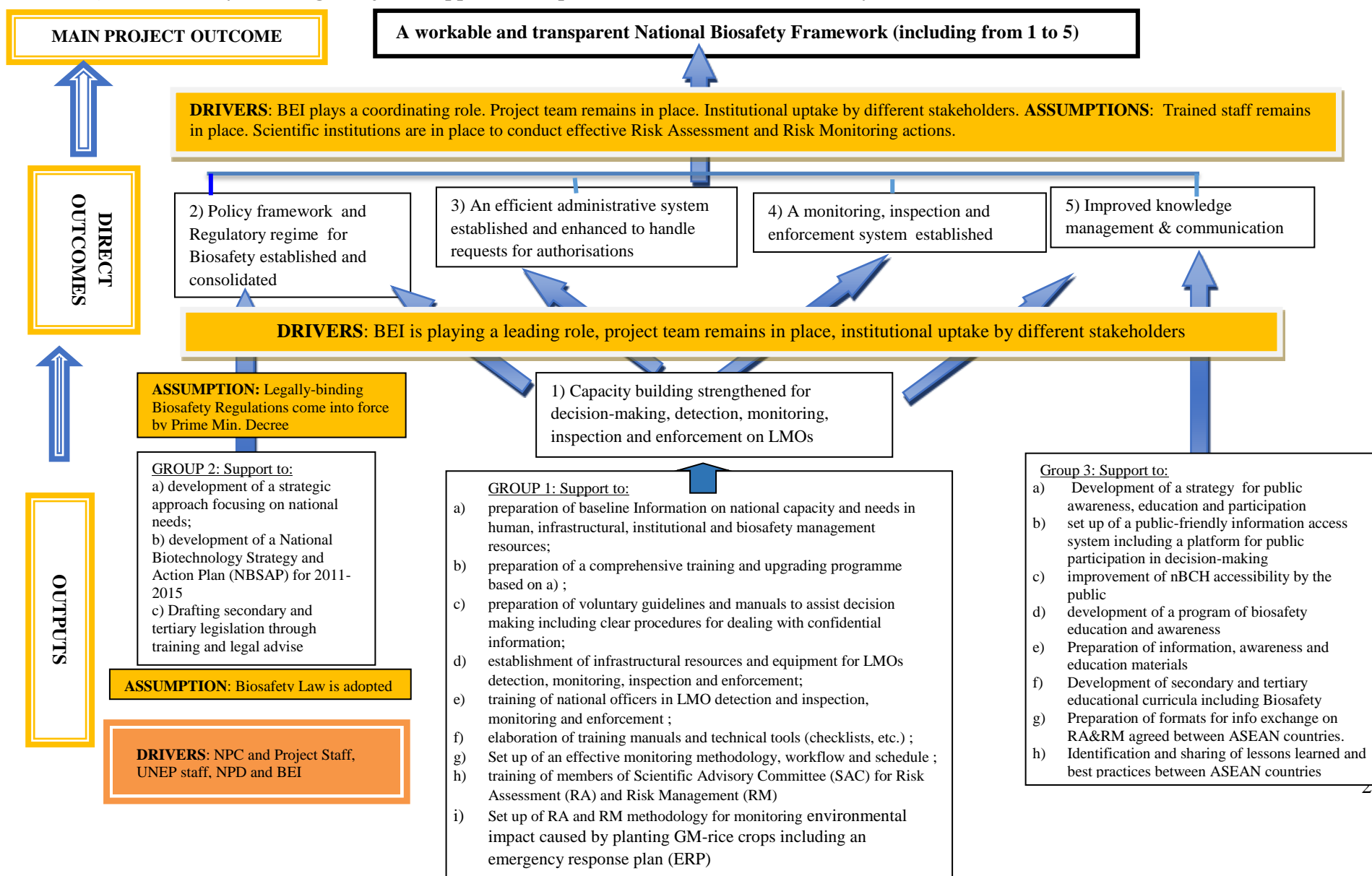
<b>Outcome E2:</b> <i>Mechanism for monitoring post-release environmental impact</i>	<i>A strategic plan is developed for monitoring environmental impact.</i>	<i>No plan for monitoring impact of releases of LMOs available.</i>	Key indicators for monitoring environmental impact of key GM-crops are being identified by a national consultant (not related to any environmental release of GMOs)
<b>Outcome E3:</b> <i>Better enforcement and compliance to national regulatory regime.</i>	<ul style="list-style-type: none"> <li><i>Special training programs are developed for personnel at border and ports of entry into the country.</i></li> <li><i>Unauthorized LMOs are stopped at points of entry.</i></li> </ul>	<i>No special training programs for ‘follow-up’ activities are available.</i>  <i>Entry of LMOs into country is unchecked.</i>	Training has basically targeted national officers at central level.
<b>Outcome F1:</b> <i>Enhanced public awareness in biotechnology and biosafety matters</i>	<i>Awareness raising materials on biotechnology and biosafety are created and distributed.</i>	<i>No outreach materials developed for targeted audience.</i>	Awareness material have been produced and distributed to relevant stakeholders. Several DVDs produced as part of the outreach activities.
<b>Outcome F2:</b> <i>Active public participation in decision making</i>	<i>Platform for public participation is developed</i>	<i>Public not involved in decision making</i>	Premature at this stage
<b>Outcome G:</b> <i>Enhanced Regional networking</i>	<i>Critical information on risk assessment and risk management (RA&amp;RM) is shared between countries in the region.</i>	<i>Regional cooperation in biosafety was weak.</i>	Regional networking has basically consisted of NPC meetings and some training opportunities out of the country (Malaysia)

#### 4.3.2 *Direct outcomes from reconstructed TOC*

45. As mentioned before, the Project has practically been paralysed for more than one year, due to profound institutional changes at governmental level, which have led, among others, to the creation of the new Ministry of Science and Technology, current NCA, to staff reshuffling (also in the Project team), with all the subsequent administrative and procedural changes and delays. The Project has gained momentum with a new team from 2013 onward and, based on the outputs produced, has started to produce some systemic effects (Outcomes). Actually, it is largely recognised that substantive steps have been taken to prepare the ground for more tangible results in the near future and for the consolidation of what has been achieved so far. The Consultant shares this view, taking into account the positive results of the last two years and the cohesion and motivation of the team in place.
46. Diagram 1 here below depicts the reconstructed Theory of Change (TOC) of the Project from Outputs to Outcomes. The most consistent group of foreseen Outputs (group 1 in the Diagram) was supposed to be conducive to the pivotal Outcome 1 of the Project: “Capacity building strengthened for decision-making, detection, monitoring, inspection and enforcement on LMOs”. Some of the planned outputs have actually been delivered, as shown in previous Table 1, while others have been left behind. The establishment of infrastructural resources and equipment for LMOs detection has been successfully completed and a first, introductory training of national officers in LMO detection and inspection, monitoring and enforcement has been carried out. However, guidelines, manuals and other technical or methodological tools for Risk Assessment and Monitoring are not yet in place, and the Technical Coordination Committee (TCC) is in its stage of constitution, hence not yet targeted by adequate training to carry out its advisory function. Therefore, the Project can claim to have only partially achieved Outcome 1.
47. As a consequence of that, and also taking into account that during the Project life-time no practical opportunity of GMO assessment and monitoring materialised, Outcome 3 (An administrative system to handle requests for authorisations) and Outcome 4 (A monitoring, inspection and enforcement system) are not yet achieved.
48. Outcome 2 (Policy framework and Regulatory regime) depends, as clearly shown in Diagram 1, on two crucial assumptions. The first one, i.e. the adoption of the Biosafety Law, has been recently achieved in January 2014 (see Table 1), while the subsequent draft Regulations are in their phase of revision by the Ministry of Justice. Outcome 2, therefore, has been almost, though tardily, achieved.
49. Some of the Outputs of Group 3 (Diagram 1) have been delivered as shown in Table 1, specifically those related to the preparation of information and awareness materials, while other outputs related to education curricula and public participation are in an early stage of implementation. Therefore, Outcome 5 (Improved knowledge management & communication) can be considered as partially achieved.
50. While the key-drivers, the Biotechnology and Ecology Institute (BEI) and particularly BEI’s project team are actively playing their leading and coordinating role, the overall institutional up-taking by other national stakeholders is still in an initial phase and the two main national Committees (the National Biosafety Committee and the Technical Coordination Committee) are under constitution.
51. As a result of all the exposed above, the overall finding is that the main Project Outcome (A workable and transparent National Biosafety Framework) is on its way to be achieved, yet relevant components are still at their initial stage, despite the undeniable efforts of the national team in the last two years. When considering the baseline situation and the difficulties of the institutional environment experienced by the

Project during its implementation, the Evaluation judges the Outcomes achievement of the Project so far, as Moderately Satisfactory (MS).

**Diagram 1: Theory of Change Project “Support the implementation of National Biosafety for Lao PDR”: From OUTPUTS TO OUTCOME**

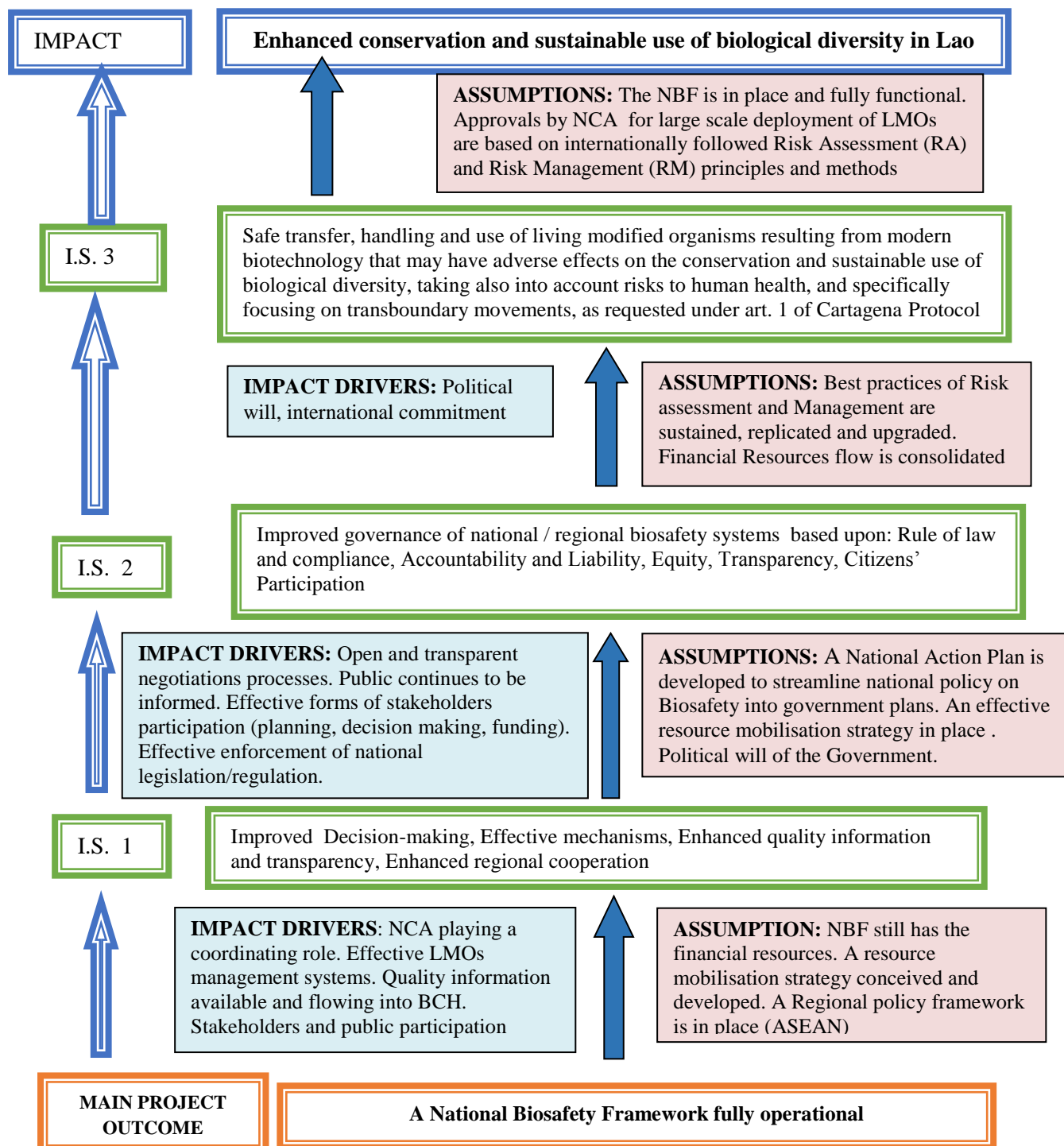


#### 4.3.3 *Likelihood of impact using ROtI and based on reconstructed TOC*

52. The intended impact of the project is the Global Environmental Benefit to which it contributes: the enhanced conservation and sustainable use of biological diversity in Lao PDR. The pathway from the Project Outcome (a workable and transparent National Biosafety Framework, NBF) to the intended Impact is not a straightforward process: transitional conditions (called Intermediate States) have to be fulfilled, as shown in Diagram 2, which presents our understanding of the causal logic and of the pathway from Outcome to Impact.
53. Three main Intermediate States (I.S.) have been identified. Assuming that the Outcome is achieved and maintained (under the conditions that a) the NBF still has the financial resources to effectively monitor all the relevant aspects of the LMOs management and b) that a resource mobilisation strategy is conceived and developed), the process will lead to “Improved decision-making processes for LMOs approval, effective implementation mechanisms and enhanced quality information and transparency” (**I.S. 1**). A regional policy framework among ASEAN countries should also be in place to keep and consolidate the regional networking on Biosafety. Key impact drivers in that step are the coordinating role of the National Competent Authority/NCA (BEI), effective LMOs management systems (e.g. for detection and referral, for handling applications, for risk assessment and monitoring), active stakeholders and public participation, quality information available and timely flowing into BCH and national websites.
54. Improved decision-making will lead to “Improved Governance of National/International Biosafety systems based upon: Rule of Law and Compliance, Accountability and Liability, Equity, Transparency and Citizens’ Participation” (**I.S. 2**). That will happen, under the assumption that the political will of the Governments is not missing, particularly through a National Action Plan developed to streamline national policy on Biosafety into government plans, as well as through an effective resource mobilisation strategy in place. The main impact drivers at that stage will be open and transparent negotiation processes at different levels, effective forms of stakeholders participation, from planning to decision-making and co-funding, and that citizens and constituencies continue to be well informed and to participate.
55. The Intermediate State 3 (**I.S. 3**) is the Objective of the Protocol itself, as stated in its art. 1: “The safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements”. Political will, negotiations and international commitments will act as impact drivers at that level, under the main assumption that the NBA’s decision-making persists based on rigorous Risk Assessment and Risk Management best practices, and that the financial flow of resources to Biosafety Agenda is consolidated.
56. Under the same assumption that internationally followed principles of Risk Assessment and Risk Management are lastingly used by the National Competent Authorities (NCA) for deciding on LMOs production/use, the **Project Impact** (Enhanced Conservation and Sustainable Use of Biological Diversity in Lao PDR) can be achieved.



**Diagram 2: Theory of Change Project “Support the implementation of National Biosafety for Lao PDR”: From OUTCOMES to IMPACT**



57. According to the TOR of the Evaluation, the Evaluation has to assess the likelihood of the Project to achieve the expected Impact, by using the rating scales of Table 3 and 4 that follow. Based on the analysis presented in Chapter 4.3.2, we have to acknowledge that the main Project Outcome is being tardily and partially achieved. Some direct outcomes (e.g. direct outcomes 3 and 4) have not been achieved at all. Therefore, when using Table 3 here below, the Outcome Rating of the project can be defined for now between “D” and “C”.
58. The pathway from Outcomes to Impact is still to be approached and the likelihood of progressing upward, as depicted in Diagram 2, will depend on relevant factors that still have to materialize or consolidate. Future programs and possible supports could find useful to build upon Diagram 2, when designing logical frames of cooperation. Rating on progress toward Intermediate States is “D”.
59. As a result, the aggregate rating, as showed in Table 4, is between “CD” and “DD”. The Evaluation considers, however, that significant steps have been given in the last few years, as underlined in 4.3.2 (Direct Outcomes) and in 4.5 (Efficiency). This positive trend should be reflected in the rating with a “+” notation. The final score reported in Table 4 is therefore between “CD+” and “DD+”, which corresponds to the “Unlikely” achievement of impact, at the current stage.

**Table 3. Rating scale for outcomes and progress towards ‘intermediate states’**

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

**Table 4. ‘Overall likelihood of impact achievement’ on a six point scale.**

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

#### **4.4 Sustainability and replication**

60. The evaluations has analysed to what extent follow-up work has been initiated and how project results could be sustained and enhanced over time. The reconstructed TOC presented in the previous chapter has assisted in the evaluation of sustainability, by identifying the main driving forces and assumptions influencing Project’s achievements. Four aspects of sustainability have been addressed: a) Socio-political sustainability, b) Financial sustainability, c) Institutional sustainability, d) Environmental sustainability.

##### ***4.4.1 Socio-political sustainability***

61. To integrate Biosafety into national policy and plans has proved to be an extremely cumbersome task for the project, eventually culminated with the promulgation of the National Biosafety Law in January 2014. The approval of the Law has been the outcome of a long and tortuous process started not less than ten years ago, which is explicable by the highly centralised structure of the State, the complex and heavy institutional mechanisms of decision-making in the country and a recent governmental reshaping. Nevertheless, national stakeholders believe that, in the political context of Lao PDR, the existence of the Law will dramatically improve socio-political sustainability of the Biosafety agenda. Actually, the process seems to have gained momentum since the approval of the Law, with three relevant Regulations (Secondary Laws) on their way to be finalised and approved.
62. National ownership is high, due to the strong commitment of the NCA (the Biotechnology and Ecology Institute, BEI), which is currently the main driving force for socio-political sustainability. As stressed by the National Director of BEI, in Lao PDR technical experts can have access to high level posts in the Public Sector (e.g. BEI National Director has also been recently designated “Vice-Ministry” of MOST) and that is a guarantee for moving forward the Biosafety agenda, too. Overall the Socio-political sustainability is considered Moderately Likely (ML).

##### ***4.4.2 Financial sustainability***

63. The approval of the Law is a necessary condition, now fulfilled, for financial sustainability, yet not a sufficient one. In the short term, the NCA believes that external support is indispensable to put forward the Biosafety agenda in the country. The Government has already negotiated through GEF 6 an adequate funding for pursuing the implementation of the National Biosafety Framework. Sub-regional Cooperation, particularly with Vietnam and Cambodia, is regarded as an outstanding element which could contribute to cost-effectiveness, hence of financial sustainability, as also remarked by the Deputy Ministry of the MOST, during the interview. Financial Sustainability is rated Moderately Likely (ML).

##### ***4.4.3 Institutional sustainability***

64. Institutional sustainability will highly depend on the effective functioning of the two main coordinating bodies created by the Law: The National Committee for Biotechnology Safety and the Technical Coordination Committee. The first has the main responsibility of leading and implementing biosafety agenda in the country, being formed by the representatives of the MOST (the Minister of MOST is the Chair), of the Ministry of Natural Resources and Environment (the Minister is the vice-chair of the Committee), of the Min. of Public health and of the Min. of Agriculture and Forestry. The Technical Committee (chaired by the Vice-ministry of MOST) receives orientation from the National Committee and is formed by the key concerned departments and institutes, as well as experts and representatives of

other organizations. The Technical Committee has responsibility for the implementation of risk assessment and risk management measures, by giving technical advice on their application.

65. The two Committees are still in a phase of development, therefore Biosafety Governance is still at an early stage in the country and its institutional sustainability difficult to assess. Public participation in Lao PDR is mainly channeled through mass organizations like the Women Union, the Youth Union and the Trade Union, which have not been involved in the Biosafety agenda, so far. Institutional Sustainability has been rated Moderately Likely (ML).

#### *4.4.4 Environmental sustainability*

66. National stakeholders are well aware of environmental concerns and they do believe that the implementation of the Biosafety Framework will be a valuable support to preserve the genetic resources of the country, particularly through enhancing the national capacities in Risk Assessment and Risk Monitoring. Environmental Sustainability is rated Likely (L).

#### *4.4.5 Catalytic role and replication*

67. It is clear that the Project has played a strong catalytic role in supporting the creation of the National Biosafety Framework, which, by itself, represents a remarkable innovation for the country. Innovative policies have been championed and materialized in the National Biosafety Law and subsequent Regulations. Tremendous opportunities have been given to and profitably taken by the NCA (the Biotechnology and Ecology Institute) through the Project, also in terms of sub-regional and regional networking and cooperation. The support to the implementation of the first GMOs detection national laboratory is a paramount innovation for Lao PDR, enabling the country to approach biotechnologies with technically sound instruments. The Catalytic role of the Project is rated Highly Satisfactory (HS).

### **4.5 Efficiency**

68. Structural and political and institutional factors have jeopardised Project’s efficiency in the first period of implementation and made necessary the extension of the Project of one year, for a total of five years of duration. Due to the partial achievement of outputs and outcome (as described in Chapters 4.2 and 4.3), cost-effectiveness and timeliness have not optimal either. Nevertheless, tremendous efforts have been made in the last two years to put project activities on the right track, which is also reflected in the high rates of expenditures and in the efficient project management during 2013 and 2014. However, on the whole, Project’s Efficiency cannot be rated more than Moderately Unsatisfactory (MU).

### **4.6 Factors affecting performance**

#### *4.6.1 Preparation and readiness*

69. The quality of project design was assessed in the Inception Report and rated Moderately Satisfactory (MS). The Logical Framework of the Project (Intended Results and Causality), as well as “Risk identification and Social Safeguards” and “Governance and Supervision Arrangements” were considered Moderately Unsatisfactory (MU). As pointed out in the assessment, the high numbers of outputs foreseen looked “quite challenging” and “the high number of important assumptions is worrying and makes the whole design too ambitious”. While “Lack of understanding, lack of awareness, lack of cooperation, lack of participation” were recurrent risks mentioned in the Results Framework, the Project Document did not provide any possible element to mitigate and reduce them, resulting in an evident incapacity to overcome the problems and efficiently execute the project, once the activities were fielded.

70. The peculiar socio-political context and institutional framework of Lao PDR, too, were probably not sufficiently considered and openly discussed with the national stakeholders, something which, if appropriately done, could have led to more realistic or different objectives and a smoother, more efficient project implementation. Overall, Preparation and readiness is rated Unsatisfactory (U).

#### 4.6.2 *Project implementation and management*

71. The National Director of the BEI is currently also the National Director of the Project, as well as the National Focal Point for the CPB. He ensures the overall coordination and supervision of the Project, while the daily management and implementation are under a national team composed by officers of the BEI, namely: the Deputy Director of the Technical Services Division of BEI (NPC of the Project and BCH Focal Point), the Director of the Technical Service Division of BEI (Project Coordinator for the aspects of Regulations), the Deputy Director of Administration Division of BEI (National Project Finance Assistant). The decision of the country not to recruit external staff responds to the national policy regarding projects implemented by governmental institutions.
72. The administrative management of the national staff of the project has followed two different procedures in the first phase of the Project (before the interruption) and in the current one (from 2013 on). In both cases, the project staff has been selected among the national officers of the NEA. The current staff does not receive any extra-money from the Project, since the Government does not permit that procedure any more, whereas in the first phase the project staff did receive an extra-payment by the Project. While the governmental rule cannot be disregarded, there is a certain concern about the staff's future motivation, if some corrective measures are not taken (e.g. in kind allocations, consultancies, etc.). Though Project implementation and management in the last few years has been very satisfactory, when considering the whole of the Project the overall rate is Moderately Satisfactory (MS).

#### 4.6.3 *Stakeholder participation and public awareness*

73. Stakeholders mapping was not adequately done and the issue of national ownership quite overlooked in the project design. The NCA (MOST / BEI) is trying to create effective partnerships, particularly with the University and the Ministry of Education, which seem to be leading to interesting and relevant results in terms of Education Curricula now contemplating Biosafety. A very strong partnership has been strategically built with the Ministry of Justice for the drafting of the Biosafety Law and for the Regulations.
74. The two National Committees foreseen by the Law (see Chapter 4.4.3) look as the principal forms of stakeholder's participation in the Biosafety Framework. While that is absolutely necessary, it may not be sufficient, if other forms of factual, real collaboration among the institutions involved are not implemented, which, hopefully, will occur once the Biosafety Framework is made operational. Furthermore, the National Committee for Biotechnology Safety is formed only by Governmental Institutions (see 4.4.3) and that can be a limiting factor for a larger participation of other national stakeholders.
75. Public awareness has been one of the main activities of the Project and has achieved considerable results in terms of public information. In this area, too, a larger involvement of Public Organizations like Youth and Women Organisations could bring new opportunities for awareness raising and stakeholders participation. Overall, stakeholder participation and awareness is considered Moderately Satisfactory (S).

#### 4.6.4 *Country ownership and driven-ness*

76. The National Competent Authority (BEI) is totally assuming responsibility for the Project and for its follow up, by championing Biosafety in the Governmental and National agenda, the main result of which has been the approval of the National Law on Biosafety. While that represents a tangible prove of country ownership, other elements still have to materialise or consolidate, such as the two National Committees and the inclusion of Biosafety in some programs and plans financed though the Public Budget. Overall, Country ownership is rated Moderately Satisfactory (MS).

#### 4.6.5 *Financial planning and management*

77. The appropriate use of the ANUBIS platform has allowed the updated control of disbursements from UNEP to the Project, the quarterly financial reporting from the Project to UNEP and subsequent replenishment by UNEP, as well as the aggregate financial statement at any point in time (updated to the end of the previous trimester). The disbursement from UNEP after the Project request (nine instalments in total) has been regular and fast, though there has been a case of a late approval of a financial report, presented in June and approved in October (2014), due to a need for clarifications.

78. Annual audits have been carried out in 2010 and 2011. The report of the Audit planned for August 2014 is not yet uploaded to the ANUBIS system because this will be the final audit to be undertaken on disbursement of all cash commitments. The procurement of goods, mainly office and laboratory equipment, started in 2011 and has been completed in 2014, following the established procedures (tendering, etc.).

79. By comparing financial planning with actual project costs, the rate of expenditures was 95% as of the 30/09/2014, according to project staff information. Seven budget revisions have been approved; the fifth of them, approved in May 2014, brought about some consistent shifting between budget lines, without, however, substantive changes in activities and results. The main change consisted in:

- shifting 23.000 USD from the line “International Consultants” to the budget line “Sub-contracts to Governmental Agencies”, due to the fact that the training activities carried out from two international consultants (from Austria) were paid by the Project through the Lao’s Government (under bi-lateral agreement);
- shifting 20.000 USD from “Sub-contracts to Private firms” to activities of training, meetings and dissemination of the new Biosafety Law.

80. Co-financing from the Government has materialised, according to information received by the Project staff, at 100% and the final audit should confirm that information. Co-financing has been 100% in kind and the major co-financed costs have regarded costs for national personnel, training and laboratory and office premises. Table in Annex 5 summarizes co-finance information and a statement of project expenditures. Based on the same considerations of chapter 4.6.2, overall Financial planning and Management is rated Moderately Satisfactory (MS).

#### 4.6.6 *UNEP supervision and backstopping*

81. National stakeholders consider UNEP supervision and backstopping of high quality, for four main reasons:

- The technical and administrative backstopping of the Biosafety Unit has been constant and effective, through prompt replies (through skype and email) to any doubt or question on financial issues, on the use of the platform ANUBIS, as well as by providing technical advice on substantive issues related to project execution;

- The support received through the field missions of UNEP Task and Financial Managers, during the first supervisory mission, Mid Term Review (09/2012) and the yearly, regional meetings of the National Project Coordinators;
- The organization of the yearly meetings of the National Project Coordinators, which are considered a valuable moment of exchange and horizontal learning, technical and administrative updating, and of general “empowerment” of the project coordinators.
- The quality and timeliness of the technical assistance received by UNEP international consultants and/or the possibility to upgrade national capacities through the participation to regional or international meetings, workshops, trainings. The support of the international consultant for the preparation of the Biosafety Law and Regulations has been very instrumental to the achievement of the main results of the Projects. Overall, UNEP supervision and backstopping is rated Highly Satisfactory (HS).

#### 4.6.7 *Monitoring and evaluation*

82. The quality of the logical framework of the Project was considered Moderately Unsatisfactory (MU) in the assessment of the Project Design presented in the Inception Report. That was due to some inconsistencies in the definition of Outputs and Outcomes, the excessively ambitious number of Outputs and, most of all, the high number of “killing assumption”, as discussed in sub-chapter 4.6.1, which, in fact, have contributed to limit the attainment of project’s Outcomes.
83. The M&E plan (App. 7 of the ProDoc) was very detailed and the organisational arrangements were clearly specified. As for the Evaluation, the two planned evaluations have taken place (the Mid-Term Review and the current Terminal one) and the budget of 20.000 USD can be considered adequate.
84. The Evaluation has observed (and not only in the case of the Lao PDR project) that the information acquired through the UNEP/GEF Monitoring system in place (progress reports, PIR rating, etc.), though timely flowing from the project to UNEP, is not very helpful to really understand (at least, by an outsider view) the progress and problems of project implementation. The formats are not helpful for channeling synthetic data and meaningful information<sup>14</sup>. As a result, the reports are often repetitive, poor and boring; the scoring exercise looks somewhat “standardised” and is rarely supported by any evidence or value judgment. In sum, the effectiveness of the whole system, in terms of result-based management, is highly questionable. Overall, Monitoring and Evaluation is rated Moderately Unsatisfactory (MU).

### 4.7 **Complementarity with UNEP strategies and programmes**

85. As mentioned in chapter 4.1.2, the Project relates to two of the cross-cutting areas of UNEP’s intervention: Ecosystem Management (EM) and Environmental Governance (EG). Regarding the Sub-programme Ecosystem Management, the Evaluation considers that the Project has been instrumental to the achievement of Expected Accomplishment (EA) 3 in PoW 2014-15, as showed in the comparative table here below:

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<sup>14</sup> Reporting format is UNEP’s template for reporting

EM Expected Accomplishment (EA) 3	Project contribution (how)
“Outputs will focus on the collaborative efforts aimed at strengthening the science-policy interface at global, regional and national levels ...	Setting of the National Biosafety Framework (in progress) and approval of the National Biosafety Law, which foresees two main institutional instrument, the Nat. Biosafety Committee, political body, and the Technical Coordination Committee, technical body, that should interface.
... and assisting countries to create the necessary institutional, legal and policy conditions to integrate goods and services into their development planning, decision making and poverty reduction measures.	Supporting the preparation of the National Law and Regulations.

86. Regarding Sub-programme Environmental Governance, the Project has been instrumental to the achievement of Expected Accomplishment (EA) b in PoW 2014-15, as showed in the comparative table here below:

EG Expected Accomplishment (EA) b	Project contribution (how)
“The capacity of countries to develop and enforce laws and strengthen institutions to achieve internationally agreed environmental objectives and goals and comply with related obligations is enhanced....	Supporting NBF setting which includes developing and implementing institutional, policy, legal and regulatory measures to comply with CPB (e.g. Law and Regulations, National Committees)

87. Given its strong focus on Capacity Building and, to some extent, on Technology Support (for instance training in Risk Assessment, Risk Monitoring, Laboratory upgrading) the Project is surely aligned with Bali Strategic Plan (BSP). Actually, the project has been active in addressing many of the cross-cutting issues listed in Section D of the Plan, such as the Strengthening of national institutions, the Development of national law and regulations, the Compliance with obligations under multilateral environmental agreements, the Development of national research, monitoring and assessment capacity, including training. The Project did not have a particular focus on Gender. As far as South-South cooperation is concerned, Lao PDR has hosted in 2014 an ASEAN meeting on “GMO Food testing network”. Technical assistance is foreseen from Malaysia for training in Risk Assessment and Monitoring. The need for a stronger regional cooperation is, nevertheless, largely recognized by the NCA and will be reflected in the Recommendations of this report (Rec. 4).

## 5 Conclusions and Recommendations

### 5.1 Conclusions

88. The Project “Support the implementation of National Biosafety for Lao PDR” has been instrumental in promoting Biosafety in the country and in the initial implementation of the National Biosafety Framework in Lao PDR. These achievements occurred during a prolonged governmental reshuffling that brought about three new Ministries, among which the Ministry of Science and Technology (MOST), which includes the current National Competent Authority (NCA) and project National Executing Agency (NEA), i.e. the Biotechnology and Ecology Institute (BEI) of the Ministry of Science and Technology (MOST).



89. In that particular socio-political and institutional environment, the Project has suffered from the protracted lack of a stable institutional anchorage and, when restarting its activities, had to create a new work environment through reviewed implementation arrangements and partnerships and a reshaped new team. It is not exaggerated to say that the Project, originally foreseen with a duration of four years, then extended by one year for evident reasons, has been completely functional and effective just for the last two years.
90. This particular conjuncture has accrued to the complex institutional framework of the country, with a weighty bureaucracy and convoluted decision-making processes, as discussed in chapter 4.4.1 (Socio-political sustainability). The process of elaboration of the Biosafety Law, started in 2004, went through various and recurrent stages of discussion, revision and decision, eventually receiving a strong impulse from the Project and culminating with the promulgation of the Law, early in 2014.
91. Thanks to a tight partnership with the Ministry of Justice and the technical support of a legal adviser from UNEP, the Biosafety regulatory framework has been completed with the preparation of three draft Regulations (Secondary Law) on a) LMOs Contained use, b) Environment release of LMOs and c) Food-feed biosafety. In addition, a draft National Biotechnology Strategy and Action Plan (NBSAP) has been prepared and discussed with a large participation of national stakeholders, which will permit to insert Biosafety into national plans and policies. In addition, biosafety guidelines, manuals and technical procedures are in preparation and will be substantive tools to support decision making. Their achievement will represent one of the key and final technical tasks under the project.
92. Capacity and Institution building have also remarkably improved: a laboratory for LMOs’ detection has been equipped and the national staff trained; national officers, particularly those related to the Inspection and Customs Agencies have been trained on inspection, risk assessment and risk monitoring, and a very high number of public officers have been exposed to activity of information, awareness raising and training on Biosafety and decision-making processes on LMOs. Information material has been produced for awareness raising purposes and used in wide communication campaigns for the general public and for the schools, as well as for more targeted audiences (University, stakeholders, and decision-makers). Biosafety Curriculum has been developed by the University of Lao PDR with financial support from the project and technical support from UNEP as one of the last tasks of the project. The draft document (already in Anubis) is undergoing final review among stakeholders.
93. Overall, and despite the problems mentioned above, it can be concluded that the Project has undoubtedly contributed to the setting and implementation of the Biosafety agenda in the country. Nonetheless, as discussed under Effectiveness (Chapter 4.3), direct Outcomes have been too recently and often partially achieved, so that the country is still far from having functional administrative systems able to manage applications, to assess and monitor risks, to enforce the new law and the regulations.
94. The current situation, at the end of the Project, seems promising due to the momentum that the activities have gained in the last part of project life-time. This is mainly due to the strong driving force, motivation and “championing” role of the NCA (BEI) directorate and of BEI’s project team (main drivers in Diagram 1 of the TOC), that have to be maintained and reinforced, if continuity and sustainability are to be achieved. Under that assumption, the National Biosafety Framework can move forward, provided that continuity is also given to external assistance, so that capacity and institution building can be enhanced and consolidated.

95. As requested by the TOR of the Evaluation, the overall ratings table for the different evaluation criteria is presented hereafter<sup>15</sup>. As a whole, the Project can be rated as Moderately Satisfactory (MS).

Criterion	Summary Assessment	Rating
<b>A. Strategic relevance</b>	The Project confirms all its relevance in addressing challenging and crucial issues and needs in the area of biodiversity's sustainable use, in achieving internationally agreed environmental objectives and goals and in contributing to fulfil UNEP's mandate and policy, as well as GEF priorities and strategies.(see 4.1)	<b>S</b>
<b>B. Achievement of outputs</b>	The Project has partially delivered the expected outputs.(see 4.2 and Table 1)	<b>MS</b>
<b>C. Effectiveness: Attainment of project objectives and results</b>	Main Project Outcome (A workable and transparent National Biosafety Framework) is in its way to be achieved, yet relevant components are still at an initial stage, despite the undeniable efforts of the national team in the last two years. (see 4.3)	<b>MS</b>
1. Achievement of direct outcomes	Partially and tardily achieved (see 4.3.1, Table 2)	<b>MS</b>
2. Likelihood of impact	The pathway from Outcomes to Impact is still to be approached and the likelihood of progressing upward, will depend on relevant factors that still have to materialize or consolidate.	<b>U</b>
<b>D. Sustainability and replication</b>	Sustainability can be achieved, but Financial Sustainability raises some concerns	<b>ML</b>
1. Financial	The approval of the Law is a necessary condition, now fulfilled, for financial sustainability, yet not a sufficient one. In the short term, external support is indispensable to put forward the Biosafety agenda in the country. (see 4.4.2)	<b>ML</b>
2. Socio-political	In the political context of Lao PDR, the existence of the Law can dramatically improve socio-political sustainability of the Biosafety agenda. National ownership is high, due to the strong commitment of the NCA which is currently the main driving force to socio-political sustainability. (see 4.4.1)	<b>ML</b>
3. Institutional framework	Institutional sustainability depends on the effective functioning of the two main coordinating bodies created by the Law: The National Committee for Biotechnology Safety and the Technical Coordination Committee, which are at an early stage (see 4.4.3)	<b>ML</b>
4. Environmental	The Precautionary Principle is well reflected in the National Biosafety Law and in the National Biosafety Programme (NBP). (see 4.4.4)	<b>L</b>
5. Catalytic role and replication	The Project has catalysed outstanding behavioural and institutional changes in the country, and given opportunities to national “champions” (see 4.4.5)	<b>HS</b>
<b>E. Efficiency</b>	Reform organisation and stakeholders participation are usually time consuming processes. That also occurred in Lao PDR case, hampering project efficiency and timeliness of results. Tremendous efforts have been done in the last two years to put project activities on the right track (see 4.5).	<b>MU</b>
<b>F. Factors affecting project performance</b>		
1. Preparation and readiness	Log frame with high and challenging numbers of outputs, high and worrying number of “killing” assumptions not addressed and discussed. Socio-political context and institutional framework not sufficiently considered and discussed with the national stakeholders (see 4.6.1)	<b>U</b>
2. Project implementation and	Central and effective role of the NEA / NCA. Concerns about	<b>MS</b>

<sup>15</sup> Ratings are explained in Chapter 2

management	staff's future motivation, if some corrective measures are not taken (see 4.6.2)	
3. Stakeholders participation and public awareness	National Committees foreseen by the Law are main forms of stakeholders' participation. While that is absolutely necessary, it may not be sufficient. Many activities of public awareness (see 4.6.3)	<b>MS</b>
4. Country ownership and driven-ness	BEI totally assuming responsibility for the Project and for its follow up represents a tangible prove of country ownership. Other elements still have to materialise or consolidate. (see 4.6.4)	<b>MS</b>
5. Financial planning and management	Good use of financial monitoring tools (Anubis, etc.). Audits not regularly carried out. Rate of expenditure 95%, Co-financing to be checked. (see 4.6.5)	<b>MS</b>
6. UNEP supervision and backstopping	High quality, through constant coaching, in-country mission, mid-term review, NPC meetings, quality of consultants (see 4.6.6)	<b>HS</b>
7. Monitoring and evaluation	Monitoring tools not very helpful to really monitor progress and problems, formats not helpful for channelling synthetic data and meaningful information, repetitive and poor, scoring not explained or justified. (see 4.6.7)	<b>MU</b>
a. M&E Design	Weak Log frame, inconsistencies in the definition of Outputs and Outcomes, excessively ambitious number of Outputs and high number of “killing assumption”	<b>U</b>
b. Budgeting and funding for M&E activities	Appropriate	<b>S</b>
c. M&E Plan Implementation	See above	<b>MU</b>
<b>Overall project rating</b>		<b>MS</b>

## 5.2 Lessons Learned

96. The Project shows how decisive the socio-political environment and the NCA institutional up-taking can be for implementing Biosafety Framework. In a new socio-political and institutional context, the Project has dramatically improved its performance.

## 5.3 Recommendations

97. Based on the Conclusions and Lessons Learned here above, the Evaluation mission makes the following Recommendations:
98. Recommendation 1: to MOST / BEI and MOST / BEI Biosafety Team

### Findings / Conclusions (§ 89)

Thanks to a tight partnership with the Ministry of Justice and the technical support of a legal adviser from UNEP, the Biosafety regulatory framework has been completed with the preparation of three draft Regulations (Secondary Law) on a) LMOs Contained use, b) Environment release of LMOs and c) Food-feed biosafety. In addition, a draft National Biotechnology Strategy and Action Plan (NBSAP) has been prepared and discussed with a large participation of national stakeholders, which will permit to insert Biosafety into national plans and policies.

### Recommendation 1:

In order to consolidate the positive achievements so far and to enable the achievement of the Outcomes not yet fully attained, it is strongly recommended:

- a) to follow up and support the swift completion of the approval process of the three draft Regulations and of the NBSAP.

99. Recommendation 2: to UNEP, NCA (MOST / BEI), NBC

**Findings / Conclusions (§ 91)**

Overall, and despite the problems mentioned above, it can be concluded that the Project has undoubtedly contributed to the setting and implementation of the Biosafety agenda in the country. Nonetheless, as discussed under Effectiveness (Chapter 4.3), direct Outcomes have been too recently and often partially achieved, so that the country is still far from having functional administrative systems able to manage applications, to assess and monitor risks, to enforce the new law and the regulations.

**Recommendation 2:**

In order to consolidate the positive achievements so far and to enable the further achievement of the Outcomes not yet fully attained, it is recommended to give continuity to GEF/UNEP assistance in the framework of the new round of GEF funding for Lao PDR, namely through:

- a) Technical and methodological support of UNEP to the NCA (MOST / BEI), particularly through coaching and targeted trainings of the Biosafety Team in place;
- b) Training needs assessment and targeted, intensive training to key human resources responsible for and/or directly involved in Risk Assessment and Monitoring, with particular reference to the members of the Technical Coordinating Committee;
- c) Finalisation, in collaboration with the National University, Faculty of Science, of the Biosafety Curriculum and its implementation in the Education programme

100. Recommendation 3: to MOST / BEI and NBC

**Findings / Conclusions (§ 92):**

The current situation, at the end of the Project, seems promising due to the momentum that the activities have gained in the last part of project life-time. This is mainly due to the strong driving force, motivation and “championing” role of the NCA (MOST / BEI) directorate and of MOST / BEI’s project team (main drivers in Diagram 1 of the TOC), that have to be maintained and reinforced, if continuity and sustainability are to be achieved.

**Recommendation 3:**

In order to put in value the national human resources involved so far and to foster continuity and sustainability of activities and results, it is strongly recommended:

- a) to maintain and consolidate the current MOST / BEI Biosafety national team, to match them with a targeted training and coaching (see Rec.1) and to explore forms of staff’s motivation according to national policies on Human Resources management.

101. Recommendation 4: to MOST / BEI, NBC and UNEP

**Findings / Conclusions**

(§ 61): Sub-regional Cooperation is regarded as an outstanding element of cost-effectiveness, hence of financial sustainability.

(§ 85): As far as South-South cooperation is concerned, Lao PDR has hosted in 2014 an ASEAN meeting on “GMO Food testing network”. Technical assistance is foreseen from Malaysia for training in Risk Assessment and Monitoring.,

**Recommendation 4:**

In order to consolidate networking allowing cost-sharing and service-sharing among countries of the Region, it is recommended:

a) to prepare and implement, with the support of UNEP and ASEAN, a joint programme of human resources upgrading and of mutual technical assistance in specific areas, by building on the comparative advantage of each country of the region.

## **Annexes**

1. Response to stakeholder comments received but not (fully) accepted by the evaluators
2. Evaluation TORs (without annexes)
3. List of people met
4. Bibliography
5. Summary co-finance information and a statement of project expenditure by activity
6. Brief CV of the consultant
7. Notes of the Consultant: “The UNEP/GEF projects of NBF implementation in Mongolia, Bhutan, Lao PDR : elements for a comparative analysis”

## Annex 1

### Comments to the first draft of the evaluation report of the project “Support the implementation of National Biosafety for Lao PDR” and responses from UNEP EOU and independent evaluator

16 February 2015

Reference	Comment	EOU comment	Evaluator response
Executive Summary  § 9 – rating table - efficiency	<p>We think it is unfair to jump into a conclusion that political and institutional factors have jeopardised cost-effectiveness and timeliness. It might correct to some extent, this is because reform organisations is common in many developing countries in order to suit a development situation. Another reason is that the chair of project steering committee is the MOST minister who waited for an agreement among the project stakeholders before starting the duties. More explanation can be further discussed if there is still unclear points.</p> <p>We propose MS instead of MU because the last two year activities continued based on the ground of previous works. Another reason is that earlier stages were basically on survey, study and consultations, so didn't have many concrete activities. You can please consider on our proposal in rating.</p>	<p>The report does acknowledge the improved situation of the last two years. This does not mean that the previous period should be disregarded. Evaluator to please comment and, if considered necessary, re-discuss with stakeholders</p>	<p>The Consultant agrees with EOU comments.</p> <p>However, considering that, to some extent, the conclusion can be regarded as too sharp edged, the Consultant would reformulate the paragraph as follows: .</p> <p><i>“Reform organisation and stakeholders participation are usually time consuming processes. That also occurred in Lao PDR case, hampering project efficiency and timeliness of results. Tremendous efforts have been done in the last two years to put project activities on the right track (see 4.5)”</i></p> <p>As stressed by EOU, Project efficiency has to be assessed and rated in its globality. Though Project Efficiency has been high in the last two years, we cannot ignore that Project implementation suffered notable delays, as clearly expressed in the Progress Reports of the Project Team and in the Mid Term Review. Therefore, the Consultant would not agree to upgrade Project</p>

			Efficiency: as a whole, the Project was not satisfactorily time-efficient.
57	Please clarify on this by showing direct outcomes 3 and outcome 4, we are not sure what standard did you use to make decision that they have not been achieved at all. Then we should be able to comment on this highlights.	EOU considers that sufficient explanation is provided in page 20 and other sections (e.g. Table 2). We may want to discuss this point over a skype call.	The Consultant agrees with EOU  When carefully considering the formulation of Direct Outcomes 3 (An efficient administrative system established and enhanced to handle requests for authorisations), and Outcome 4 (A monitoring, inspection and enforcement system established), the Project cannot claim having achieved them.
69	Just would like you to make clarification on this seem this report is the whole project or just the preparation stage????	This section of the report refers to the design phase only.	See EOU comments
70	Would you like to make clarification on this before concluding U on this, this is because stakeholder participation is a basic process in our project. If video interview or skype us to clarify on this will be more appreciated. We will be ok if this is not overall project, but some part or activities instead.	This refers to consultations with stakeholders during the design. It does not refer to the overall project.	See EOU comments



## Annex 2

### Evaluation TORs (without annexes)

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

- “Implementation of Bhutan National Biosafety Framework”
- “Support the implementation of National Biosafety for Lao PDR”
- “Capacity Building for Biosafety Implementation for Mongolia”

#### 1. PROJECT BACKGROUND AND OVERVIEW

#### 2. Project General Information

**Table 1. Project summary**

GEF project ID:	3850 3642 4010	IMIS number:	GFL/2328-2716-4B22 GFL/2328-2716-4A85 GFL/2328-2716-4B95
Focal Area(s):	BD3 –SP6 (Biosafety)	GEF OP #:	
GEF Strategic Priority/Objective:	Environmental governance	GEF approval date:	08/01/2010 22/06/2009 06/04/2011
UNEP approval date:	19/03/2010 08/09/2009 27/04/2011	First Disbursement:	22/03/2010 17/09/2009 15/05/2011
Actual start date:	01/07/2010 01/10/2009 01/05/2011	Planned duration:	48 months 48 months 36 months
Intended completion date:	06/30/2014 07/09/2014 26/04/2014	Actual or Expected completion date:	06/30/2014 07/09/2014 26/04/2014
Project Type:	MSP	GEF Allocation:	\$869,000 \$995,000 \$379,300
PDF GEF cost:		PDF co-financing*:	
Expected MSP/FSP Co-financing:	\$854,000 \$505,000 \$335,000	Total Cost:	\$1,723,000 \$1,500,000 \$753,300
Mid-term review/eval. (planned date):	30/06/2012 30/09/2011 30/01/2013	Terminal Evaluation (actual date):	August 2014
Mid-term review/eval. (actual date):	23/08/2012 30/09/2012	No. of revisions:	5 6

	30/01/2013		3
Date of last Steering Committee meeting:	17/04/2013 02/04/2013	Date of last Revision:	01/01/2014 01/04/2014 01/01/2014
Disbursement as:	\$731,610.00 (Bhutan, 27/01/2014) \$944,265.00 (Laos PDR, 25/02/2014) \$379,300.00 Mongolia, 30/03/2014)	Date of financial closure:	Financial closure will be done in IMIS when the Terminal Evaluation is done.
Date of Completion:	N/A	Actual expenditures reported as of:	
Total co-financing realized	\$492,150.83 (Bhutan, 31/03/2014) \$444,658.41 (Laos PDR, 31/03/2014) \$336,670 (Mongolia, 26/04/2014)	Actual expenditures entered in IMIS as 30 June 2013:	
Leveraged financing:			

### 3. Project rationale

**Bhutan:** Bhutan ratified the Convention on Biological Diversity on August 25, 1995, the Cartagena Protocol on August 26, 2002 and completed its National Biodiversity Strategy and Action Plan in 2002; the NBSAP recognized the potential contribution of modern biotechnology to development and conservation of biodiversity. Bhutan started its project on the development of a National Biosafety Framework in April 2004. The final draft of the NBF project was completed in June 2006; this draft included a draft biosafety policy, a draft regulatory framework, a system for handling request to be in conformity with the provisions of the Cartagena Protocol, a system for monitoring and enforcement, and a system for public awareness, education and participation in decision-making on LMOs. This project intended to contribute to:

- The implementation of the Bhutan’s legislative framework on the safe use of biotechnology through regulations, orders, guidelines and procedures;
- The preparation of specific technical guidelines, forms and manuals;
- The strengthening of appropriate institutional structures for risk assessment and decision making;
- The development and implementation of policies for biotechnology and biosafety;
- The training of decision makers, scientists, and administrative and technical staff on legal and technical matters;
- The reinforcement of the existing infrastructures (laboratories) to strengthen monitoring;
- The setting up of a mechanism for monitoring and enforcement;

- The strengthening of communication and information exchanges relating to biosafety both at the national and BCH level;
- The development of systems for strengthening public awareness, education and participation in decision making on LMOs.
- Enhancing regional cooperation on biosafety and biotechnology in the SAARC subregion that would promote: sharing of technical resources and expertise; networking and sharing of information as well lessons and best practices; and alignment of biosafety policies amongst member countries.

Bhutan’s major concern at the time of project development was the safety of its citizens and its almost pristine environment. At the same time, increasing food security and food self-sufficiency were critical objectives. The use of biotechnology to achieve these objectives seemed a likely course of action for the country.

**Lao PDR:** The government of Lao PDR acceded to the Convention on Biological Diversity (CBD) on September 20, 1996 and completed its National Strategy on Environment to the year 2020 and Action Plan (2006 – 2014) by Prime Minister’s Decree No. 120 / PM on August 27, 2004. This was followed by accession to the Cartagena Protocol on Biosafety (CPB) on November 1, 2004. Lao PDR participated in the UNEP/GEF National Biosafety Framework Development (NBF) project and completed it successfully in December 2004. This project aimed to assist Lao PDR to implement the draft Biosafety Law, which was based on the draft NBF, into a workable and transparent NBF by 2014, to fulfill its National Socio-economic Development Plan and implement its obligations as a Party to the Cartagena Protocol on Biosafety. Expected Project Outcomes included:

- Updated needs analysis of the country;
- The integration of Biosafety into National development plans;
- A workable regulatory regime for biosafety supported by regulations;
- An efficient administrative system for handling requests;
- Increased public awareness and education in biotechnology and biosafety and participation in decision making.

Lao PDR is a landlocked country where modern biotechnology R&D activities were still nascent in its national R&D institutions at the time of the project development. No biotechnology products from its national research laboratories were expected to be released in the immediate future. However, since Lao PDR was considered a potential net importer of biotechnology products, it appeared imperative that the country be prepared to handle import of LMOs. Additionally, with its porous borders, farmers may have unknowingly planted GM-crops like rice, without due risk management in place to reduce the potential negative impact of gene flow from the transgenics to the thousands of wild and other cultivated varieties. Additionally, information received at the time of the project development suggested that farmers, financed by foreign companies, were already cultivating GM-crops (soybean, cotton, papaya). Without the setting up of proper risk management procedures, the potential for dispersal of pollen from these transgenic crops to wild and cultivated conventional crops was deemed high.

**Mongolia:** Mongolia is a Party to the Convention on Biological Diversity since September 30, 1993 and Party to the Cartagena Protocol on Biosafety since October 20, 2003. The Ministry of Nature, Environment and Tourism (MNET) is the appointed National Focal Point for the Protocol. From 2002 to 2005, Mongolia successfully completed a draft NBF

under the UNEP/GEF funded global project on “Development of National Biosafety Frameworks”. The project aimed to develop the National Biosafety Framework in agreement with the provisions of the CPB. The draft NBF formed the basis of a new law, which was enacted in November 2007.

However, Mongolia had very limited capacity to implement this new law. In order to operationalize it, supporting implementing activities were deemed necessary. This project intended to enable Mongolia to adopt essential regulations to help make the Law on LMOs workable and consistent with its international obligations. In addition, Mongolia did not have the technical capacity to detect LMOs, and LMOs could therefore enter the country without detection and prior risk assessment. Mongolia also lacked the capacity to perform any safety assessment of modern biotechnology applications, which might benefit the country’s food security through maintaining yields in the face of pest pressure (insects and weeds) and abiotic stress (temperature, drought and salt tolerance).

The project aimed to establish and operationalise Mongolia’s National Biosafety Framework and to assist Mongolia to comply with its obligations as a Party to the Cartagena Protocol on Biosafety so that Mongolia may make a safe use of modern biotechnology for sustainable development.

#### 4. Project objectives and components

The overall goal of the projects was to put in place a workable and transparent national biosafety framework, in line with respective national development priorities and international obligations.

The projects’ 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.

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

The structure of these projects comprised seven components in Bhutan, eight in Lao PDR and six in Mongolia. Table 2, 3 and 4 summarize the components per country and list the outcome and/or outputs the projects intended to achieve.

**Table 2 – Projects components/outcomes and outputs – Bhutan**

Project Component	Outputs
Baseline established for information on the safe use of biotechnology in Bhutan through a stocktaking analysis.	Inventory of current national human, technical and institutional capacities to implement a comprehensive biosafety management system. Accurate information on how Biosafety can be harmonized with National Laws, policies and plans, and built into existing Monitoring and Enforcement systems. Biosafety systems are consistent with national priorities on gender mainstreaming, and human rights, including participation by all sectors in decision-making.
Biosafety integrated and incorporated into National Priorities on poverty reduction and environment, as well as sectoral action plans and strategies, in conformity with Bhutan’s Tenth Plan.	Biosafety policy approved & implemented by Government by end of 2010. Biosafety policy integrated into the Tenth Plan and reflected in the National Priorities, and sectoral action plans by end-2011.
A legal and regulatory framework on biosafety in place that is consistent with the CPB, and is workable and responsive to national needs and the National Priorities of the Tenth Plan.	Biosafety Rules and Regulation promulgated by the Minister of Agriculture under the Food Act of Bhutan, 2005 to replace the existing Moratorium on import of LMOs. Relevant biosafety procedures, protocols and guidelines prepared and promulgated by relevant Government agencies. Existing laws and legislations revised to ensure consistency with biosafety regulation and CBP by end of 2012.
A workable system for handling requests, carrying out risk assessment, and decision making for LMOs in place that reflects the	A fully functional administrative system for handling requests for LMOs. A fully functional system for risk assessment and decision-making. An efficient system for handling, storing and exchanging information on biosafety in place

priorities of the Tenth National Plan.	under the nBCH.
A workable and effective national system for monitoring, inspections & enforcement in place, including monitoring of socio-economic impacts, that is consistent with National Priority on environment and disaster management.	Fully functional and effective inspection, monitoring and enforcement system in place in BAFRA. Strengthened BAFRA laboratories able to detect LMOs. Emergency response procedures (ERP) established & made operational by BAFRA, the NEC and relevant Govt agencies.
A workable and effective national system for public awareness, education and participation in decision making for LMOs in place, in support of the National Priority on good governance:	Fully functional system for access to, and sharing of information in place in Bhutan by end of 2011, inter alia through the establishment of a national BCH under the BCH project. Strengthened system for public awareness on the safe use of LMOs in place. Strengthened system for public participation in decision-making on LMOs in place.
Enhanced regional cooperation on biosafety in SAARC, as well as sharing of experiences with other NBF Implementation projects globally:	Technical expertise, decision-making tools, training activities and materials for training and outreach with other countries in SAARC. Alignment of biosafety policies, regional mechanisms and common formats for sharing of information amongst SAARC countries on biosafety. Establish networks established with other Implementation project teams for sharing experiences, lessons & best practices.

**Table 3 – Projects components and expected outcomes and outputs – Lao PDR**

Project Component	Expected Outcomes	Outputs
1. Stocktaking analysis	Updated information on status and capacity for biotechnology & biosafety management in the country	A clear national policy encompassing biotechnology, biosafety and national development is developed within the first year of project initiation by the NEA and line agencies. A status and strategy paper on biosafety cum biotech. R&D in Lao PDR prepared by the National Coordination Committee (NCC) and NEA, within 6 months after completion of stocktaking exercise.
2. National plan (policy) implementation	Biosafety intergrated into national development policy and plans	A National Biotechnology Strategy and Action Plan (NBSAP) for 2011-2015 is jointly developed by NEA and partners to implement the Biotech. & Biosafety policy by 2010. Biosafety & biotech. are executed in national and sectoral plans and strategies by line agencies by 2011. Biosafety Law which is supported by other national Laws and is compliant with CPB is adopted by 2012. Legal personnel are trained in the operation of the Biosafety regulatory regime by 2010.
3. Regulatory regime	Regulatory regime to complement other national laws and compliant with CPB Regulatory regime strengthened and consolidated	By 2012, the Prime Minister’s Decree will ensure that the legally-binding Biosafety Regulations will come into force. By 2011, voluntary instruments like guidelines and manuals are developed by NEA and relevant agencies. By 2010, legal personnel are trained in at least 2 workshops organized by the NPC and NEA on drafting secondary and tertiary legislations.
4. Handling requests	An efficient administrative structure for biosafety Enhanced institutional arrangement for handling requests.	By 2009, institutional arrangement for handling requests is made functional by NCC/NEA and relevant line agencies. By 2009, the Scientific Advisory Committee (SAC) for RA and RM is appointed with trained members by NEA. By 2009, technical tools & documents to assist decision making are developed by NCA. By 2009, responsibilities of various agencies are clearly defined by NCA and National Authorities on Biosafety. A functional and integrated administrative system at institutional level is in place for handling requests within first 12 months of project life. Members of all SACs are appointed by NCA/NEA and trained by 2009. A transparent decision making process is established within first year of project by NEA/NCA. By 2009, tools, training manual and technical documents are developed by NEA/NCA. By 2009, clear procedures are in place for dealing with confidential information. By 2009, a mechanism for public participation in decision making is established within the NEA/NCA.
5. System for	Strengthened capacity for	By 2011, human and infrastructural resources for monitoring, inspection,

‘follow-up’ activities	monitoring, enforcement and inspection Better enforcement and compliance to national regulatory regime.	enforcement and LMO detection are strengthened in Lao PDR by NCAs. By 2010, an effective monitoring strategy comprising methodology, workflow and schedule is set up by NCAs. By 2011, relevant staff are trained and equipped with appropriate tools by NCAs. Technical guidelines and checklists are developed by NEA/NCAs and distributed to relevant personnel by 2010. By 2010, information is compiled on the biology and distribution of rice and other important crops in Lao PDR by NEA/NCAs. By 2011, indicator organisms and parameters are identified for monitoring environmental impact caused by planting GM-rice by SAC. Strategy to apply GM-rice with minimal negative impact on the environment is devised by SAC by 2011. By 2010, emergency response plan (ERP) is developed by SAC/NCA for accidental or unauthorized release.
6. Public education, awareness and participation	Enhanced public awareness in biotechnology and biosafety matters Active public participation in decision making	By 2009, a public-friendly information access system is set up by NEA. By 2010, biosafety education and awareness materials are developed by NEA and partners. By 2011, secondary and tertiary educational curricula contain biosafety. By 2010, a platform for 2-way public participation is set up by NEA/NCAs. By 2010, strategy for public awareness, education and participation is developed by NEA/NCAs. By 2010, platform for public participation in decision-making is developed by NEA. By 2010, entry points are identified by NCC/NEA/SAC for feedback from the public in decision making. By 2010, decisions on LMOs are publicized and accessible to the public by NEA via the BCH.
7. Project Review & Evaluation, and Audit	Checks and balance for project implementation	
8. Regional Networking	Enhanced Regional cooperation	By 2010, formats for info exchange on RA&RM will be agreed between ASEAN countries. Lessons and best practices will be identified and shared between ASEAN countries throughout project cycle and beyond.

**Table 4 – project components, expected outcomes and outputs - Mongolia**

Project Components	Expected Outcomes	Expected Outputs
1. Policy and legal aspects for development of a National Biosafety Program	1.1 Review of Mongolian policy and legal framework with respect to implementation of the Law on LMO. 1.2 Gaps in national laws in relation to biosafety are identified and addressed	1.1.1 An analysis of what implementing regulations are needed to make the Law on LMO (2007) operational.  1.2.1 Regulations to implement the Law on LMOs are prepared and linked to environmental governance.  1.2.2 Biosafety Program is developed and integrated into the Environmental Framework Law and NBF within national strategies.
2. Capacity building in human resource for implementation of a Biosafety Program	2.1 Strengthened human resource in administration and decision making for implementation of biosafety program.  2.2 Coordinated decision making on LMOs  2.3 An effective mechanism for monitoring and inspection to ensure compliance to Law on LMOs	2.1.1 Training organized for decision makers. Staff trained in administrative aspect of Biosafety implementation, including risk assessment and risk management, decision making and risk communication.  2.2.1 Technical manuals on decision making procedure are prepared.  2.3.1 Organizing training for enforcement and monitoring officials.
3. Capacity strengthening at institutions for implementation of	3.1 Strengthened institutional arrangement for effective implementation of a	3.1.1 Key professional institutions to be strengthened are identified. 3.1.2 Strengthening the reference laboratory

a Biosafety Program	<p>Biosafety Program</p> <p>3.2 Enhanced institutional infrastructure to facilitate operation of the Biosafety Program</p> <p>3.3 Improved coordination between institutions for Biosafety implementation</p>	<p>3.2.1 Training for technicians and researchers in LMO detection and verification of LMOs for regulatory compliance.</p> <p>3.3.1 Setting clear roles and responsibilities by MOU between collaborating institutions</p>
4.Public awareness and public participation in matters related to Living Modified Organisms (LMOs)	<p>4.1 A comprehensive public awareness and participation strategy on biosafety that is linked to the national environmental policy/program and Law on LMOs.</p> <p>4.2 Publishing materials on biosafety in different media</p> <p>4.3 Trainings, lectures, info days, public debates</p>	<p>4.1.1 A strategy for public awareness and participation in decision making related to LMOs.</p> <p>4.2.1 Special educational materials for schools and colleges.</p> <p>4.2.2 Outreach materials for target groups.</p> <p>4.2.3 A regularly updated nBCH as a platform for public communication and participation.</p> <p>4.3.1 Organizing public lectures and trainings</p>
5.Establishment of a National and Regional networking system for Biosafety	<p>5.1 Cost effective pooling of regional experts and resources, cooperation between R &amp; D institutions and regulatory bodies</p>	<p>5.1.1 A database on national experts in crop science and biotechnology.</p> <p>5.1.2 A network among national and regional crop science and biosafety experts.</p>
6.Project audit, Monitoring and Evaluation cost	<p>6.1 Checks are in place to ensure that project implementation is according to workplan</p>	<p>6.1.1 Annual audit reports</p> <p>6.1.2 Mid-term review</p> <p>6.1.3 End of project evaluation</p>

Source: project documents and result framework

#### 4. Executing Arrangements

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.

In Bhutan, the Bhutan Agriculture and Food Regulation Authority (BAFRA), designated as the National Competent Authority by the Government of Bhutan under the NBF, was the National Executing Agency for this project. In implementing the project, BAFRA was supposed to work closely with the National Environment Commission (NEC), which is the focal point for Bhutan to the Cartagena protocol on Biosafety. In Lao PDR, the National Authority for Science and Technology (NAST), the focal point to the CPB, was the National Competent Authority (NCA) as well as the National Executing Agency (NEA) for this project. The Ministry of Nature, Environment and Tourism, the focal point to the CPB, was the National Competent Authority (NCA) as well as the National Executing Agency (NEA) for this project. The NEAs were responsible for working on behalf of the respective governments to manage the project, ensuring that the objectives would be met by the end of the project. The NCA were also responsible to provide the necessary scientific, technical, financial and administrative support to the project, working in close cooperation with relevant government agencies, the scientific community and the public.

The National Project Coordinator was 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. Bhutan and Mongolia also appointed a National Project Director, a government employee with the responsibility to provide policy advice and overall direction to the project, as well as coordinating project activities with relevant government agencies.

Bhutan established a Project Steering Committee, while Lao PDR and Mongolia established a National Co-ordinating Committee (NCC). These bodies were established by the National Executing Agencies (NEAs) to advise and guide the implementation of the projects. These committees 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. They were intended to be multi-disciplinary and multi-sectoral, covering all fields relevant to the Cartagena Protocol on Biosafety.

## 5. Project Cost and Financing

The three projects fall in the Middle-size Project (MSP) category. They were expected to mobilize \$854,000

(Bhutan), \$505,000 (Lao PDR) and \$335,000 (Mongolia) in co-financing, mostly from government sources. The estimated projects costs at design stage and associated funding sources are presented in Table 5, 6 and 7.

**Table 5. Estimated project cost in Bhutan (US \$)**

Component	GEF Financing	Government contribution	Total
1. Stocktaking	29,500	36,000	55,500
2. Integration into National plans	30,500	40,000	80,500
3. Regulatory regime	102,000	90,000	192,000
4. Handling requests	125,000	180,000	305,000
5. Monitoring	333,000	248,000	581,000
6. Public participation	97,000	112,000	209,000
7. Regional cooperation	62,000	38,000	100,000
8. Project monitoring & evaluation	10,000	30,000	40,000
9. Project Management	80,000	80,000	160,000
Total	869,000	854,000	1,723,000

Source: project document, agency fee of \$86,900 not included

**Table 6. Estimated project cost in Lao PDR**

Component	GEF Financing	Government contribution	Total
1. Stocktaking analysis	12,5000	3,000	15,500
2. National plan (policy) implementation	70,000	49,000	119,000
3. Regulatory regime	140,500	110,000	250,500
4. Handling requests	144,000	50,000	194,000
5. System for ‘follow-up’ activities	350,000	123,000	473,000
6. Public education, awareness and participation	106,000	56,000	162,000
7. Regional Networking and meetings	63,000	3,600	66,600
8. Project Management, Review & Evaluation, and Audit	109,000	110,400	219,400
Total	995,000	505,000	1,500,000



Source: project document (appendices 1 – 2), agency fee of \$99,500 not included

**Table 7. Estimated project cost in Mongolia**

Component	GEF Financing	Government contribution	Total
1.Policy and legal aspects for development of a National Biosafety Program	38,000	10,000	48,000
2.Capacity building in human resource for implementation of a Biosafety Program	108,000	60,000	168,000
3.Capacity strengthening at institutions for implementation of a Biosafety Program	165,000	125,000	290,000
4.Public awareness and public participation in matters related to Living Modified Organisms (LMOs)	0	100,000	100,000
5.Establishment of a National and Regional networking system for Biosafety	14,000	10,000	24,000
6.Project Management, audit, Monitoring and Evaluation cost	53,000	30,000	83,000
<b>Total</b>	<b>379,300</b>	<b>335,000</b>	<b>714,300</b>

Source: project document (appendices 1 – 2), agency fee of \$37,930 not included

## 6. Implementation Issues

The Mid Term Reviews (MTRs) were originally scheduled for September 2011 in Lao PDR, June 2012 in Bhutan and January 2013 in Mongolia. Internal reviews were carried out by the UNEP Task Manager in September 2012 in Lao PDR and August 2013 in Bhutan. No review was carried out in Mongolia as it was considered that the project was progressing well and monitoring tools like the PIRs were providing sufficient guidance. The evaluation should consider the extent to which the MTR recommendations for Bhutan and Lao PDR were taken into account and acted upon by the relevant stakeholders.

In Bhutan, the project was developed in 2006. However, it was only submitted under the GEF 4 portfolio and it started being implemented in 2010, after receiving the necessary approvals. Many changes occurred during this period. The project could therefore not follow the work plan as described in the document. The change in some development policies of the government also affected the outcome of the project. For example, the project was supposed to implement the 2006 biosafety draft, however, the changes created a need to have a biosafety act that could bring other related rules and regulations under one umbrella. The evaluation should assess the extent suitable adaptive management practices were put in place once the project implementation got underway.

In Mongolia, the implementation of the project seems to have run smoothly. However, changes in government officials posed some challenges while the fluctuation of the US dollar, which caused an increase in costs, reduced the project budget. The evaluation should assess the extent to which the project was successful in maintaining a high level of country ownership notwithstanding the changes in government officials and whether all outcomes could be delivered as required but with a reduced budget.

In Lao PDR, the project suffered a one year delay, after a satisfactory first year of execution, due to unplanned institutional changes including setting up a new Ministry with new implementing agency. The MTR highlighted a general need to fast track activities. In particular, it stressed the need to use the available draft legislation as a basis for implementation, instead of waiting for formal approval. It also highlighted the need to quickly roll out the public awareness campaign. The evaluation should assess the extent to which activities were expedited and whether suitable adaptive management measures were introduced.

## Objective and Scope of the Evaluations

In line with the UNEP Evaluation Policy<sup>16</sup>, the UNEP Evaluation Manual<sup>17</sup> and the Guidelines for GEF Agencies on Conducting Terminal Evaluations<sup>18</sup>, the Terminal Evaluations of the Projects “Implementation of Bhutan National Biosafety Framework”, “Support the implementation of National Biosafety for Lao PDR”, “Capacity Building for Biosafety Implementation for Mongolia” will be undertaken upon completion of the project (Bhutan, Mongolia) or immediately before the completion of the project (Lao PDR) 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 Bhutan, Mongolia and Lao PDR in establishing a national biosafety framework in accordance with national development priorities and international obligations?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR 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 Bhutan, Mongolia and Lao PDR to establish and consolidate a functional national system for handling requests, perform risk assessments, testing of GMOs, decision-making and performing administrative tasks?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR 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 Bhutan, Mongolia and Lao PDR 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 “Implementation of Bhutan National Biosafety Framework”, “Support the implementation of National Biosafety for Lao PDR”, “Capacity Building for Biosafety Implementation for Mongolia” 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.

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<sup>16</sup> <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

<sup>17</sup> <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

<sup>18</sup> [http://www.thegef.org/gef/sites/thegef.org/files/documents/TE\\_guidelines7-31.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf)

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-4 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 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 2, 3 and 4 above, both in quantity and quality, as well as their usefulness and timeliness. The evaluation should briefly explain the degree of success of the projects in achieving their 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 projects 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:

1. 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.
2. Assessment of the likelihood of impact using a *Review of Outcomes to Impacts* (ROtI) approach as summarized in Annex 6 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.
3. 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 evaluations 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 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<sup>19</sup>

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<sup>19</sup> Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

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 evaluations will assess the catalytic role played by these projects, namely to what extent the projects have:

- *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 projects 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.

To what extent were the projects efficiently managed and what lessons can be learnt for future projects? To what extent did any 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<sup>20</sup> 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<sup>21</sup>? 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 where 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 evaluations 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.

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<sup>20</sup> Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

<sup>21</sup> <http://www.thegef.org/gef/node/4562>

- 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 an 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 evaluations 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 evaluations 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<sup>22</sup> to meet its unique needs. Agencies are requested to fill out these forms at CEO

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<sup>22</sup> [http://www.thegef.org/gef/tracking\\_tools](http://www.thegef.org/gef/tracking_tools)

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 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)<sup>23</sup> 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)*<sup>24</sup>. 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 these evaluations, 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.

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

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<sup>23</sup> <http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf>

<sup>24</sup> <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

## 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 7 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 consultant 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 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 a 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 three 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 that could therefore not or only partially be accommodated in the final report. The consultant 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

These Terminal Evaluations 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	1 September 2014
Inception reports	30 September 2014

Comments from Evaluation Office	10 October 2014
Field visits	20 October – 31 October 2014
Zero Draft reports	21 November 2014
Comments from Evaluation Office	29 November 2014
First draft reports	12 December 2014
Comments from stakeholders	5 January 2014
Final reports	17 January 2015

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

In case the consultant is not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultant has improved the deliverables to meet UNEP’s quality standards.

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 consultant’s 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

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

Fund Management Officer

UNEP/DEPI

Email: 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.

### Annex 3

#### LAO PDR – LIST OF PEOPLE MET (24-27/10)

NAME	POSITION & INSTITUTION
Dr Sakhone Chaleanvong	Vice-Ministry of Science and Technology (MOST), also Chairman of the Project Steering Committee
Dr Souroudong Sundara <a href="mailto:souroudong@yahoo.co.uk">souroudong@yahoo.co.uk</a>	Director General of the Biotechnology and Ecology Institute (BEI) of the MOST, now also Vice-Ministry, National Focal Point for CPB, National Project Director
Mrs Viengpasith Vanisaveth <a href="mailto:viengpasith@yahoo.com">viengpasith@yahoo.com</a>	National Project Coordinator, BEI
Ms Kongchai Phimmakong <a href="mailto:kongchaybeechn@yahoo.com">kongchaybeechn@yahoo.com</a>	Director of Technical service Division for Regulations, BEI, National Project Assistant
Ms Somsamay Phengsy <a href="mailto:may_phengsy@yahoo.com">may_phengsy@yahoo.com</a>	Deputy Director of Administration Division, BEI, Project Finance Assistant
Dr Kosonh Xayphakatsa	Director of Genetic Resources Division, BEI, Head of the Laboratory
Madame Buonphone Huaungmany	General Director of the Legislation Department, Min of Justice, National Consultant of the Project
Mrs Khamphoui Louanglath	Director, Department of Agriculture BEI
Mrs Bounthieng Chanthavong	Director, General Administration, BEI
Mr Phouthanouthong Xaysombath	Director, Department of Planning and Cooperation, BEI
Prof. Manichanh Sayavong	Vice Head Biology Department, Faculty Science, UNOL
Ms Toulaphone Keokene	Director of Section, Faculty Science, UNOL
Ms Soukphathay Simeuang	Head of Biotechnology Section, Agr. Research Center
Mr. Khamsalath Soudthelath	Technical Staff, Genetic Resources Division, BEI
Mr. Panya Bouphasiri	Technical Staff, Technical Service Division
Mr. Khamkeo Senginvong	Technical Staff, MOST



## Annex 4

### BIBLIOGRAPHY

#### Documents consulted during the main evaluation phase

##### Lao PDR:

- Terms of Reference of the Terminal Evaluation
- Project Document “Support the implementation of National Biosafety for Lao PDR” (GFL/2328-2716-4A85) and 12 Appendices
- “Lao National Biosafety Frameworks”, Prime Minister’s Office - Science Technology and Environment Agency, December 2004
- From ANUBIS: Mid Term Review, PIR 2012 and 2013, Budget Revisions n.5 and n.6, Audit Report 2013, revised Work plans, PSC Minutes, Final Inventory
- “Lao PDR and the GEF” (2012, from GEF Website)
- BCH Lao PDR page (<https://bch.cbd.int/>)
- National BCH (<http://la.biosafetyclearinghouse.net/default.shtml>)
- International Rice Research Institute Portal, Lao PDR page, [www.irri.org/lao](http://www.irri.org/lao))
- Lao PDR UNDP Portal ([http://www.la.undp.org/content/lao\\_pdr/en/home.html](http://www.la.undp.org/content/lao_pdr/en/home.html))
- Common Country Assessment (CAC), Lao PDR, UNDP, 2004

##### Global:

- Cartagena Protocol on Biosafety (CPB)
- Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety
- Bali Strategic Plan for Technology Support and Capacity- building
- Status of capacity-building activities, UNEP/CBD/BS/COP-MOP/5/INF/9, September 2010
- Medium term strategy of UNEP 2010-13 “Environment for Development”
- Strategic plan of CPB 2011-20
- A Comparative Analysis of Experiences and Lessons from the UNEP-GEF Biosafety Projects, 2006, UNEP-GEF Biosafety Unit
- Guidance towards Implementation of National Biosafety Frameworks: Lessons Learned from the UNEP Demonstration Projects, 2008, UNEP-GEF Biosafety Unit
- Learning from experience, the global UNEP-GEF BCH Capacity building project, 2008, UNEP-GEF
- Public Participation and the Cartagena Protocol on Biosafety, A review for DfID and UNEP-GEF (IDS)
- An Explanatory Guide to the Cartagena Protocol on Biosafety, IUCN, 2003
- Genetically Modified Organisms and Biosafety: A background paper for decision-makers and others to assist in consideration of GMO issues, IUCN, 2004
- Guidelines for GEF Agencies in Conducting Terminal Evaluations, GEF Evaluation Office, 2008
- “ROtI - Review of Outcomes to Impact: Practitioners Handbook”, 2009, GEF
- [http://www.unep.org/eou/StandardsPolicyandPractices/UNEP EvaluationPolicy/tabid/3050/language/en-US/Default.aspx](http://www.unep.org/eou/StandardsPolicyandPractices/UNEP%20EvaluationPolicy/tabid/3050/language/en-US/Default.aspx)
- [http://www.unep.org/eou/StandardsPolicyandPractices/UNEP EvaluationManual/tabid/2314/language/en-US/Default.aspx](http://www.unep.org/eou/StandardsPolicyandPractices/UNEP%20EvaluationManual/tabid/2314/language/en-US/Default.aspx)
- [http://www.thegef.org/gef/sites/thegef.org/files/documents/TE\\_guidelines7-31.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf)

## Annex 5

### Project costs and co-financing tables

#### Project Costs (USD)

Component/sub-component	Estimated cost at design	Actual Cost	Expenditure ratio (actual/planned)
<b>TOTAL</b>	<b>1.500.000</b>	<b>1.449.191 (26/10/2014)</b>	<b>97%</b>

#### Co-financing

Co financing (Type/Source)	IA own Financing		Government		Other*		Total		Total Disburse d
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants									
– Loans									
– Credits									
– Equity investments									
– In-kind support			505.000	505.000			505.000	505.000	505.000
– Other (*)									
–									
–									
<b>Totals</b>			<b>505.000</b>	<b>505.000</b>			<b>505.000</b>	<b>505.000</b>	<b>505.000</b>

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

## Annex 6

### CV profile of the Consultant (Camillo Risoli)

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

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



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

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

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

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

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

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

## Annex 7

### **The UNEP/GEF projects of NBF implementation in Mongolia, Bhutan, Lao PDR<sup>25</sup>: elements for a comparative analysis**

- The concept and design of the three projects are similar. They basically are Institutional and Capacity Building projects aiming at creating and consolidating in-country conditions for the implementation of the National Biosafety Framework: a combination of policy, legal, administrative and technical instruments enabling the countries to manage the safe transfer, handling and use of living modified organisms (LMOs) from modern biotechnology.
- Socio-political, economic, geographical and environmental situations of the countries are very different. However, they share some notable elements that are relevant for GMOs management:
  - a) the three countries are richly endowed in natural resources, pristine environments and biodiversity;
  - b) all of them are landlocked countries, with somewhat porous borders;
  - b) two of them (Mongolia and Bhutan) have big and powerful neighbors (Russia and China for Mongolia, China and India for Bhutan) with which they maintain strong economic and trade relations;
  - d) the three countries import great part of the food and feed consumed internally, which, on the one hand, entails the need for adequate measures of control, inspection and detection, and, on the other hand, is raising increased interest for the use of GMOs in agriculture.
- Due to the above listed elements, the relevance of the projects is equally high for the three countries.
- The baseline situation of the three countries at the starting of the projects was quite different. Mongolia had already a national Biosafety Law (since 2007), while the other two countries had not. Bhutan was in a particular situation, due to a ministerial decree issued by the Ministry of Agriculture in 2000 that banned all imports of LMOs into the country (moratorium).
- As a consequence of the previous point, Mongolia project focused on the elaboration and implementation of a “National Biosafety Programme” (NBP), considered the pivotal instrument for the implementation of all programs and activities concerning Biosafety in the country. The NBP is a comprehensive instrument of public planning including Work plans (2014-2017, 2018-2021), Monitoring & Evaluation framework and a Budget. Moreover, building upon the National Biosafety Law of 2007, the Project has largely contributed to the elaboration of five Regulations (General Regulations and specific Regulation on Inspection, Customs, Registration & Risk Assessment,

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<sup>25</sup> “Capacity Building for Biosafety Implementation for Mongolia”; “Implementation of the National Biosafety Framework of Bhutan”; “Support the implementation of National Biosafety for Lao PDR”

Transportation), two of which already approved (Inspection and Customs) and three other at the final stage of their process of approval.

- Bhutan and Lao PDR have obviously focused on the elaboration and approval of the National Biosafety Laws, which occurred in both countries during 2014, with a strong impulse by the respective projects. The process leading to the adoption of the new Laws was, however, quite different between the two countries.
- In one case, Bhutan, the Project, while technically and methodologically supporting the discussions and the gradual revisions of the text, eventually leading to the Biosafety Act approved in November 2014, has, in a parallel way, acted “as if the law existed already”. As a matter of fact, the two main bodies established by the new Biosafety Law (the National Biosafety Commission / NBC with responsibility for strategic guidance and coordination, and the Technical Working Groups with advisory function) are the natural evolution of the implementing mechanisms set by the Project. They have already given evidence of meaningful participation and of strategic and technical capacities during the phase of the elaboration and discussion of the Law.
- Lao PDR had started the process of discussion and elaboration of the National Law well before (2004) and, after a complex and challenging process (also including a governmental reshuffling, the creation of new Ministries, a new NCA, a reshaped project team), eventually the National Biosafety Law was approved in February 2014. Due to the complex structure of the public administration and to the convoluted mechanisms of decision-making, the formal absence of a law hampered many related activities and represented a major obstacle to the smooth progress of Biosafety agenda in the country. After the adoption of the Law, the biosafety regulatory framework has been completed with the preparation of three draft Regulations (Secondary Law) and the elaboration and discussion of a draft National Biotechnology Strategy and Action Plan (NBSAP), which will permit to insert Biosafety into national plans and policies.
- The experience of the three projects shows how relevant socio-political conditions and governance mechanisms are for the implementation of National Biosafety Frameworks. On this regards, the three projects’ teams have responded with different assets and capabilities: capacity of coordination and partnership have been strong driving forces of the Mongolia team, flexibility and management adaptation have been strong assets of Bhutan project, while resilience and strong motivation have been major assets of the Lao project team.
- Some interesting elements of analysis can also come from the observation of the different institutional frameworks of the three projects. Few lessons can be drawn by the Lao PDR experience on this aspect, due to the renewed institutional frame, while both Mongolia and Bhutan present two different institutional frames, each of them with strong and weak points.
- In Mongolia, the setting of a permanent Secretariat (three full-time MEGD staff) of the National Biosafety Committee (NBC), within the MEGD structure (Ministry of Environment and Green Development) is an interesting institutional approach that combines a higher degree of autonomy and decision-making (when compared with a ministerial department) and the advantages of being

inserted within a Ministry (institutional anchorage), which is also the NCA<sup>26</sup>. This is a strong point. Nevertheless, most of the national stakeholders stress the need to link Biosafety and Food Safety, particularly on issues such as imported food’s quality control and labelling, which are under different institutional umbrellas. This perspective entails a strong need of coordination and partnership of the NBC Secretariat particularly with Inspection and Customs Agencies (which is actually what the Secretariat is doing), and with the Ministry of Agriculture.

- Quite different the situation in Bhutan, where the NCA is the BAFRA (Bhutan Agriculture and Food Regulatory Authority) of the Ministry of Agriculture, a solid and dynamic institution playing a strategic role at national level, being responsible for the application of relevant national policies and legal instruments such as the Plant Quarantine Act, Seed Act, Pesticide Act, Livestock Act, Food Act, Forest and Nature Conservation Act, Biodiversity Act and, eventually, the Biosafety Act. It functions as the National Food Quality and Safety Control agency and is the National Competent Authority not only for the CPB, but also the IPPC (International Plant Protection Convention), CAC (Codex Alimentarius Commission), the WTO-SPS Agreement (World Trade Organization-Sanitary and Phytosanitary Agreement). Biosafety can therefore take profit from a robust and polyvalent institutional anchorage, which offers large guarantees of institutional and socio-political sustainability. This is a major strong point.
- Bhutan and Lao PDR (especially Bhutan) look more dynamic in searching and fostering regional cooperation (within SAARC and ASEAN umbrella, respectively) probably due to the dimension of those countries entailing a greater need of cooperation / integration and the existence of more dynamic regional associations in those regions.
- The partnership with Academic Institutions in Mongolia (the University and the national Academy of Sciences, where the GMO lab is placed) is a strong asset that is not yet fully explored in the other two countries (in Bhutan, National University is at a very early stage).
- This brief comparative analysis cannot omit mentioning the peculiarity of the Bhutan Biosafety Act of November 2014 that, in its art.20, prohibits the import, transit, intentional introduction, any use including contained use, research and development of modified organisms capable of reproducing and the socio-politically different set ups of the countries.

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<sup>26</sup> This approach could probably also be adopted in Lao PDR, where the BEI Biosafety team could perhaps play the role of NBC Secretariat within the NCA, the Biotechnology and Ecology Institute (BEI) of the Ministry of Science and Technology.