

1. Project Data

Summary project data			
GEF project ID		3636	
GEF Agency project ID		00371	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		UNEP	
Project name		Building Capacity for the Detection and Monitoring of LMOs in Cambodia Biosafety Program	
Country/Countries		Cambodia	
Region		Asia	
Focal area		Biodiversity	
Operational Program or Strategic Priorities/Objectives		Strategic Program 6: <i>Building capacity for the implementation of the Cartagena Protocol on Biosafety</i>	
Executing agencies involved		Ministry of Environment (MOE)	
NGOs/CBOs involvement		None	
Private sector involvement		None	
CEO Endorsement (FSP) /Approval date (MSP)		March 2012	
Effectiveness date / project start		April 2012	
Expected date of project completion (at start)		March 2015	
Actual date of project completion		July 2017	
Project Financing			
		At Endorsement (US \$M)	At Completion (US \$M)
Project Preparation Grant	GEF funding	0.028	0
	Co-financing	0.006	0
GEF Project Grant		0.656,528	0.656,528
Co-financing	IA own	0	0
	Government	0.9	0
	Other multi- /bi-laterals	0.1	0.105,413 (don't know the source of funder)
	Private sector	0	0
	NGOs/CSOs	0	0
Total GEF funding		0.684,528	0.656,528
Total Co-financing		1.006	0.105,413
Total project funding (GEF grant(s) + co-financing)		1.690,528	0.761,941
Terminal evaluation/review information			
TE completion date		August 2018	
Author of TE		John Mauremootoo	
TER completion date		December 24, 2018	

TER prepared by	Spandana Battula
TER peer review by (if GEF IEO review)	Molly Sohn

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	S	MU	-	MU
Sustainability of Outcomes		MU	-	MU
M&E Design		MS	-	U
M&E Implementation		MS	-	MU
Quality of Implementation		MS	-	MS
Quality of Execution		UA	-	MS
Quality of the Terminal Evaluation Report		-	-	MS

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The overall Global Environmental Objective of the project was to “assist Parties to the Cartagena Protocol on Biosafety (CPB) in building capacity to implement the CPB” (TE pg 17).

3.2 Development Objectives of the project:

The Development Objective of the project was to “build human and infrastructure capacity for LMO (living modified organism) detection, with focus on the development of capacities for the detection of LMOs and monitoring of their environmental effects, along with capacity for safe handling of LMOs, information dissemination and research capacity for risk assessment of LMOs” (TE pg 17). The project intended to achieve its objective through the following four components and their corresponding outcomes:

Component 1: Identification and analysis of Living Modified Organisms (LMO) detection and monitoring needs;

Outcome 1.1: Accurate and comprehensive baseline information on national capacities in infrastructure, biosafety and biotechnology manpower needs for LMO detection and monitoring in the country.

Outcome 1.2: Identified capacity needs mainstreamed into National plans and budgets.

Component 2: Training and Public Understanding;

Outcome 2.1: Institutional capacity for LMO detection, including operation and maintenance of laboratory equipment in accordance with international norms.

Outcome 2.2: More effective control of movement of LMOs across Cambodian border.

Outcome 2.3: Enhanced ability to comply with obligations of CPB.

Outcome 2.4: Staff trained in public communication.

Outcome 2.5: Active public participation after increased understanding.

Component 3: Improvement of Infrastructure;

Outcome 3.1: Identified laboratory upgraded according to international standard required for LMO detection.

Outcome 3.2: Enhanced capacity for in-country detection and monitoring of LMOs.

Component 4: Establish an Information System;

Outcome 4.1: National Information System for Management of Data on Biosafety & Biotechnology linked to the BCH, existing national databases and international information resources.

Outcome 4.2: Scientific basis for resolving legal disputes on LMO labelling and non-compliance.

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

The TE stated that there were no changes in objectives or activities during implementation.

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 Relevance	Rating: Satisfactory
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The project was consistent with GEF-4 focal area on biodiversity and strategy to assist countries to comply with the Cartagena Protocol on Biosafety. It aligned with GEF's Strategic Program on Building capacity for the implementation of the Cartagena Protocol on Biosafety. The project was also consistent with GEF's Strategy for Financing Biosafety and was in accordance with the key elements of the Updated Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol.

The project is a follow up to previous GEF funded projects for the development of a National Biosafety Framework and its implementation (2006-2010) under which Cambodia produced a National Law on biosafety and a Sub-decree on mechanism and procedure to implement the Law on Biosafety. Therefore, this current project to build infrastructure capacity for Living Modified Organisms detection is consistent with the national priorities of the government of Cambodia.

4.2 Effectiveness	Rating: Moderately Unsatisfactory
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The TE assessed effectiveness on the basis of achievement of outputs and outcomes and rated the former as Moderately Satisfactory while the latter as Moderately Unsatisfactory. The project had planned to deliver one preliminary output and thirteen other outputs in four strategies but in the end the project completed eight outputs and partially completed five outputs. Due to the partial completion of outputs, none of the nine direct outcomes were fully achieved. Thus, the TER also gives a Moderately Unsatisfactory rating to effectiveness of the project. Below is detailed analysis of each component:

Component 1: Identification and analysis of Living Modified Organisms (LMO) detection and monitoring needs:

Under this component, there were two outcomes to set baseline data and identify capacity needs and both were not achieved. The project intended to collect baseline information on national capacities in infrastructure, biosafety and biotechnology manpower needs to detect LMO but there was no evidence that activities to collect baseline data was done. “However, biosafety capacity needs had been identified in the thematic Assessments and Action Plan for the Three Conventions (CBD, UNFCCC AND UNCCD). There was also input from the Action Plan on Biosafety 2010-2014 which was undertaken as part of previous GEF project for implementation of the National Biosafety Framework (NBF) and a brief situation analysis of capacity to detect and monitor transboundary movement of LMOs in Cambodia was undertaken during the project preparatory phase” (TE pg 27). On identifying capacity needs mainstreamed into National plans and budget, the TE stated that it was not achieved (TE pg 32).

Component 2: Training and public understanding:

Under this component, the project aimed to build institutional capacity by operating and maintaining laboratory equipment. The project identified a laboratory and trained six staff members; however it was not fully functional at the time of evaluation. The TE also said there was no “complete continuity of trainees (three individuals participated in all trainings), so material had to be repeated and many of the trainees (about half according to 1 respondent) had no molecular biology background which slowed down progress” (TE pg 28). For the output on training trainers, the project trained 6 staff as trainers and some others from various agencies. It also conducted 11 training workshops for customs and border control staff, and a total of 880 people participated in the workshops. The project also completed communication material including project brochure and LMO and biosafety-related videos which were produced and broadcast on National TV (TE pg 28).

Component 3: Improvement of infrastructure:

Under this component the project intended to improve the identified laboratory and strengthen capacity for in-country LMP detection. As per the TE, the project partially completed upgradation of laboratory and it was noted that “LMO detection lab was created and equipped but not to international standards and the necessary steps for accreditation were not followed. The laboratory has the potential

to achieve the international standards required for LMO detection and has most of the necessary equipment, but it is lacking in certain respects. It is a single room facility, so it is not possible to separate sample preparation from extraction and detection thus risking contamination, some equipment is currently not functioning, and the power supply in the MOE building in which it is housed is not consistent enough for such a facility” (TE pg 28).

Component 4: Establish an information system:

Under this component, the project established an information system and incorporated into the biosafety clearing house, created a database to produce a national register, set-up a decision-making system and collaborated with other reference labs. However, none of these outputs are operational and “the institutional restructuring of MOE currently being undertaking has resulted in uncertainty in terms of future commitment” (TE pg 33).

4.3 Efficiency	Rating: Moderately Unsatisfactory
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The TE gave a Moderately Unsatisfactory rating to project efficiency and the TER also gives the same rating due to number of issues with timeliness and financial management. The project faced delays because of the protracted process of establishing laboratory facilities, institutional reform, construction of a new Ministry of Environment building, and lack of expertise for LMO detection. There were also delays due to translation of documents and internal bureaucracy. In terms of the budget, TE stated that a “major change was the increase in the budget for training and the reduction in the budget for accreditation. Spending was generally within what was allocated. The project was able to run additional workshops on the budgeted funds as the costs were relatively low” (TE pg 42).

4.4 Sustainability	Rating: Moderately Unlikely
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The TE gave a Moderately Unlikely rating to project’s sustainability because there were risks to financial sustainability and moderate risks to socio-political and institutional aspects. The TER also gives the same rating. Below is a detailed description of the sustainability criteria:

Financial: The financial risks seem high as “no formal estimates of financial requirements for the continuation of project results have been produced” (TE pg 45). The TE also stated that although potential financial mechanisms such as LMO testing fees were suggested, there was no evidence that these fees were being considered at the higher administrative levels. The project also received much lesser financing than expected at the beginning. Thus, financial sustainability seems unlikely.

Socio-political: The TE stated that although the Ministry of Environment had supported biosafety in the past, it is not sure that biosafety will continue to be a priority especially as the Ministry is undergoing changes. “Other stakeholders, including external funders (e.g. US Embassy and USDA) are interested in the development of biotechnology in Cambodia and have funded activities but their commitment to the

CPB is not clear. Individual capacity development efforts initiated in this project have not been maintained after project closure and are highly unlikely to be sustained unless external funding is acquired” (TE pg 44).

Institutional and governance framework: there are issues with institutional commitment as there has been “lack of consensus over which institution should be responsible for laboratory testing and other biosafety operations threatens to undermine institutional sustainability” (TE pg 45). However, the project did find commitment as “enshrined in the Biosafety Law and Sub-decree, and the draft law on liability and redress and draft regulations among those interviewed from different institutions” (TE pg 45). Thus, institutional sustainability is Moderately Likely.

Environmental: The TE does not mention any environmental risks to the project benefits.

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project’s outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The TE reported that the materialized co-financing was \$105,413 which is much lesser than the expected amount of \$1,000,000, however, the TE does not mention whether this affected project’s outcomes.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project’s outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project experienced several delays which led to extension of the project closing date. As per the TE “establishing laboratory facilities was a protracted process and ultimately there was a failure to gain accreditation, institutional reform and the construction of a new MOE building resulted in long delays as did the lack of expertise in certain key areas such as trainers for LMO detection” (TE pg 42). The project also faced delays because of translation of reports, internal bureaucracy, and funds transfer when UNEP moved its financial system to a new planning system (TE pg 42).

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

The TE reported that, although, there was political willingness to support biosafety by the government and the National Biosafety Law was passed, there was still dependency on key individuals and insufficient level of capacity and degree of ownership by relevant institutional stakeholders (TE pgs 41 & 46).

6. Assessment of project’s Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate

shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 M&E Design at entry	Rating: Unsatisfactory
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The TE reported that the M&E design was not met as there was no formal monitoring plan provided by the project. Also, the data was not disaggregated by gender or groups with low representation which posed an issue when formulating the indicators. On indicators, the TE stated “Outputs, in most cases, were accompanied by 'SMARTish' indicators though time-specificity is missing in most instances. Most outcomes are accompanied by SMART indicators though many of them relate more to outputs than outcomes, e.g. 'staff at major entry points will be trained' does not tell us anything about the behavioural changes to which this training has contributed. In addition, some outcomes are accompanied by inappropriate indicators, e.g. the (non-SMART) indicator Mechanism for public participation' is not appropriate for the outcome 'Active public participation after increased understanding” (TE pgs 42-43). Robust indicators are key for good M&E reporting, but as the indicators for the results framework seem weak, the TER gives an Unsatisfactory rating to M&E design at entry.

6.2 M&E Implementation	Rating: Moderately Unsatisfactory
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The TE stated that there a number of problems with M&E implementation. The submitted Project Implementation Reports paid very little attention to results beyond outputs, and the mid-term review was never conducted. As per the TE, “Reporting was mainly at the activity and output level and did not fully facilitate timely tracking of results and progress towards projects objectives” (TE pg 44). Further, these results were not used to better performance or adapt to changing needs. There was also a failure in engaging important stakeholders in the M&E process as was evidenced at “the Project Inception Meeting and the lack of a formal feedback mechanism to improve the support adaptive management beyond the formal project reporting process” (TE pg 44). Thus, the TER gives a Moderately Unsatisfactory rating to process of M&E implementation.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 Quality of Project Implementation	Rating: Moderately Satisfactory
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The project's implementation agency was UNEP and the TE gave project implementation a Moderately Satisfactory rating. The TE mentioned that the UNEP task manager was efficient as he processed requests on time responded to queries and used his overview of the subject and his network to support project activities, for example, he recruited experts from Austrian Environment Agency to support project activities. UNEP was also engaged in project preparation especially during the inception period, however there was no formal capacity assessment or formal partnership agreements. The TE does not describe whether UNEP provided sufficient supervision and backstopping to the project team. Given the lack of additional information, the TER also provides the same rating as the TE.

7.2 Quality of Project Execution	Rating: Moderately Satisfactory
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The Ministry of Environment was the project executing agency. As per the TE mentioned that there was a "great deal of positive feedback regarding project management effectiveness with a broad consensus that project outputs could not have been achieved without the knowledge, experience and energy of the NPC (National Project Coordinator)" (TE pg 46). The MOE provided project coordination, provision of buildings, acted as Cartagena Protocol on Biosafety focal point, chaired National Steering Committee on Biosafety (NSCB), and provided staff time. However, the TE noted that there was a lack of involvement and supervision at the higher levels of the Ministry. The steering committee met only three times and "there is no evidence that it was actively involved in providing leadership towards planned outcomes, for example, by leveraging the necessary resources for the project, and working with partners across various sectors, including potential donors" (TE pg 46). Therefore, the TER gives a Moderately Satisfactory rating to project execution.

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The TE does not mention any environmental impacts.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The TE does not mention any socioeconomic changes.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “Capacities” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “Governance” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities: The TE stated “through training and awareness raising, new relevant institutional stakeholders have been sensitized about biosafety (Customs, CamControl, Agriculture and Food Processing Lab - CamLAPF Cambodian Agricultural Research and Development Institute - GDA)” (TE pg 41).

b) Governance: None mentioned by the TE.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

The TE does not mention any unintended impacts.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

The TE stated that the national project coordinator (NPC) “successfully catalyzed the involvement of the Austrian Environmental Agency (during the project); there has been a follow-up workshop organised by USDA which was catalysed by the NPC. There are a number of initiatives that have been identified

including under USAID (although funding would come with a very clear “pro-LMO” agenda), JICA and through ASEAN” (TE pg 41).

9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The TE provided following key lessons (TE pg 55):

- a) It is important to build the knowledge base and of biosafety champions in countries with existing biosafety capacity;
- b) Planning and implementation of the project should focus on outcomes towards impacts and activities;
- c) It is critical to have consistent engagement from the executing agency throughout the cycle of the project in order to have effectiveness; and
- d) The relationship between key institutions should be maximized at all levels to encourage long term ownership.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The following are recommendations given in the TE (TE pgs 55-56):

- a) Future projects should build upon existing experience and address some of the shortcomings of the current project;
- b) Future projects should optimize the comparative advantage of, and synergies among, the relevant institutions to maximize effectiveness;
- c) Future projects need to include a formal mid-term review and it is critical that sufficient resources are allocated by UN Environment for this evaluation including the necessary stakeholder consultations;
- d) Future projects should have formalized results-based monitoring systems that are operational throughout project cycle; and
- e) Future projects should have a formal exit strategy/sustainability plan and build in cost-recovery measures.

10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The TE provides a detailed assessment of outputs and outcomes and good summary of impacts	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The ratings are internally consistent with well substantiated evidence	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	The criteria under sustainability was explained well, but no exit strategy has been produced	MS
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned, and recommendations are well substantiated	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The co-financing amounts are presented but the report does not include project costs	MS
Assess the quality of the report's evaluation of project M&E systems:	The report described well both M&E design and implementation	S
Overall TE Rating		MS

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).

The TER did not use any additional sources.