Capacity Building for Implementation of the Cartagena Protocol

MEXICO

PIMS 2285

FINAL PROJECT EVALUATION

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Capacity Building for Implementation of the Cartagena Protocol
MEXICO: 00013572 (MEX/01/G32)

FINAL PROJECT EVALUATION

Executive Summary

The project "Capacity Building for Implementation of the Cartagena Protocol" was developed by a group of governmental organisations in order to increase the national capacities in biosafety required to: carry out risk assessments with an appropriate scientific and technical level; implement necessary activities for risk management; evaluation and strengthening of legal and regulatory framework; and development of infrastructure for information exchange and data management. This document constitutes the final evaluation of this 3 year project. In this evaluation, through the revision of 55 documents and interviews with 17 people of 15 organisations we assessed the different stages of the project, from its design and formulation, through its implementation until completion of project outputs, the attainment of its objectives and noted the lessons and best practices derived from it. Some recommendations are respectfully made at the end of the evaluation. The project was originally thought and driven from its onset by Mexican technician gathered in the so called Project Committee and coming from research institutions and from four ministries that are members of the Technical Committee of CIOBIOGEM, the National Focal Point on Biosafety. The interventions were well thought, were feasible, important and urgent. The implementation ran smoothly both financially and in terms of actual progress on activities. The set objectives were met. The means through which Mexico conducted this capacity building effort have an example and support for other countries in the region, the capacities lie outside of the CIBIOGEM and offer the best options for continuity.

Acknowledgements

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Thank you all

Sincerely

Ramón Pérez Gil Salcido

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List of Acronyms

ARIMLOGM	SAGARPA's information systems
AROMMA	The information systems developed by SEMARNAT-INE
BCH	Biosafety Clearing House of CBD
CBD	Convention on Biological Diversity
CENICA	National Environmental Research and Training Centre
CIBIOGEM	Commission on Biosafety and Genetically Modified Organisms
CNBA	National Commission for Agricultural Biosafety
CONABIO	National Commission for the Use and Knowledge of Biodiversity
CONACYT	National Commission for Science and Technology
EA	Enabling Activity
EMA	Mexican Certifying Entity
FIBIO	Biosafety Trust Fund for CIBIOGEM's Secretariat at CONACYT
GEF	Global Environmental Facility
IA	Implementing Agency
IFAI	Mexican Federal Institute for Information Access
IICA	Inter-American Institute of Agricultural Cooperation
ILSI	International Life Sciences Institute
INE	National Ecology Institute
IUCN	World Conservation Union
LMO	Living Modified Organism
M&E	Monitoring and Evaluation
NAFTA	North American Free Trade Agreement
NGO	Non Governmental Organisation
OIRSA	International Organization of Regional Plant & Animal Health
PCU	Project Coordination Unit
PROFEPA	Office of the Attorney General for the Protection of the Environment
PUAL	Programa Universitario de Alimentos
SAGARPA	Ministry of Agriculture, Regional Development, Fisheries and Food
SAT	Tax & Revenue Administration Service from SHCP Ministry
SE	Secretaría de Economía, Ministry of Economy
SEMARNAT	Ministry of Environment and Natural Resources
SEP	Ministry of Education
SHCP	Ministry of Finance and Public Debt
SIOVM	Information System on Modified Living Organisms
SSA	Ministry of Health
UNAM	National Autonomous University of Mexico
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
UNDP	United Nations Development Programme
WB	World Bank
WWF	World Wildlife Fund

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FINAL PROJECT EVALUATION

1. Introduction

1.1 Purpose of the evaluation

The purpose of the evaluation as per the Terms of Reference is to analyze and document the results obtained through the execution of this project over the period June 2002- July 2005 and assess the impacts achieved and their sustainability. The evaluation is to be the final evaluation of the above stated project. It has been initiated in accordance with UNDP/GEF M&E policies and procedures and was financed through the project's resources.

1.2 Key issues addressed

The key issues to be addressed in this evaluation are the following:

a) To evaluate the attainment of project objectives and outcomes, as well as the delivery and completion of project outputs/activities
b) To evaluate project achievements according to GEF Project Review Criteria (i.e. including implementation approach, country driveness, stakeholder participation, replication approach, financial planning, cost-effectiveness, sustainability and monitoring and evaluation.
c) To identify the problems or constraints, if any, that may have affected the smooth implementation of the project.
d) To recommend any outstanding measures needed to assure the viability and sustainability of the results obtained through the project.
e) To identify lessons learnt that can be disseminated to GEF projects, to the national authorities involved in the project as well as other organisations as they plan follow up actions.

1.3 Methodology of the evaluation

As per the Terms of Reference and what was discussed during the preliminary selection interview, the activities foreseen included: review of key documentation, interviews with the project team and review of project reports and documents, interviews with the main stakeholders, the drafting of evaluation reports versions and the oral presentation of the main findings.

The actual process was launched with the first interview held on August 2nd, 2005. In the course of the following 12 days a total of 19 interviews took place. The interviewees were selected from an extensive list produced by the evaluator together with the Project Coordinating Unit. Without exception the people chosen had a close relationship with the project in any of its stages of development, from its conceptualization to its completion.

Interviewees belong to 15 different organizations. These were: the National Commission on Biodiversity (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, CONABIO), the Science and Technology Council (Consejo Nacional de Ciencia y Tecnología, CONACYT), the NGO's Greenpeace México and Grupo de Estudios Ambientales (GEA), the National Institute of Ecology (Instituto Nacional de Ecología INE) from the Environmental Ministry SEMARNAT, the company Monsanto, the UNDP, the project itself (PNUD-CIBIOGEM), the ministry of Agriculture, Animal Husbandry, Rural Development, Fisheries and Food (Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación SAGARPA).
Additionally, SAGARPA's own Health Inspection Service (Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimenticia SENASICA-SAGARPA) the GEF-UNDP Unit at the ministry of the environment SEMARNAT and 4 individuals currently working in other organizations but that formerly worked in CIBIOGEM, Greenpeace México, INE-SEMARNAT and SEMARNAT respectively. (Please refer to Annex 1 List of Interviewees).

Unfortunately while this evaluation was taking place a cane sugar grower's movement closed down for almost a fortnight the offices of the SAGARPA ministry disrupting the carefully planned interviews agenda and reducing the actual time budget for such activity. Nevertheless, the time spent on each of the interviews was about 90 minutes on average. Most of the interviews were conducted individually and at the interviewees' working space. Few were kind enough to assist to

an office in Mexico City to be interviewed, and few also acceded to have long telephone conversations in more than one occasion.

During the course of this evaluation a total of 55 documents, some provided by the Project Coordination Unit, others by the interviewees and other obtained by the evaluator were thoroughly and carefully read. Among them several revised versions of the Project's documents such as the Logical Framework and original versions of the proposal. Minutes or proceedings of meetings and courses held, evaluations and audits undertaken by external consultants, regular reports on activities and on expenditures, custom made spreadsheets requested to the Project Coordination Unit that kindly produced them on such short notice, publications of a varied nature (primarily for the general public) and other materials that seemed appropriate (Please refer to the list in Annex 2).

1.4 Structure of the evaluation

This evaluation follows the Terms of Reference, which in turn are based on the GEF Guidelines on Terminal Evaluations and is structured along the following lines.

We first present an abridged summary of the whole report, and make a short introduction of the project and of the evaluation itself. Stating for both cases their objectives, context and expected results. Then, the actual evaluation is presented by means of a succinct discussion and rating of the project's conceptualization and design, formulation, implementation, attainment of outcomes and objectives. The rating follows GEF standards with a 4 degree scale (Highly Satisfactory, Satisfactory, Marginally Satisfactory, and Unsatisfactory). In the final portion of this evaluation we present what we see as the lessons learned and respectfully formulate some recommendations and conclude with some final remarks.

2. The project and its context

2.1 Project information

Following all the documents the Project identifiers are:

a) Project Number Mex/01/G32 (PIMS 2285)

b) Project Name: Capacity building for Implementation of the Cartagena Protocol

c) Duration: 3 years

d) Implementing Agency: United Nations Development Program in co-ordination with UNEP & UNIDO

e) Executing Agency: CIBIOGEM

f) Requesting Country: Mexico

g) Eligibility: Cartagena Protocol signed 24 May, 2000

h) GEF Focal Area Biodiversity

i) GEF Programming Framework Enabling Activity (EA)

As seen in the identifiers the executing agency is CIBIOGEM, the National Commission on Biosafety and Genetically Modified Organisms. This entity was created in November 1999 to address the country's needs and priorities related to biosafety and biotechnology issues taking into account risks to human health. CIBIOGEM has the core institutional responsibility for policy making and scientific advice regarding biosafety in Mexico in its different aspects: socio-economic, agricultural, food and feed applications, ecological, public perception and legal framework. This Commission includes representatives from six Ministries and the National Council on Science and Technology (CONACyT); hence its agenda represents a very important inter-institutional effort and promotes cross-sector synergies. As the National Focal Point on Biosafety CIBIOGEM lead the process of drafting the proposal bearing in mind the long-term capacity building need to meet Mexico's commitments under the Cartagena Protocol of the CBD.

Among the different issues that were considered in the conceptualization and design of the project were the interest in protecting the biodiversity of a country, which is well known as Centre of Origin and genetic diversity, also the acknowledgement of the huge gaps and lacks of information in all the aspects of Biosafety in Mexico, but also the fact that Mexico had just established a

national focal point for the topic, that there was already a national Biosafety project (efforts dated back to 1988) involving government agencies related to the topic and also the imminent entrance of Mexico to the Cartagena Protocol.

A small Project Committee was informally established (in 2001) whose prime responsibility was to conduct the necessary consultations and draft all the required documents in order to submit a formal proposal to GEF through the UNDP. This committee invested several months in putting together all the necessary elements. After revisions, redrafting and resubmission the project was eventually approved and formally began in June 2002 and was scheduled to conclude in June 2005 but its conclusion was formally postponed until August 31, 2005 (according to some of the documents reviewed).

As per the formal description of the project this transcription is a fair summary of it: "The project will help consolidate Mexico's national capacity for the implementation of the Cartagena Protocol on biosafety. This project will address short and medium-term aspects to the national biosafety framework related to the trans-boundary movements of Living Modified Organism (LMO´s) in the context of the Cartagena Protocol. Specifically, the project will develop the national capacities in biosafety required to: carry out risk assessments with an appropriate scientific and technical level; implement necessary activities for risk management; evaluation and strengthening of legal and regulatory framework; and development of infrastructure for information exchange and data management.

The project builds on the experience accrued in Mexico on public health, plant and animal health and biodiversity conservation efforts, especially the biodiversity enabling activities, and promotes cross-sector synergies."

GEF's participation in strategic elements of Mexico's biosafety capacity building effort over the medium-term horizon (3 years) was thought to permit the longer-term consolidation of the strategy. The GEF alternative provides training and risk management components that, as said, will substantially increase the governmental agencies of Mexico's immediate response to the provisions of the Cartagena Protocol.

Biosafety is considered to be a safeguard for the conservation of natural resources and is a key aspect in the 2000–2006 National Development Plan.

The global importance of Mexico as a centre of biological diversity and agro-biodiversity can hardly be overstated. It is the centre of diversity of maize, one of the world's top three crops for human consumption. Furthermore, our country occupies a critical geographical location involving large-scale migration of different species between regions to the north and south that may possibly be negatively affected by the unmanaged diffusion of LMOs in Mexico.

2.2 Problems that the project seek to address

The context in which the project was being drafted by the Project Committee included among other circumstances the fact that CIBIOGEM, as a recently created inter-ministerial body, had to adjust and to increase its capacity to fully address the issues related to the Cartagena Protocol. Simply because CIBIOGEM is charged with the implementation of the Protocol, and therefore has to co-ordinate the specialized subcommittees and in general all governmental activities related to biosafety and risk evaluation and management.

Strengthening CIBIOGEM through GEF support therefore was seen as a crucial step forward and is based on incrementing the capacity of each of its institutional partners. Levelling unequal capacities, even within a single sector, the public sector, seemed like a big enough challenge that the Commission had to face.

Moreover, the country still lacked a thorough and clear legal framework, public perception and overall knowledge around the actual or potential effects of transgenes on the environment was missing, and also, as we have almost come to get used to, the country experiences severe constraints on the national budget for research on this (and many other) topics.

Mexico will slowly develop its capacities in evaluating, monitoring, and managing the risks associated with the trans-boundary movement of LMOs. Research and academic institutes will slowly continue carrying out research in support of CIBIOGEM to LMOs presence in imported

grains; however cost considerations, and the fact that their institutional research programs do not entirely respond to government needs, will not significantly contribute to increased government response capacity for trans-boundary LMO issues.

As one reviewer put it, while making an appraisal of the project's scientific and technical soundness and I quote: "the awareness at the scientific and federal government levels of the potential risks of LMOs in the Mexican environment is high". "Mexico has moved expeditiously to develop a national scientific and legal framework to assess and manage risks associated with trans-boundary movement of LMOs into Mexico". "The general conception and organization of the framework under CIBIOGEM is appropriate and sufficiently complete". "This framework, however, is currently inadequate in terms training to meet the potentially heavy demands for LMO risk assessment and management stemming from the importation of basic commodities".

"Five different ministries or national commissions are coordinated through CIBIOGEM, and these differ greatly in their capacity to respond to CIBIOGEM's needs."(sic) (Quoted literally although in fact 6 are the ministries that constitute the Commission) "For instance, the Ministry of the Environment (SEMARNAT) has no specialized laboratory technicians to monitor LMOs in environments where potential hazards to wild fauna (e.g., *Lepidoptera*)." "Likewise, the ministry of agriculture (SAGARPA) has a large national infrastructure for research and outreach, but its personnel are not sufficiently trained in the areas of monitoring the presence of LMOs, gene flow into domesticated and wild stocks, or the socio-economic impact of the diffusion of LMO seed". (Quote ends)

The shortage of trained and knowledgeable human resource in the country was seen by the Project Committee as the utmost limitation of Mexico and as a significant barrier to rural knowledge and capacity for managing LMOs. Aside from technicians of private companies and laboratories and a handful of experts in the field, there is very little knowledge of the nature of LMOs, nor of methodologies to adequately measure their potential risks and benefits. This is especially true in

the small agricultural communities that characterise the Mexican rural context, as well as for Customs officials in important points-of-entry.

Finally, the Project Committee also acknowledged the fact that the absence of an integrated information system to control points of entry and relay relevant information to CIBIOGEM significantly reduces Mexico's capacity for meaningful trans-boundary inventories of LMOs. Hence an integrated network of relational databases with taxonomic, curatorial information on cultivated species, transgenic species and their wild relatives is urgently needed and therefore incorporated as part of the project.

2.3 Immediate and development objectives of the project

Through this project, within three years, the country will build sufficient capacity to assess and manage risks associated with the trans-boundary movement of LMOs through strengthening of the legal and regulatory frameworks, enhanced institutional capacity and effective communication strategies. This enhanced capacity will assist Mexico to further protect its globally relevant bio- and agro-biodiversity.

Mexico will be better suited to implement the basic objectives of the Cartagena Protocol, including the assessment, management and monitoring of the potential risks posed by transboundary movement of LMOs to the conservation and sustainable use of biodiversity, including human health risks.

Mexico is extremely influential in scientific leadership and training in the region of Central America and beyond. Therefore, this UNDP/GEF proposal for implementing the Cartagena Protocol was also seen as an indirect means to have highly visible and beneficial effects elsewhere in the region as other countries seek to implement the protocol.

2.4 Main stakeholders

Regularly when one mentions the word-concept of stakeholders these include the public sector (government officials), grassroots or community based organizations, non governmental

organizations (NGOs), funding and support sources, private sector (biotech industry representatives primarily in this context), members of academic institutions, congress representatives, political parties, consumers' organizations, etc., anyone that has an honest interest, for whatever reason, on the topic. However, for the purposes of this project, as the project establishes and hence, this evaluation follows, we will have to recognize two groups of stakeholders.

In the first group let us consider exclusively GEF, UNDP and all the governmental entities that took part in the execution of this project as the main interested parties, thus as the main stakeholders. An open definition as the one described before constitutes in fact the second group.

2.5 Expected Results

This approach to capacity building contemplated risk assessment and management, monitoring and evaluation, legal and regulatory reform/strengthening, a limited dissemination strategy and institutional strengthening. These were the project's main components from which the expected results were derived. These were:

a) The first expected result had to do with an increased institutional capacity for risk assessment through the systematization of information in systems and databases. (Among other things it includes training of experts, database development, integration of a directory of experts, and the design and implementation of information systems)

b) The second one had to do with the increased technical and institutional capacity on risk management and monitoring through training schemes reaching technicians of several governmental entities. (Including training workshops on risk management and risk monitoring, among other)

c) Result number three was related to the legal and regulatory framework, expected to be improved incorporating the perspectives of the project executants (besides partaking in discussion it also included a course on the legal framework on Biosafety and a workshop on responsibilities and damage compensation among other activities)

d) The fourth result had to do with using training courses as a means to raise awareness on information related to LMO's and biosafety (which included the preparation of different educational materials, plus handbooks on assessments methodologies on environmental and agricultural risks among other things) whereas,

e) The last expected result was to strengthen the institutional capacity by providing laboratory equipment to identify LMO's and increase their M&E capacity (primarily considering the acquisition of equipment but also activities associated to enable the proper seamless connectivity between agencies).

Details of the actual figures incorporated under each of the expected results of the project are best summarized in the different version of the logical framework of the project, one of which we incorporated as Annex 3 and in the GEF Alternative Course of Action annex we created and included with the number 4.

3. Main Findings and Conclusions

3.1 Project Formulation

3.1.1 Conceptualization/Design

When it comes to determine whether the approach used in design and project formulation, the documents are not the best source of information. In contrast, interviews are, and these revealed that an effort was made to prioritise among the "wish" list that all the entities represented in the Project Committee built together when deciding what the project should involve.

Regardless of the credit one has to give to the actual two pens that wrote the final proposal and to all the other people than both in Mexico and abroad participated in its polishing, it is fair to say that the process of project formulation was a collective effort. As per the information gathered in the interviews, the list of potential components of the project was a large one comprised by entries suggested by all the stakeholders. The rationale behind the production of such a list by the Project

Committee was that Mexico had great needs and that our country had to seize the opportunity of opting for incremental funding that could translate in a more significant leap forward, towards an increase overall capacity on Biosafety matters.

Hence the original list of all the things that ought to be done was larger than the final one after the stakeholders discussed, explained to each other and prioritized. The fact that the different entities sat together and jointly drafted a proposal is in itself one of the projects successes and one that must not be overlooked.

Also as part of the project preparation process, it underwent an external evaluation on October 2001, carried out by an expert reviewer of the listing of the GEF Technical-Scientific Advisory Panel. To respond to remarks presented on the review, the original proposal was modified by eliminating the GEF financing for public health activities.

The conceptualization of the problems of biosafety in Mexico is quite clear in the minds of all the stakeholders that took part in the project formulation. It would have been useful to build a shared diagnosis of biosafety issues in Mexico in advance and to use it as the starting point for designing the interventions, but this was in fact replaced by the actual process of formulating the project.

During the interviews I challenged some of the interviewees as per the appropriateness of the selected interventions, by suggesting that biosafety is a complex and controversial issue and that one could deliberately chose not to engage in polemic interventions, to be on the safe side.

All interviewees in one way or another however, touched on the fact that even though Mexico had already made some progress on the biosafety agenda much needed to be done and that the items chosen for the project by the Project Committee were indeed the most badly needed ones. They insisted that the interventions and expected results should be taken almost as a starting point, not as a skewed selection avoiding the most burning issues. In fact, some of the issues gained heat just after the project began and some people even claim that the sheer existence of the project had something to do with it.

I am convinced now that the selection of interventions, the different project components and activities proposed was well thought out bearing in mind:

a) The complementarily with other efforts conducted by the same agencies-ministries and by others that contribute to achieve the objectives.
b) The need to address the threats to agro and biodiversity in the country keeping them in the core of the project design.
c) The legal and institutional context in which the project had to be launched and conducted.
d) The feasibility of attainment of the proposed goals in such a short time and in this context and also,
e) Keeping in mind the temporary nature of the project (i.e. the need for continuity afterwards).

The activities proposed seem to have been the appropriate ones. The selection and use of indicators and means of verifications for guiding implementation and measurement of achievement, even though satisfactory, could have been improved. We will get back to this when discussing project implementation.

During the drafting of the proposal and the planning of the activities of public participation a question arose disturbing one of the reviewers, how to implement this with very little background and previous national experiences?. Indeed, one could track back to that moment in the history of the project the crucial decision made that defined the nature of the project.

A tough choice was made at the design stage of the project: to first concentrate on strengthening the capacities of the public sector in Mexico. This decision left out automatically all other sectors of society regardless of their involvement, interest, commitment, degree of involvement, responsibilities or level of knowledge, on the biosafety agenda in Mexico. Therefore from the onset neither the Private sector, nor the NGO's, nor the agriculture or grass roots rural organizations, nor the political parties, nor the consumers organizations, nor the general public for that matter, were part of the project design.

It is debatable whether these sectors were ready then to engage in such an endeavour, precisely due to the disparities in knowledge, information and resources of all types (i.e. material, financial and human). The fact is that the governmental entities that designed the project, the ones that held, and still hold, the formal responsibility of the commitments the country acquired when adhering to the Cartagena Protocol, decided to first address their needs.

As per the aforementioned then, my overall rating for the Conceptualization and Design of the project is Satisfactory

3.1.2 Country-ownership/Driveness

The formulation of the project had its origin within Mexico, naturally taking advantage of the opportunity of having access to complementary support from GEF. The topic of biosafety was already in the national agenda, clearly spelled out in different documents and plans.

Mexico already had established a multi-disciplinary expert group to handle the first requests for trans-boundary introduction of LMOs, this group, formalised as the National Committee on Agricultural Biosafety (CNBA), dealing with agricultural biosafety activities and their relation to the environment dates to 1988.

Federal Government's capacity to address biosafety issues has gradually been developed since. Currently, and by the time of this projects inception, several agencies contribute to the national biosafety capacity based on their respective mandates. These include:

a) The inter-secretarial permanent Commission for the Knowledge and Use of Biodiversity (CONABIO);
b) The Ministry of Environment and Natural Resources (SEMARNAT) and its decentralized agency the National Ecology Institute (INE) and its National Environmental Research and Training Centre (CENICA) for risk assessment vis-à-vis the environment;
c) The Health Ministry (SSA) to determine potential health impacts of LMOs;
d) The Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) to issue permits for the experimental release of transgenic plants;

e) The Customs Directorate, under the Tax & Revenue Administration Service (SAT) of the Ministry of Finances and Public Credit (SHCP) , to control export, import and re-export of all products and commodities at entry points;
f) The Ministry of Economy (SE) to supervise commercial and trade aspects of LMOs;
g) The Ministry of Education (SEP) to design training programs and incorporate biosafety into higher education curricula; and,
h) Most recently, the aforementioned inter-secretarial Commission on Biosafety and Genetically Modified Organisms (CIBIOGEM) including 6 ministries and the National Council on Science and Technology.

The project offered the opportunity to coalesce different efforts, to band together or at least bring together the different perspectives in the hope of finding common ground and build a unified national approach. Some of these institutions conformed the Project Committee and were responsible for the drafting of the final proposal. Representatives from CONABIO, SEMARNAT, INE, SSA, SAGARPA, CIBIOGEM, a member of the UNAM's Chemistry Department (also at the University's Food Programme PUAL) and an independent consultant that later became the head of the Project Coordination Unit engaged in moulding the proposal and eventually, most of them, in the actual execution of the project.

My overall rating of the Country-ownership/Driveness in project formulation is therefore Highly Satisfactory

3.1.3 Stakeholder participation

For the purposes of discussing stakeholder participation in project design and formulation I must bring up a point of clarification which I already mentioned before. The narrowed definition of stakeholders to include GEF and UNDP as the supporting entities and all the "sectors" within the public sector (i.e. agriculture, environment, health, education, etc), hence the definition involves the governmental entities that took part in the drafting of the proposal. These stakeholders, at technical level shared information, freely consulted each other and jointly decided how to make the best of the offered incremental financing.

As per the information gathered in the interviews the process of project formulation was quite open and participatory, again, I must underline, within the boundaries of the public sector. Perhaps the decision to have left other sectors of society out of the design and out of the project just as beneficiaries of the activities conducted by the governmental entities being sponsored was an appropriate one at the time of the project's inception in Mexico. It is hard to say in retrospective, but it would definitively be a huge mistake in the present time. We will get back to this issue later.

Considering the narrowed definition explained above my overall rating of Stakeholder participation in project design is Highly Satisfactory.

3.1.4 Replication approach

A number of experiences coming out of the project are being replicated at this moment and, as per the information received, some will even be scaled up for application at a regional scale in a new GEF project on biosafety through the World Bank as the Implementing Agency. During the initial stages of the review of the project (before its approval) it was discussed whether it should incorporate a regional component (i.e. replication at a regional level), a recommendation was put forward not to incorporate such component.

However, reality went over the scope originally envisioned for the project, the regional demand eventually found a way to also benefit from this project and replication began taking place during this phase of implementation.

The nature of the proposed activities also enabled replicability, in fact, in the near future a number of requests have been made to the project executants asking to replicate activities, share the experience and lessons learned from the project. (for example training schemes and materials or information and data management software and systems requested to SEMARNAT, CONABIO and SAGARPA).

My overall rate for the Replication approach is Highly Satisfactory

3.2 Project Implementation

3.2.1 Implementation Approach

Documents show that the logical framework (with all its components) was indeed the prime management tool used for guiding implementation and measurement of achievement. Its actual use was limited to UNDP and the Project Coordination Unit. As per the interviews, other project executants used it at the beginning but not later during implementation. So in fact, the people with the higher burden of responsibility over the appropriate flow of the project (i.e. Project Coordination Unit and UNDP) were the ones who actually used the logical framework. The original logical framework was changed once to better reflect the actual objectives and expected results when the project was approved. Updates followed but no major changes were introduced. The Project Coordination Unit with UNDP kept track of project progress as per the framework and reminded project executants of the commitments.

As per the documents read and the information given to me during the interviews, at early stages of the implementation of the project the group met regularly in plenary sessions to discuss work plans, timetables, budget and even the need to introduce changes in the pre-established arrangements in order to enhance implementation. The frequency of the plenary meetings spaced wider as the project continued, however the Project Coordination Unit routinely kept contact with all executants through electronic means, telephone or holding bilateral encounters. Also, whenever any of the parties involved requested the input of the others, electronic chats were set up or meetings took place to support each other and collectively meet the set objectives.

This project considered the use of electronic information technologies as part of proposed activities. Indeed both CONABIO and SAGARPA engaged in major activities to enhance the overall capacity on data and information management. The project intended to increment baseline capacities by upgrading databases in CONABIO and SAGARPA to provide useful and accessible information.

An Information System on Modified Living Organisms was developed within the framework of this project. The Information System contains genetic and ecological information on genetically

modified species and their close relations, both wild and cultivated, as well as geographic information on their distribution in the country.
This SIOVM or Information System on Transgenic Organisms was developed by CONABIO. Another effort that had to do with electronic information technologies was the development of a directory of experts within the framework of the project.

These endeavours were thought to allow co-ordination and exchange of information to be promoted between the organizations involved in developing risk analysis, management and monitoring of Living Modified Organisms in the country. To achieve these objectives it was necessary to organise a network of experts, classified by subject areas, who could also act as advisers on the different matters concerning liberating LMO's to the environment (into the wild) in Mexico.

With GEF support, accumulated data generated on LMO over more than the past decade in the Plant Health office in SAGARPA (12 years of hand-written requests and responses) were for the first time captured properly and incorporated into databases.

The project foresaw that existing databases in CONABIO on the spatial distribution of crops could be enhanced through additional genetic and ecological information on cultivated species, transgenic crops and their wild relatives, enabling a greater monitoring capacity over the short, medium and long-term effects of LMO introduction. Therefore the project visualized the development of an inter-institutional transgenic database system that could enable all governmental entities to share seamlessly and with flawless connectivity all information in real time. Also, the project envisioned that at the end all of the existent information in these databases will feed into the Biosafety Clearing House Mechanism foreseen in the Protocol and the CDB.

After reviewing the documentation and taking into consideration not just the information but even the specific responses of the interviewees as per the management of the project during its implementation, my rate in the matter is Highly Satisfactory

3.2.2 Monitoring and Evaluation

As said before, the Project Coordination Unit together with the UNDP regularly conducted reviews of the activities and used the logical framework as the main means for Monitoring and Evaluation (M&E). Besides it, as per the documents reviewed several internal evaluations took place during the implementation period of the project. An Independent Evaluation was scheduled for February 2004, a Terminal Evaluation and Project review for April 2005 and took place a little later in May-June 2005 (conducted by Tomme Rozanne Young of IUCN's Environmental Law Centre in Berlin plus a person from GEF- Washington) and this Final Evaluation Report originally scheduled for June 2005.

The audits conducted at the end of each year produced certain observations that were dealt with in the following year.

It is my opinion, deducting from interviews and documents that the activities proceeded according to plan. My rate of the Monitoring and Evaluation effort of the project is Satisfactory, no more than that due to the selection of the indicators and the means to measure their progress and also for the need to involve all stakeholders in the M&E efforts rather than being an activity conducted primarily by the UNDP and the Project Coordination Unit.

3.2.3 Stakeholder participation

There are two levels of analysis when it comes to assessing the stakeholder participation in project implementation. The first level is the one the project established a narrow definition of stakeholder, including only the GEF and UNDP plus the different entities of the Government of Mexico participating in the project and that indeed stem from varied disciplinary trenches. The project states that it is a multisectorial project, I disagree, it is a project for the public sector exclusively but indeed the governmental entities that take part represent entirely different approaches. In this level the participation of the stakeholders in the implementation was significant, crucial in fact, and accounts for the results and success of the project. The so called stakeholders were in fact the key stone elements of the project's implementation.

The sharing of information according to the responses obtained in the different interviews was quite open, truly a process that flowed. Without their involvement and commitment, neither the CIBIOGEM nor the Project Coordination Unit alone would have been able to fulfil the commitments of the project.

Project information enabled some awareness rising outside the governmental entities taking part in implementation, but it was not meant to be information for awareness rising as such, rather, to foster institutional and technical capacity building, which the project concentrated on.

Information gathered and generated as part of the project was shared, to strengthen or enhance, the progress of each of the entities in a, steadily growing, common understanding of the intricacies of biosafety in a country like ours. Also, this information served the purpose of reaching other members of society (other stakeholders, in an open definition of the term) like congress representatives of different political parties, members of the academia and independent consultants while discussing the eventually approved biosafety Law. Besides them, the personnel of governmental entities, of research institutions, of social organizations and of NGO's taking part in the training schemes the project organized, benefited from the gathering and generation of information from the project.

The second level is a more open one in which we accredit the claim from the NGO's and grass roots organizations as authentic stakeholders in this issue. But not just these types of organizations ought to be recognized as stakeholders, the Industries and companies, the academia, the media, the political parties, congress representatives, and the consumers are also other sectors that must be considered as interested parties.

Seen through this lens the project failed to properly involve all the sectors of society that might or should have a saying in biosafety issues. Some of them were indeed considered in the training courses offered, and also when certain products were launched or made public, however, the participation of sectors different from the public sector, GEF and the UNDP, was indeed limited in this phase of the project.

NGO's claim that they were not properly taken into consideration; that they are invited just at the end of the process, to learn about certain things once they were completed or have been pre-arranged by the government with the multinational companies; that they never got the same information the governmental entities shared; that some entities hide information on purpose. They also claim that perhaps the efforts under this project are skewed towards promotion of biotechnology rather than on building capacity on biosafety. In contrast, the claim of the Industries or companies, shared by some of the executant entities, however, is that environmental NGO's disclose any sort of information to the media regardless of their sensitive nature.

Again, as said, neither one of the claims has to be taken literally nor taken at it's face value, for perceptions, attitudes and interests always taint radical positions, particularly in a topic as controversial and poorly known and understood as Biosafety. Nevertheless, and moreover precisely due to the "hot" nature of the topic, the project would have benefited from the perspectives in Biosafety of other sectors.

Even if the decision at the design stage was not to involve them in such an early time, they should have been requested to gradually become involved. Getting different sectors of society to interact at an equivalent level is not an easy task, and any one of us that has had some experience on this, can narrate the difficulties and bitter episodes that come with it.

Although it may sound contradictory, in my opinion the strength of the approach adopted by the project in this arena can also be read as the most relevant weakness. I am talking about the strategic decision of limiting the definition of who the stakeholders in this phase of the project ought to be

Read as the strength of the approach adopted by the project, the decision translated into being able to bring to the same table, members of different governmental entities and to facilitate their reaching common ground and even understanding.

Leaving aside the participation of GEF and UNDP representatives, this limited group shared from the onset their belonging to the Federal Government, hence the responsibility to produce certain

results and meet certain expectations (in relation to fulfilling the nation's commitments to the Cartagena Protocol). This fact forced them to erase momentarily discrepancies in perception and to set aside their respective interests and agendas around the topic to concentrate in reaching understanding and making progress together. That is in fact the most powerful element the project brought about. Sometimes perhaps the concurrency was only at the minimal common denominator, particularly when the level rose from the technical staff to the politicians at higher levels in the ministerial structure, but still, that meant progress in building a unified governmental approach.

In fact, due to this approach the governmental entities involved in this project will continue collaborating in all their activities around the Biosafety agenda for they have experienced the benefits of working together. All representatives of the agencies and entities interviewed openly recognized this fact.

Perhaps, as mentioned before, if the invitation had been entirely open, to all sectors of society, at such an early stage in the project and considering the heterogeneity, still present, in the levels of understanding, knowledge, information and commitment around a complex issue like Biosafety, the project would have simply failed not having been able to make much progress while trying to convince different sectors to even agree on a shared diagnosis and a statement of prioritary needs.

In contrast the same decision can be seen as the major weakness of the approach adopted by the project in the arena of stakeholder participation, for it definitively limited the possibility of involving more sectors that eventually need to take an active role in delineating the country's positions on the Biosafety agenda.

The Government of Mexico as the main beneficiary of this project was instrumental in its conduction, providing financial and in-kind support for the project through the different agencies that participated.

Besides the enhanced interaction between governmental entities at the technical level, and the constructive relationship established with UNDP and GEF, some other interesting partnerships and

collaborative relationships developed as direct results of the project, to mention just few, technical staff of the governmental entities that participated in this project created working groups, formal and informal (like the so called B-8) to continue sharing information and eventually doing other interventions (position statements, specific analysis, etc.).

Perhaps other indication of these impacts are that Environmental NGO's have come together to discuss and work together on Biosafety matters, and that some progress has been made in the interaction between governmental entities and the Bio-tech Industries. The latter can be said given that technicians of seed producing companies in Mexico now regularly share and exchange some information with members of the governmental entities involved in Biosafety matters. At least this is a beginning, the problem persists, for not all the technical information that either party would like to see freely exchanged is actually shared. One can hope and foresee that these collaborative relationships will expand and grow stronger now that the project has produced results.

Other examples worth highlighting are:

a) BioSelect, supplier of laboratory equipment, has lent equipment for the GEF-CIBIOGEM-UNAM course on Practical Biosafety aimed at decision makers and laboratory experts.
b) The company Monsanto Life Sciences has donated laboratory materials which were used during the works of the regional courses on Biosafety and GMO´s.
c) The International Life Sciences Institute (ILSI), institution that develops research and training activities on health care and the environment, as well as AgroBIO México have provided surveys related to the perception of transgenic products.

Due to all the aforementioned, my rating of the Stakeholder participation in project implementation is two fold. At the first level of analysis is highly satisfactory. At the second level of analysis is unsatisfactory as explained before.

3.2.4 Financial Planning

The limited financial information analyzed in this evaluation, given the fact that all previous financial audits praised the way the project was managed in this regard, enabled me to at least

comment on three issues: the cost effectiveness of achievements, planning disbursement and co-financing.

In terms of the cost effectiveness of the project my perception after reviewing budgets and actual expenditures, tailor made spreadsheets plus the auditors' reports, is that the costs of activities is reasonable, even on the lower end of the range of costs for equivalent activities organized by other organizations used as comparison references. For example, holding a training workshop implied spending roughly on average $30,800 USD. An equivalent session as per UICN standards (for the Mesoamerican area, i.e. including Mexico) implies spending between $30,000 USD. to $40,000.USD. Hence, the actual expenditure in this project is, benchmarking-wise within the acceptable limits.

In terms of the disbursement planning, the unforeseen variation or need for adjustment between items-concepts or accounts in 2005 seemed too large. For the 6 activities in logical framework (including the costs associated to the Project Coordination) 18 out of the 23 budgetary items (over 78%) required adjustments in this last year. The differences between the original budget and the actual expenditure figure went from as little as less than $150 USD to nearly $90,000 USD.
The need to make all these final adjustments to the budget reflects a more flexible use of funds in the first years of the project.

By the end of 2004 76% of all the budget had to be spent according to the original previsions, however, only 68% of the budget allocated for 2004 was spent and the 32% remaining were transferred to 2005. This change had to do with a mandatory revision that modified the allotted batch for the year. All transferences are explained and justifiable and all expenses correspond to items included in the budget and to activities foreseen in the work plan and logical framework, however, a more careful budgeting (disbursement planning) or perhaps a tighter control along the life of the project would have helped to prevent the large variation in the final adjustments.

In terms of the co-financing it is fair to say that the expenditures of the governmental entities taking part in the project went even above the foreseen estimates. This was not the case however with regards to the anticipated financing of other entities. This is the case of the offered

contribution of the World Wildlife Fund to undertake an awareness campaign, a public participation survey and other related activities. The WWF in Mexico underwent several structural changes during the period and simply the original offer was not honoured, it was in fact completely forgotten, to some extent also because CIBIOGEM did not follow up, lost contact with WWF in fact.

GEF was requested to provide $1.461 M USD as agreed full cost funding, or 23% of the project cost. The actual figure varied slightly to become $1,466 M USD.

The rationale behind the incremental cost concept operated nicely in this project, for the activities foreseen and the interaction and working relationships that this project brought about would have not occurred had there not been the additional GEF funding.

As per the yearly audit reports and the information gathered, even though UNDP has its unique book keeping scheme (ATLAS) that can not be compared to the traditional practices in our country, the controls and procedures are strong, efficient, reliable and trustworthy. Once in ATLAS the bookkeeping information can be accessed by UNDP offices worldwide thus bringing about an additional benefit of sharing practices and lessons.

3.2.5 Execution and implementation modalities

By virtue of the institutional arrangements foreseen in the project, of having UNDP as the implementing agency (for GEF Funds) and creating a Project Co-ordination Unit whose joint responsibility was the smooth implementation of the project, with all it entails, and not depending from CIBIOGEM, the project achieved its goals in a timely fashion.

The project document established that UNDP was responsible, as the implementing agency, of the timely provision of the GEF financial resources, the project operated under the strict regulations and procedures of UNDP as per the corresponding guidelines (NEX, i.e. for nationally executed projects). The equipment bought, for example, is properly inventoried and under the stewardship of the different agencies as UNDP procedures establish. The project was and is still closely and routinely supervised by a Programme Officer from the UNDP Mexico Office. In fact, during the

execution of this project the Programme Officer's position was occupied by 3 different people, however, this fact was transparent to the executing entities, meaning that the turnover was seamless and no turbulences of any sort were experimented. Besides this, the project has two Committees, a Directive Committee and an Executive Committee. The former presumably meeting every three months to follow up on the work plan and sanction the budgetary provisions. The latter presumably meeting twice a year, to sanction the overall progress of the project and decide on major adjustments. The fact is that neither one of the two bodies met with the planned regularity.

The Directive or Steering Committee met 4 times from June 2002 to September 2003, never again. Whereas the Executive Committee met just twice in December 2002 and in December 2003. Other high level meetings substituted perhaps during 2004, as did the meetings held between the executing agencies and the PCU and UNDP.

As per the information received by the interviewees and the documents resulting from the three audits conducted to the project in 2002, 2003 and 2004 the Project Co-ordination Unit was efficient in the financial or budgetary management of the project in close work with the UNDP. Accountability standards (those of UNDP as stated) were followed and no major problems were detected.

The only difficulty that all participants in the project were acquainted with had to do with a delay in the availability of GEF funds in 2005. Presumably the delay had to do with some red tape and missing deadlines (for request of un expended funds from 2004), regardless of the combination of circumstances that produced the delay, the impact of the delay in fund allocation on the project was buffered by the timely intervention of UNDP that offered some reimbursable resources to bridge the delay.

3.3 Results

3.3.1 Attainment of Outcomes/ Achievement of objectives

As said before one of the most important achievements of the projects was the process of project design and formulation for it promoted a wider dialogue and consensus between the different agencies that integrate the technical committee of CIBIOGEM, and helped to centre the federal government's priorities in relation to LMOs. This improved co-ordination and dialogue was a key aspect of the proposed capacity building activity with this GEF Project.

The lack of a comprehensive risk analysis methodology in the country created the need to incorporate in the project, from the beginning, the development of such a risk assessment methodology for both, the agricultural and the environmental sectors

One risk that the proposed project considered was the fragmentation of the institutional mandates and political cycles, as stated, this might make project implementation difficult. The truth is that regardless of this risk, that was detected as a baseline condition, currently, even though the fragmentation of governmental mandates is structurally still in place, the working relationships, information sharing schemes and routine communication between technical staff of SEMARNAT-INE, SAGARPA and CONABIO, at least, account for a rather coordinated, not fragmented, approach towards the challenges Biosafety imposes.

The baseline risk of a limited financial capacity of CIBIOGEM, that perhaps made all parties decide to follow a different path to execute the project, is still a reality, presumably even more serious than in the past due to poor decision making in the past few months.

Another element indicated in the baseline scenario was the following fact "the Industry advances continue to outpace government capacity to respond to biosafety challenges", this is undoubtedly still the case, but this condition is not endemic to Mexico, is taking place elsewhere also. However, the Companies representatives see in the recently approved (March 2005) Biosafety Law (in which this project was instrumental) a framework forcing them to cooperate with the governmental agencies and helping them in attaining a greater capacity.

The quantity and quality of information gathered relevant to biosafety and the effectiveness of the information base was undoubtedly strengthened through the project.

In fact, the information systems developed under the project by SAGARPA (ARIMLOGMs), SEMARNAT-INE (AROMA) and CONABIO (SIOVM and the Directory of Experts) are running and in use. Some have public open access through the web. The Directory of experts is hosted in the web page of CONABIO in fulfilment of the commitments under the Biosafety Clearing House (BCH).

The agencies increased their capacities in terms of managing information and data but the last goal of reaching a seamless connectivity between all agencies was not completed and postponed to a later stage. Presumably a lack of communication at a critical stage in the design of the fields of databases accounts for the difficulty in importing and exporting data from one agency's system to the other in a seamless fashion.

An example provided had to do with the listing of states where a certain wild relative is distributed, in one case (a given agency) all states are part of a single text field in the database whereas in the other (another agency) each state is a two digit catalogue field. This is indeed the only flaw one could easily point put of the project. Labelled as a flaw for it created great expectations that also followed the logic of the incremental cost funding, for the combination of the systems and information of SAGARPA, CONABIO and SEMARNAT-INE would have meant a quantum leap in terms of information management capacity, yet, rising to that level will still have to wait a little longer.

In general terms the project achieved its objectives and in fact managed to exceed the expectations of participants. Indeed there were activities that were not covered entirely as planned and gaps still present. However the project had additional results that derived from the planned activities. My overall rating of the project's attainment of outcomes or achievement of objectives is Highly Satisfactory.

As per information shared with UNDP this project becomes the first fully completed in Latin America.

3.3.2 Contribution to upgrading skills of the national staff

The project was thought to have a catalytic and consolidating effect on the national effort spearheaded by the CIBIOGEM. Without exception the interviewees agreed that our country is better suited today thanks, in part, to the structured (workshops and courses) and unstructured (meetings, chats, info exchange and discussions) capacity building efforts that this project brought about.

The figure of trainees attending the offered courses was greater then originally planned. The courses for personnel of government agencies include training for field technicians. Originally there was no course for biosafety managers of the Project, however a course was implemented with the cooperation of the National Autonomous University of Mexico (UNAM) and was carried out successfully. But the figure of people that actually warmed up a chair on a given workshop might not be as useful or convincing, as reading the final evaluations of the workshops. The lecturers can rest assured that they were heard, that people learned and that they did a good job, for they also were graded and ranked as per their performance.

3.3.3 Sustainability

The project began under the assumption that its success or the level of attainment of its objectives was hinging critically on the Mexican government's commitment towards implementation and ratification of the Cartagena Protocol on Biosafety. Mexico indeed ratified the Protocol and as recent as May 2005 a Press Release prior to the 2nd COP-MOP meeting held in Montreal in May-June 2005 made clear the interest of the Mexican Government to continue building the national capacity using the foundations laid by this project (SEMARNAT 2005).

This capacity-building project was designed as part of a longer-term national effort to consolidate the biosafety strategy and framework. Each of the proposed activities addresses gaps or barriers that have been identified during the project preparation process. Capacity building activities have

been designed to strengthen not only the capabilities of the Mexican entities that conform the technical branches of CIBIOGEM, the focal point to the Cartagena Protocol, but also of key federal line ministries, and awareness and decision-making support activities, although limited, aimed to ensure cross sector and cross government synergies.

It is precisely these entities the ones that would continue with the steps that follow. For example, these agencies have already outlined some of the following steps they foresee as needed to continue the path of building Mexico's capacity on Biosafety, among other things they mentioned the following: restructuring regulations, as they derive from the recently approved law, concluding the certification of the laboratories by the Mexican Certifying Entity (*Entidad Mexicana de Certificación*, EMA) and the International Genetic ID, launching the full fledged laboratories in due time, complying with the BCH and the Mexican Institute for Information Access (IFAI) on disclosing information to the general public, redefining procedures and protocols for field work, a pilot programme with other countries to train people on the use of the software developed, among other.

The Chinese have publicized widely the saying that if you want to see a man eat one day you ought to give him a fish, but if you are interested in seeing him eating on a regular basis, sustainably that is, in our current jargon, you must rather teach him to fish. The weight of training stands out quite clearly. The same rationale seems to be behind the selection of the interventions this project addresses. One can only hope that these first steps, these additional building blocks, will indeed have a long term effect on the sustainability of the Biosafety efforts in Mexico.

Regardless of the black clouds that darken the horizon given the flimsy and perhaps even unsustainable nature of CIBIOGEM, considering the fact that this Commission had not much to do with the actual pace, progress and achievements of the project, I am tempted to keep my rating of the project's attainment of outcomes or achievement of objectives as highly satisfactory and trust its evident resilience and have high hopes on its continuity regardless of the fate of CIBIOGEM.

4. Lessons learned

a) Even though over 300 people were trained, it's not enough; it is never enough due to the turnover of personnel in governmental agencies. Nevertheless training trainers and producing educational material and also conducting evaluations at the end of each workshop greatly increases the long term impact of the efforts.

b) A bitter lesson learned was that of acceding to a recommendation of a STAP review that suggested that all the Health Ministry considerations ought to be taken out. The Project Committee could have fought to keep them in and the project would have gained.

c) An obvious lesson one has to underline is that there is always more cooperation and understanding at the technical levels than at the political high spheres. It is lot easier to reach agreements on the "whats" than it is on the "hows".

d) Even though the National Focal point on Biosafety CIBIOGEM spelled in GEF terms eligibility, in fact it was better not to work through this Commission. The lesson one can derive from this is that if the body, entity or organization is too political, chances are it is not going to work at all, let alone as an executing agency. The capacities are elsewhere, not in the political body. Unfortunately the Commission is not working properly, it has structural problems, it is seen like a forum where the political agendas are not forgotten in favour of constructing a national vision, on the contrary, all interviewees say it is a political "hot potato" and that was never able to play its role.

e) Conducting regular evaluations and annual Auditing is a practice that should be taken as an example for it prevents problems and helps everyone involved.

f) As it often happens the process was more important and long lasting than the product. The mechanisms created to share information among government agencies involved in the project have

allowed that all share criteria, know their respective objectives, exchange information and have constituted working groups as a sound task force on the topic.

g) One can never be sufficiently neutral. There is always a sector that did not like your position. NGO's in this case felt the project promoted Biotechnology, the Biotechnology companies on the contrary felt the project was too biased against promoting biotechnology instead.

h) Everyone knows that involving all interested parties takes more time, and that taking some shortcuts bring more trouble and end up being more time consuming than walking the presumably longer path in the first place. We have already discussed this issue, we believe the lesson is that fostering a higher degree of public participation is a must; otherwise one gives room to misinterpretations such as the question on whether the project is promoting biotechnology or building capacity around biosafety. A legitimate concern indeed, but one that could have easily been dealt with in due time.

i) Another lesson learned that is at the time a best practice is the way in which a capacity building and training model was set up, one that has already benefited other countries in Central America. With the help of the Inter-American Institute of Agricultural Cooperation (IICA-Instituto Interamericano de Cooperación para la Agricultura) and the International Organization of Regional Farming and Animal Husbandry Health (OIRSA- Organismo Internacional Regional de Sanidad Agropecuaria), consultations started (in Costa Rica and El Salvador) and are related to the creation of the juridical framework presented as the Central American Regulation. Likewise, the government of Nicaragua needed the collaboration of the Mexican project to train and review the Technical Standard of LMO´s. As expressed by UNDP personnel the project offered ideas and practices to other offices in the region.

5. Recommendations

a) A book was produced as a result of this project, one that could serve several purposes linked with building capacity, the material is ready to be published hence I strongly recommend its immediate publication, an actual printing that can reach many interested parties both in Mexico and abroad, taking advantage of the momentum the project created..

b) When selecting indicators a "scale of performance" must also be developed in order to better measure progress in the different activities detailed in a logical framework. Without this precision, rating only allows for two options, the goal is either met or not met, whereas if a range of potential outcomes is established in advance and those that are satisfactory clearly recognized, then the rating is more accurate and fair. Any effort around strengthening the Monitoring and Evaluation procedures ought to be in line with the worldwide harmonisation that the UN as a whole is pursuing.

c) The discussion & working groups that CONABIO has already "tested" with members of the Academia and from Biotechnology Industries must incorporate members of other sectors of society, particularly indigenous groups and NGO's that are eager to participate, honestly, seriously on this topic.

d) I suggest that if Steering or Directive Committees and Executive Committees are formed they should meet regularly. There has to be consistency in the way minutes or acts are recorded and a standardized procedure for following up on the agreements reached during those meetings. Results of these meetings must reach the stakeholders or involved parties affected by such agreements in a timely fashion.

e) Periodic evaluations of the people that attend the courses and training schemes should be conducted to monitor their learning, hence the impact of the workshops, also to foster greater interest and eventually to detect the need for updating.

f) I strongly recommend the immediate link with Customs authorities and with their own SEMARNAT (PROFEPA actually) and SAGARPA-SENASICA personnel at points of entry.

g) In order to bridge the foreseeable hurdle of the lack of funds from CIBIOGEM, perhaps funds could be channelled through a Trust Fund, not the current FIBIO housed in CONACyT for this is linked to the secretariat of CIBIOGEM, but a rather new one.

h) The emphasis on exclusively agriculture must also be overcome for crucial items like aquaculture or animal health were left aside.

i) Bearing replicability and learning in mind, a serious effort ought to be made in order to compile and document the "know how", or the "how they did it" experiences of this project.

j) The Mexican Government should respond responsibly to this initial support and honour its declared interest of strengthening the country's capacity around the Biosafety Agenda. It is only political will what fosters the design and implementation of policies, and what allocates resources to continue the path that this project started.

6. Annexes

Annex 1. List of Interviewees and Organisations
Annex 2. List of Documents
Annex 3. Logical Framework
Annex 4. GEF Alternative Course of Action

6. ANNEXES

ANNEX NO. 1
DOCUMENTS REVIEWED // DOCUMENTOS REVISADOS

A) Minutas y actas// Minutes & proceedings

1. Minuta de la primera reunión del Comité Directivo del Proyecto de Bioseguridad GEF-CIBIOGEM (19-06-02)
2. Acta de la segunda reunión del Comité Directivo del Proyecto de Bioseguridad GEF-CIBIOGEM (06-09-02)
3. Tercera reunión de Comité Directivo del Proyecto de Bioseguridad GEF-CIBIOGEM (05-03-03)
4. Acta Cuarta reunión de Comité Directivo. Proyecto de Bioseguridad GEF-CIBIOGEM (23-09-03)
5. Primera reunión del Steering Committee del proyecto GEF-UNEP de Bioseguridad en México. MEX/01/G32 (17-12-02)
6. Segunda reunión del Steering Committee del proyecto GEF-UNEP de Bioseguridad en México. MEX/01/G32 (11-12-03)
7. Reunión de participantes del proyecto GEF-CIBIOGEM México (29-01-03)
8. Reunión de participantes del proyecto GEF-CIBIOGEM México (13-03-03)
9. Reunión interna de participantes del proyecto GEF-CIBIOGEM (00013572) (10-06-04)
10. Reunión de secretarios de CIBIOGEM (18-10-04) Presentación de avances del proyecto "Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena"
11. Reunión con Sr. T Lemarisquier y Sra. R. Santizo. PNUD (21-07-03), proyecto de seguridad GEF-CIBIOGEM MEX/01/G32
12. Minuta reunión de seguimiento del proyecto GEF-CIBIOGEM (01-06-05)
13. Minuta reunión de seguimiento del proyecto GEF-CIBIOGEM (22-07-05)

B) Informes De Actividades // Reports of Activities

1. Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena (05-03-04) Enero a Marzo 2004
2. Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena (05-07-04) Abril a Junio 2004
3. Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena (05-10-04) Julio a Septiembre 2004
4. Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena (05-01-05) Octubre a Diciembre 2004
5. Fortalecimiento de la capacidad nacional para la implementación del protocolo de Cartagena (04-04-05) Enero a Marzo 2005
6. Addendum al documento de proyecto México: Fortalecimiento de la capacidad para la instrumentación del Protocolo de Cartagena sobre la Bioseguridad en México.

C) Auditorías// Audit Reports

1. Auditoría al 31 de diciembre del 2002 del proyecto : MEX /01/G32 "Bioseguridad".

2. Auditoría al 31 de diciembre del 2003 del proyecto : MEX /01/G32 "Bioseguridad
3. Auditoría al 31 de diciembre del 2004 del proyecto : MEX /01/G32 "Bioseguridad

C) Talleres, Cursos Y Evaluaciones Relacionadas //
Workshops, Courses And Related Evaluations

1. Evaluación de los cursos de capacitación sobre bioseguridad y organismos genéticamente modificados. Del 4 de diciembre del 2002 al 27 de noviembre del 2003 (SAGARPA-SEMARNAT)
2. Taller sobre bioseguridad. Mérida, Yucatán, 15 y 16 de diciembre del 2003 (SAGARPA-SEMARNAT)
3. Taller sobre bioseguridad. Mérida, Yucatán, 17 y 18 de diciembre del 2003 (SAGARPA-SEMARNAT)
4. Taller internacional sobre responsabilidad y compensación en materia de bioseguridad. Ciudad de México, 23 a 25 de febrero del 2005. PNUD, Fondo para el Medio Ambiente Mundial.
5. Curso de capacitación técnica sobre bioseguridad y organismos genéticamente modificados. Campeche, Camp., 29 al 30 de noviembre del 2004 (SEP)
6. Segundo curso de capacitación técnica sobre bioseguridad y organismos genéticamente modificados, del 7 al 10 de abril del 2003, Villahermosa, Tabasco.

E) Informes De Gastos // Expenses Reports

1. Oficio n°BOO.01.03.02.01 1681 de la SAGARPA (24 de febrero del 2003) al Ing. Fernando Ortíz Monasterio, Secretario Ejecutivo de la CIBIOGEM
2. Oficio n° BOO.04.00.02.01 01761 de la SAGARPA (22 de octubre del 2003) al Dr. Agustín López Herrera, Coordinador del proyecto GEF
3. Oficio n° BOO.04.00.02.01 2895 de la SAGARPA (17 de junio del 2004) al Dr. Agustín López Herrera, Coordinador del proyecto GEF
4. Oficio n° BOO.04.00.02.01 2894 de la SAGARPA (17 de junio del 2004) al Dr. Agustín López Herrera, Coordinador del proyecto GEF
5. Lista de gastos efectuados por el INE, 2003
6. Lista de gastos efectuados por SEMARNAT-INE, 2004
7. Actividades y Presupuesto CONABIO año 2003
8. Aportación Nacional al Proyecto GEF, Aportación CONABIO 2004

9.- Presupuesto por actividades (Excel) Producido ex profeso Agosto 2005
10.- Desglose Gastos por Curso (Excel) Producido ex profeso Agosto 2005

F) Marco Lógico // Logical Framework

1. Marco lógico de proyectos (PNUD México) (31-07-02)
2. Marco lógico de proyectos (PNUD México) (31-10-03)
3. Marco lógico de proyectos (PNUD México) (31-12-04)

G) Otros Documentos // Other Documents

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2. Productos transgénicos e información en etiquetas. 7 al 13 de noviembre del 2000. Conocimiento y reacción emocional a términos biológicos.
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4. Ryan Villalba, Eric. (sin fecha) Subsistence farmers. Perception on biotechnology and its preferences on agricultural biodiversity of milpas in México., INE-UNDP
5. Comisión para la Cooperación Ambiental. 2004 Maíz y biodiversidad. Efectos del maíz transgénico en México. Conclusiones y recomendaciones. Informe del secretariado de la Comisión para la Cooperación Ambiental.
6. Miguel García, Mateo. 2005 Organismos genéticamente modificados (1ª parte), reporte especial de la revista "Consumidor", Agosto del 2005. pp 54-63
7. S. Ortíz García, E. Ezcurra, et. al. 2005 Absence of detectable transgenes in local landraces of maize in Oaxaca, México (2003-2004). 6p. En PNAS Early Edition www.pnas.org/cgi/doi/10.1073/pnas.0503356102
8. La CIBIOGEM en fechas. www.greenpeace.org.mx
9. Requisitos de documentación para organismos vivos modificados para alimentación, forraje o para procesamiento OVM/AFP. Documento trilateral. Octubre 2003
10. SEMARNAT Comunicado de prensa Núm. 111/05 México, D. F., a 25 de mayo de 2005: MEXICO APOYARA LA CONTINUIDAD DE LAS INICIATIVAS DEL PROTOCOLO DE CARTAGENA

H) Folletería// Brochures

1. Folleto: “Análisis del riesgo por liberar un organismo modificado genéticamente en el ambiente. INE
2. Folleto: Mexico working for biodiversity and human health. GEF, PNUD, CIBIOGEM
3. Folleto: Inauguración del laboratorio de detección de organismos genéticamente modificados de uso agrícola. SAGARPA, PNUD, SENASICA
4. Folleto: Cómo conservar nuestro maíz criollo. SEMARNAT

ANNEX NO. 2

Interviewees // Personas Entrevistadas:

1. Acevedo Gasman, Dra. Francisca
2. Colín, Lic. María
3. Cotero García, Ing. Marco Antonio
4. Covantes Torres, Liza
5. De la Fuente, Ing. Juan Manuel
6. Ezcurra Real De Azua, Dr. Exequiel
7. Fernández Bremauntz, Dr. Adrián
8. Lamas Figueroa, Ing. Andrea
9. López Herrera, Dr. Agustín
10. Marielle, Ing. Catherine
11. Montes, Lic. Luisa
12. Ortiz García, Dra. Sol
13. Ortiz Monasterio, Ing. Fernando
14. Ryan, Dr. Jonathan
15. Sordo Veraza, Ing. Alonso
16. Trujillo, Omar Gerardo
17. Villalobos Arámbula, Dr. Víctor Manuel

Charlas que no alcanzaron a ser entrevistas con:
Chats that did not reach the "interview" level, held with:
(Guzman, Fis. Ana Luisa)
(Pineda, Perla)
(Robert Diaz, Dr. Manuel)
(Soberon Mainero, Dr. Jorge)

Organisations // Organizaciones:

1. Unidad GEF-PNUD de la SEMARNAT
2. Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimenticia SENASICA-SAGARPA
3. Secretaria de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación SAGARPA
4. Proyecto PNUD-CIBIOGEM
5. Programa de las Naciones Unidas para el Desarrollo, PNUD
6. Monsanto
7. Instituto Nacional de Ecología, SEMARNAT
8. Grupo de Estudios Ambientales, GEA
9. Greenpeace México
10. Ex-SEMARNAT
11. Ex-INE-SEMARNAT
12. Ex-Greenpeace México
13. Ex-CIBIOGEM
14. Consejo Nacional de Ciencia y Tecnología, CONACyT
15. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, CONABIO

ANNEX NO. 3

PROJECT LOGICAL FRAMEWORK

Each of these five main components has intermediate outputs expected which will be reached by diverse activities carried out by the main participants of the project.

Component	Outputs	Success Indicators	Means of Verification
1. Risk assessment	1.1 Adequate scientific and technical level in the following areas of evaluation: • Site testing to identify risks of gene flow and seed exchange • potential impacts of gene flow under different conditions • risk of conservation and sustainable use of biodiversity effects on ecosystems of the introduction of living modified organisms • potential health impacts (Non GEF) • epidemiology genetics and toxicology (Non GEF) • processed food LMO's identification (Non GEF) 1.2 Standardised methodologies on risk assessment for biodiversity 1.3 Institutional manuals 1.4 Databases on cultivated species; genetic and ecological information on transgenic crops, transgenic species and their wild relatives; information on the spatial distribution on transgenic crops.	Government officials trained in Health (national effort), Environment and Agriculture by the end of the project. 24 experts trained on issues related to LMO commodities, molecular genetics and ecological risk assessment by the middle of year 2 35 technical support personnel trained on identification of LMO's, monitoring and evaluation of products, and system and database management At least 5 Site studies carried out in Agrobiodiversity hotspots per year, during the life of the project in order to backstop requests under the Advance Informed Agreement. Capacities for a regional training mechanism (national effort) created by the middle of year 2. Methodologies developed by the middle of year 2. Institutional Manuals developed by the middle of year 2 Databases developed by the end of year 2	Course participation certificates Site studies reports Technical progress reports Monitoring and evaluation reports Institutional manuals published and disseminated Databases operating and consulted
2. Risk management and monitoring	2.1 Risk management • Site testing • Molecular Biology Capacity Building • Molecular biology equipment in the local monitoring stations 2.2 Customs officials able to process requests	6 experts trained on molecular biology and risk management by the end of year 2 In situ monitoring and data management practices established by the middle of year 2 240 technical field support personnel	Course Participation certificates Methodologies adopted

Component	Outputs	Success Indicators	Means of Verification
		(SAGARPA,SEMARNAT and customs officials) trained on LMOs identification, field testing, risk management and monitoring of LMO´s introduction by the beginning of year 2	Monitoring and evaluation reports.
	2.3 Methodologies for molecular detection and tracking of LMOs will be developed		Databases operating
	2.4 Information capacity developed shared. • Biosafety Clearing House • Operational manuals • Databases	Standard methodologies for detection of LMOs available in order to share information among institutions by the end of year 2. Existing databases up-scaled to include the processing of data useful for tracking and monitoring LMO and a gap analysis used to evaluate distinct potentials for data management, by the end of year 2. Databases developed gathering the relevant characteristics of the landraces and native varieties possibly affected by transgenic crops by the end of year 2	Operational manuals available
3. Strengthening of the legal framework	3.1 National level consultations regarding the need and scope of a biosafety law and regulations	Legal framework reviewed and evaluated by the end of year 1	Consultant reports
	3.2 Targeted visits to identify and transfer know-how to Mexico on useful legal instruments for biosafety	Best practices identified, catalogued and summarised for applications in Mexico by the beginning of year 2	Consultant reports
	3.3.Experts group meetings on the need of diverse standards and regulations regarding biosafety.	Institutional gaps and overlaps identified; modifications suggested and promoted by the end of year 1	Experts group meetings acts/minutes
	3.4. Standards for food and feed and release of transgenic plants and micro-organisms developed.	Experience acquired through Advance Informed Agreement considered for standardised adoption among agencies by the beginning of year 3	Standards approved
	3.5. Environmental damages as related to introduced LMOs included into civil law	Evaluation of new requirements following the second year of project implementation	Consultant reports
		Lobbying carried out with legislators by the end of year two	Law Decrees
4. Public awareness program and communication strategies	4.1 Public information fora 4.2 Preparation of Basic Information on LMO risks and potential for recipients of official agriculture programs	Communication strategies at national level and in regional and sub-regional contexts developed by the end of year 1 and implemented during the project life.	Campaign plans Media spots, newsletter adds

Component	Outputs	Success Indicators	Means of Verification
	4.3 Stakeholder consultations for specific issue	Information included on official programs and disseminated by the beginning of year 2	Folders, signs.
	4.3. Information campaigns on media; radio newspapers, television and targeted material	Strategies developed to target core stakeholders for appropriate technical and scientific information by the middle of year 2.	Number of Web site users
	4.4. Web page developed.	Web page operating by the end of year 1.	
5. Administrative framework strengthening (lab equipment and database infrastructure)	5.1. Labs and monitoring stations strengthening with modern equipment	Equipment in operation by the end of year 1	Laboratories established and equipped
	5.2. Information sharing protocols developed between customs at ports of entry with central databases in CIBIOGEM, SAGARPA; Health and SEMARNAT.	Protocols, databases and Access®-based Information System on Transgenic Organisms operating by the end of year 2.	Software developed and system functioning
	5.3. Molecular detection techniques developed	Trained experts and technical personnel implementing molecular detection techniques by the middle of year 3.	M & E reports
	5.4. Fully comprehensive databases on national biodiversity, transgenic crops and wild relatives, including a module established in the biotic information system	Databases on biodiversity operating by the end of year 3	Database searches produced and available in biosafety focal point
	5.5. A roster of experts on every biological group	Feedback from experts on biological groups during the project life	Roster available on the web site.

ANNEX 4

GEF ALTERNATIVE COURSE OF ACTION

4.1. STRATEGY, OBJECTIVES, OUTPUTS, INDICATORS AND ACTIVITIES

1. The **Development Objective** of the project is: Mexico will be able to implement the basic objectives of the Cartagena Protocol, including the assessment, management and monitoring of the potential risks posed by transboundary movement of LMOs to the conservation and sustainable use of biodiversity, including human health risks

2. The **Immediate Objective** is: Within three years, the country will build sufficient capacity to assess and manage risks associated with the trans-boundary movement of LMOs through strengthening of the legal and regulatory frameworks, enhanced institutional capacity and effective communication strategies. Knowledge and methodologies on biosafety will be shared and transferred through the establishment of regional training programs based in Mexico.

3. The Strategy: The main activities of the project are focused on the identification, regulation and management of the risks derived from the trans-boundary release and utilization of LMOs, that might present adverse risks to the conservation and sustainable use of biological diversity, taking also in account potential risks to human health. This national approach to capacity building contemplates risk assessment and management, monitoring and evaluation, legal and regulatory reform/strengthening, broad social participation and a dissemination strategy in the context of the Advanced Informed Agreement. GEF is requested to participate in strategic elements of this approach over the medium-term horizon (3 years) that will permit the longer-term consolidation of the strategy. The GEF-financed portion of the project includes training and risk management components with technical support for information network design and implementation that will ensure sustainability and information exchange over the long-term. The project concentrates GEF funds in the areas of trans-boundary risk assessment and management as GOM considers these capacities to be of vital concern that must be developed prior to the implementation of a large-scale communication campaign. Consolidated capacities in these two areas will also help detect additional gaps in the legal framework and will help fine tune possible strategies for its modification. GEF support will have a catalytic and consolidating effect on the national effort spearheaded by the CIBIOGEM.

The activities and outcomes that are anticipated for each component are summarized below:

Output 1. Enhanced institutional capacity to carry out risk assessment
(GEF: US$ 745,010; COFIN: US$ 3,332,500)

4. The lack of the availability of science-based and local risk assessment knowledge is a critical barrier to the effective implementation of the Advanced Informed Agreement. CIBIOGEM and the expert staff of its Technical Committee would benefit from the preparation of manuals and standardized methodologies for the assessment of risks associated with the trans-boundary aspects of the CP, and especially those that may imperil the country's biodiversity and agro-biodiversity, in support of baseline conservation and sustainable use efforts. National training efforts in toxicology and epidemiology would continue for public health experts at CIBIOGEM and SSA with counterpart resources. Also with baseline resources, CINVESTAV is developing a research project to standardize analytic methods with SAGARPA and Customs to identify LMO presence in

processed foods. Agriculture's significant baseline capacity to carry out field tests and to manage experimental data would be strengthened through expert support and training courses to increment the response capacity to LMO challenges in specific site studies linked to the advance informed agreement. CONABIO's risk assessment capacity -of central importance to the CIBIOGEM framework- will be strengthened through enhanced capabilities for modeling exercises on probable impacts or risks related to the liberation of introduced LMOs. This enhanced capacity will be embodied in an Information System on Transgenic Organisms, supported under Output 5. As a megadiverse country and centre of origin of important commercial species, the modeling capacity will be complemented by a limited number of field studies on the effect of gene flow in maize landraces and squash and other cucurbitaceae, as well as other important commercial crops. The information and data generated from these studies and database scenarios will be extremely useful for the execution of the advanced informed agreement (AIA) and will provide Mexico with operational tools that will better conserve its biological and agro-biological diversity.

Output 2. National capacities enhanced in risk management and monitoring (GEF: US$ 327,760; COFIN: US$ 255,000)

5. GEF resources will be used specifically for training experts in molecular genetics to detect and track LMOs presented under the AIA. The capacity developed will increase Mexico's potential to monitor in-country movements of LMO and to help prevent their use as crop seeds in the case of commodity grains. Training for SAGARPA and SEMARNAT staff will include GEF support to develop field capacity to monitor possible gene flow between introduced LMOs and semi-domestic and wild relatives. More general training will be imparted for field technicians from these ministries on basic information regarding LMOs as most of these technicians have had no contact with biotechology products. This training will allow personnel to supervise the implementation of biosafety measures and over the medium term to identify potential gene flow, as well the effect on non-target species. Data on trans-boundary shipments of LMOs at points of entry would be registered, collected and validated by Customs through ad hoc methodologies designed with the help of GEF resources and the technical expertise of UNEP.

Output 3. Strengthening of the legal framework
(GEF: US$ 42,563; COFIN: US$ 226,970)

6. Co-financing resources would be used to carry out an in-depth evaluation of Mexico's current legal framework in the context of the CP and make recommendations for modifications. Intensive, short-term training with GOM funding on the issues and risks surrounding LMO would be made available to lawmakers including inter alia: labelling of transgenic foods, processing of commodity grains, the implementation of traceability (either molecular or documentary) within the Codex Alimentarius, and the possible benefits of a transboundary document control system. The establishment of LMO-free zones beyond those already proposed for country's protected areas (see above, section 7.3.1) would also be explored. Additional cross-sector charters and legal instruments would be explored to reinforce the operational capacity and mandate of CIBIOGEM while eliminating overlaps in the inter-agency framework. GEF funds will be used to complement this effort by supporting targeted country visits to identify and transfer know how to Mexico on useful legal instruments for biosafety, especially from other megadiversity countries. Environment's efforts to harmonise cross-sector legislation related to environmental risks and damages would be extended to the biosafety legal framework. The enhanced monitoring and evaluation capacity detailed above

would be used to assess the effectiveness of initial modifications in the legal and regulatory framework.

Output 4. Public awareness program and communication strategies
(GEF: US$ 28,375; COFIN: US$ 873,000)

7. Targeted information needs to be simple and reliable and should make best use of the different available media options under an overall strategy. Modest GEF resources would be used to design a targeted information campaign on potential risks and benefits of LMOs for small-holders in rural communities that participate in GOM's agricultural outreach and subsidy programs. This information would be reviewed during project implementation to take into account the results of capacity building efforts in outputs 1 and 2. WWF project funds will be used to compliment and enhance this strategy to ensure that a wider range of stakeholders are party to reliable information. The elements generated during the participatory process leading up to the integration of this proposal provide sufficient input to create a national proposal for biosafety education, designed for adoption in undergraduate and advanced degree programs. Replication efforts would ensure that lessons learned and scientific and technical innovations on biosafety efforts would be directly incorporated into the human resource preparation efforts over the mid- and long-term. CIBIOGEM as the National Focal Point for the CP, will develop a website to concentrate information and links to different databases in line ministries (Art. 19 of CP). Norms and guidelines, the abstracts of each risk evaluations, final decisions and reports of the procedure for the AIA (Art. 20) will also be included. This information will be at the disposal of the BCH and the focal points of the 26 countries with which Mexico has celebrated trade agreements in order to facilitate transboundary commerce. UNIDO and possibly OECD will be engaged to reinforce specific aspects of information packaging and use in the context of the Clearinghouse Mechanism.

Output 5. Institutional strengthening: laboratory equipment and database infrastructure and protocols
(GEF: US$ 317,440; COFIN: US$ 304,000)

8. GEF support will be used to increment baseline capacities by upgrading databases in Customs and SAGARPA to provide useful and accessible information on the control and monitoring of trans-boundary movements of LMOs. Existing laboratories in Agriculture, Environment and Health will be provided with specialized equipment and training to increase current capacities in identifying, monitoring and tracing LMO through molecular biology and molecular genetics in support of activities in Outputs 1 and 2. Co-financing will be used to develop the Biosafety Risk Management System in CONABIO, and to provide telecommunications equipment in support of the transgenic information system. With GEF support, accumulated data generated on LMO over the past decade in the Plant Health office in SAGARPA (12 years of hand-written requests and responses) and toxicology analyses that have been carried out by SSA will be classified, validated and made available in shared database format in support of Output 2. Existing databases in CONABIO on the spatial distribution of crops in will be enhanced through additional genetic and ecological information on cultivated species, transgenic crops and their wild relatives, enabling a greater monitoring capacity over the short, medium and long-term effects of LMO introduction. An inter-institutional transgenic database system will be developed and made operational with GEF support, with co-financing support for connectivity aspects. Finally all of the existent information in these databases will feed into the Biosafety Clearing House Mechanism.