

Terminal Evaluation

PIMS 4055

“Reducing and Preventing Land-based Pollution in the Rio de la Plata/Maritime Front through Implementation of the FrePlata Strategic Action Programme”

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ACRONYMS

ACUMAR	Authority of the Matanza-Riachuelo Basin (Argentina)
ADT	Trans boundary Diagnostic Analysis's
AI	FMAM - IW International waters (GEF)
ANP	National Harbors Administration (Uruguay)
APA	Environmental Protection Agency (Argentina)
APN	National Park Administration (Argentina)
APP	Public-Private Associations
Ar	Argentina
AySA	Water and Sanitation (Argentina)
APMC	Marine Coastal Protected Areas
BID	Interamerican Development Bank (IADB)
CABA	Autonomous City of Buenos Aires
CARP	River Plate Administrator Commission
CAL	Local Advisor Council (Uruguay)
CDC	Directive Commission of the Consortium CARP / CTMFM
CIC	Intergovernmental Coordinator Committee of the River Plate Basin
CIMA	Environmental Research Center U.N.L.P (Argentina)
CIU	Industries Chamber of Uruguay
CINs	National Intersectoral Committees
COFEMA	Federal Environmental Council (Argentina)
CTMFM	Technical Commission of the Maritime Front
DINAMA	Environmental National Direction - (Uruguay)
DINAGUA	Water National Direction (Uruguay)
DINARA	National Direction of Aquatic Resources (Uruguay)
DNH	National Direction of Hydrography (Uruguay)
Ecoplata	Sustainability of the integrated Uruguayan coastal zone management program
FMAM/GEF	Global Environment Fund
GAL	Local Assessor Group (Argentina)
GCBA	Government of the Buenos Aires City
SIG / GIS	Geographic Information System
GTA /	Technical Advisor Group (Binational)
GemStat:	Global Environment Monitoring System
HSL	Santa Lucia Wetlands - Uruguay
INA	Water and Environment National Institute - Argentina
INIDEP	National Fisheries Research and Development Institute - Argentina
LATU	Technological Lab of Uruguay
LF	Logical Framework of the Project
MGAP	Ministry of Breeding Agriculture and Fisheries (Uruguay)
ML/LF	Logical Framework of the Project.
MIZC	Coastal Zone Integrated Management
MVOTMA	Ministry of Housing, Territory and Environment (Uruguay)
OPDS	Sustainable Development Provincial Organism - Argentina
PAE/SAP	Strategic Action Plan
PAN	National Action Plan
P+L	Cleaner Production (CP)
PMI	Integrated Monitoring Program
PNA	Argentina Coastal Guard - Argentina
PNUD	United Nations Development Program
PyMES	Small and Medium Enterprises
PRODOC	FMAM 3519 Project Document
RIIGLO	Local Governments Information Exchange Network
RPFM	River Plate and Maritime Front
SAyDS	National Secretary of Environment and Sustainable Development Argentina
SIIB	Integrated Binational Information System
SHN	Naval Hydrography Service – Argentina
SAP	Strategic Action Plan
SIFAP	National Protected Areas System (Argentina)
SNAP	National Protected Areas System (Uruguay)
SOHMA	Army Oceanography, Hydrography and Meteorology Service (Uruguay)
UBA	University of Buenos Aires
UCMCI	Coastal Integrated managementUnidad de Coordinación de Manejo Costero Integrado de la Provincia de Buenos Aires
UNLP	National University of La Plata
UY	Uruguay

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Executive Summary

The PIMS 4055 project is the continuation of GEF FREPLATA (FMAM 613) project, carried out between May 1999 and December 2008, which was the first in the transboundary area of the River Plate and its maritime front. The main achievements thereof include: i) a survey of important information, which resulted in the generation of a transboundary diagnostic (ADT) and which concluded that control of land-based pollution in the coastal zone of the two countries is a priority. ii) the design of a joint Strategic Action Program (SAP) and the complementary National Programs of Action (NPA); and iii) also managed to form a binational ad hoc network of municipalities (RIIGLO) and bring together senior actors, including nine ministries, navy, coast guard, provincial authorities and the private sector.

In the post-completion stage of FREPLATA program, some institutional weaknesses were found in both countries and in the articulation between the business, academic and government sectors, to promote the implementation of the SAP. These aspects resulted in poor coordination in the implementation of environmental programs in the coastal areas, which were independently performed by different authorities, leaving the processes generated during FREPLATA, mostly unattended. Thus, there were difficulties for the operation of Technical Advisory Groups and for the RIIGLO, because as the result of not being institutionalized did not worked permanently.

Despite the efforts of the interventions made, the institutional weaknesses persist and the interministerial interaction instances within each country failed to become a platform for intersectional multidisciplinary dialogue to give integrative responses to transboundary issues. By the end of the FREPLATA project, the countries still not yet had a standardized monitoring system nor a binational integrated information system to track indicators of environmental quality in international waters, and to support public policies in transboundary waters.

The PIMS 4055 project try to solve the aforementioned problems, aiming at the long-term objective "to have safe water that is healthy for human health and recreational uses and development of aquatic biota "and to the general objective of "moving towards using sustainability of resource use and RPFM by SAP implementation concerning the reduction and prevention of pollution from land". The project pretended to achieve four outcomes: a) the implementation of institutional reforms, and strengthening capacities at national and binational level prior to address transboundary environmental problems. b) Build skills and tools to prevent and mitigate pollution, and fostering a greater collaboration between the public and private sectors, c) Implement a set of pilot activities that contribute to the reduction of priority pollutants. d) Establish a Program environmental Monitoring and Information System Binational to support decision makers and RPFM management.

This report aims at evaluating the implementation of PIMS 4055 and the results achieved considering the formulation and design stage, the implementation process and finally the progress of its achievements. In addition to the conclusions obtained after this process, some learned lessons are summarized and recommendations made in order to continue achieving the long-term goals.

The project is highly relevant in order to generate positive effects at global and national levels of various kinds, including health benefits of a high percentage of the populations of Argentina and Uruguay, and the conservation of biodiversity. The long-term goal of PIMS 4055 cannot be

achieved only with the executed stage; it is just a step in a path that countries should continue ongoing, to achieve productive development with environmental sustainability. The contributions made are particularly relevant considering the new challenges of large engineering constructions and the exploitation of hydrocarbons that are being evaluated to be implemented in coastal areas and in the transboundary area.

In the logic framework (LF), four indicators of purpose are presented to verify actions to achieve management criteria agreed and validated by both countries. In the final evaluation, according to the means of verification, no evidence was found of compliance with these goals and the parties attribute these results to changes in context situations that caused tensions at binational level, and led to postpone the objectives in transboundary waters, in order to prioritize project activities in coastal areas of national jurisdiction. Independent analysis of the implementation and on the achievements in each of the four results of this evaluation shows that the goals were not achieved in full satisfaction while certainly the Outcome 3 (pilot projects) is evaluated as the most successful. Regarding the scope of cross agreements between municipal, provincial, national and civil society, for the construction and operation of an artificial wetland in San Clemente, there is evidence that the project has played a substantive role as a catalyst and promoter of synergies. The project identified long-standing problems such as the ineffectiveness of the solid waste treatment plant, and helped to correct them prior to attempting the creation of the artificial wetland. Despite these important advances, the treatment plant was not built, failing to reach this project goal. In the pilots projects in the tanneries and dairy industry, successful results were achieved in the development of clean processes and good practices for the industry, which in case of being implemented would significantly reduce industrial waste discharges into the environment. Despite these results, the project failed to achieve expected goals stated in the LF, in terms of reduce pollution content in wastewater according the limits for tannery effluent established in the environmental regulations for the tannery sector in Uruguay (Outcome 3.4), nor to reduce significantly the volume of organic waste effluents from the dairy industry (Outcome 3.5). This should not be interpreted as a project failure but to an inconsistency in the LF indicators, which stated quantitative goals for reduction of pollutants of industrial effluents not consistent with the managed resources. Regarding the creation of a binational integrated information system, the evaluation results pointed out a highly unsatisfactory performance. The target could not be reached neither in the case of developing a binational monitoring system nor in the creation of an information system to support decision processes. The limited scope of the goals, and the reduced project performance, can be explained by changes in the status of execution context and some faults found in the coordination and management mechanisms, which did not have contingency plans nor corrective actions to address deviations identified by the tracking instruments.

Table 1. Summary of scores assigned to the Project

Global Evaluation Score for the Project 1	S²
Relevance	HS
Effectiveness	MU
Efficiency	MS
Conceptualization / Design:	MS

¹ This item includes a global score that it is explained in numeral 4 (Conclusions) and has been added in order to evaluate altogether the evaluation items.

² Rating categories: Highly Satisfactory (**HS**); Satisfactory (**S**), Moderately Satisfactory (**MS**), Moderately Unsatisfactory (**MU**), Unsatisfactory (**U**), Highly Unsatisfactory (**HI**).

Stakeholder involvement in the design:	MU
Implementation Approach:	MU
Monitoring and Evaluation (M & E):	S
The participation of stakeholders during implementation	MS
Progress in achieving outcomes and objectives	MU

Despite being inefficient in achieving the expected results in the PRODOC, the project generated significant positive externalities (Impacts & Catalytic Effects) that while unable to be quantified by the indicators designed in the LF, deserve to be mentioned. Some of these are:

1. Maintaining commitment to environmental issues and water quality RPMF on the agendas of both governments,
2. Strengthening the governance for addressing environmental issues in border areas by the inclusion of environmental authorities in the Directive Board of the project, along with the administering binational commission's authorities.
3. The beginning of the consolidation of a regional system of environmental innovation that articulates the academic, government and business sectors of both countries in order to promote their links to generate environmental value.
4. The exchange of environmental information and the adoption of agreed standards nationwide within both countries.
5. The contribution to the national research system in both countries for the development of disciplines related to geosciences and marine science
6. Strengthening local capacities. Some examples of these results are: a) Redesign of the information systems of the DINARA to facilitate the access to oceanographic data. b) Project support to the SOHMA to systematize historical oceanographic data. c) Improvement of SAYDS graphical interface of databases for a more friendly use and improved functionalities and ; d) Important contributions in capacity building, particularly to research groups in oceanography, hydrography and fluid mechanics engineering, in order to promote the tuning of international predictive models of sediments circulation according to the local ecosystem specificities.

The learned lessons points out in paying more attention to future initiatives in order to respond to the sectorial policies in which they are framed. There was a weak involvement of key stakeholders in the strategic political level with the project so that future actions must take care of developing specific communication policies addressed to them, in order to maintain project issues on their agendas. Another important aspect emerging from the learned lessons is the need of strengthening the mechanisms of project evaluation and monitoring by implementing efficient procedures for taking quick corrective actions when necessary or reinforce aspects that are proving effective.

The major contributions of the project resulted in the technology transfer component of the pilot projects in the coastal areas of both countries to introduce practices of CP as well as the contributions generated to the management of protected areas. In all cases, the project-coordinating role was crucial to generate synergies between the academia, government and business sector.

The learned lessons show the need to incorporate innovations in organizational models in future initiatives, in order to respond to sectorial policies in which these are framed. This should be complemented with innovations in organizational models, in order to respond to sectorial policies in which the projects are framed. The weak involvement of key actors during the execution of the

project, particularly at the political-strategic level, makes necessary to implement future actions and specific communication policies, to maintain the substantive issues of the project in the political agenda. Other lessons indicate the convenience of strengthening the political follow up of the project, and assure the implementation of corrective actions in case of deviations alerted by the monitoring system.

Tables 2 and 3 summarize the main attributes of the Project and rate their performance:

Table 1 Synoptic schema of the project.

Title <i>Reducing and Preventing Land-based Pollution in the Rio de la Plata/Maritime Front through Implementation of the FrePlata Strategic Action Programme</i>				
GEF Project ID	Project ID 3519		at endorsement (US\$)	at completion (US\$)
UNDP Project ID	PIMS 4055	GEF financing::	3,300,000	3,300,000
Countries:	Argentina and Uruguay	IA/EA own::		
Region:	Latin-American and Caribe	Government:	15,020,000	1,555,070
Area:	International Waters	Other:		
Operational Program:	IW SP - 2	Total Cofinancing	15,020,000	1,555,070
Executing Agency	SAyDS / MVOTMA	Total Project Cost:	18,320,000	4,855,070
Other partners involved:	CARP and CTMFM	Prodoc Signature (date project began):		November 2010
		Closing Date (Operative):	Proposed: November 2014	Real: December 2014

Tabl3 2 Rating Project Performance

Project Scoring Information			
1. Monitoring and Evaluation	<i>TE rating</i>	2. IA y EAIA & EA Execution:	<i>TE rating</i>
M&E design at entry	S	Quality of UNDP Implementation	S
M&E Plan Implementation	S	Quality of Execution - Executing Agency	MU
Overall quality of M&E	S	Overall quality of Implementation and Execution	MS
3. Assessment of Outcomes	<i>TE rating</i>	4. Sustainability	<i>TE rating</i>
Relevance	HS	Financial resources:	2
Effectiveness	MU	Socio-political:	2
Efficiency	MS	Institutional framework and governance:	3
Overall Project Outcome Rating	MS	Environmental:	4
		Overall rating on the likelihood of sustainability:	3

1. Introduction

1.1. *Evaluation Purpose*

The project terminal evaluation is performed in accordance with the guidelines, rules and procedures established by UNDP and GEF, as stated in the Guide to conduct final evaluations of UNDP financed by GEF (http://web.undp.org/evaluation/documents/guidance/GEF/GEFTE--Guide_SPA.pdf), and the terms of reference of the consultancy (Annex I). Aims to provide a review of progress of project implementation, identify potential problems in the design, review the achievements in the realization of their products, assess progress towards achieving the objective, and expected results of the project and lessons learned.

In this paper the fulfillment of the objectives and products obtained is evaluated in relation to the logical framework (LF) established in the project document (PRODOC), the detailed work plan and related documentation approved by the UNDP.

1.2. *Scope of the final evaluation*

The project terminal evaluation was conducted between October 27 and December 20, 2014 based on the terms of reference agreed and the approved work plan (Annex II). The evaluation has been performed considering that the main audience is the National Implementing Agencies (SAyDS and MVOTMA), UNDP (Uruguay and Argentina offices), the Binational Commissions (CARP and CTMFM), National Project Coordination Units and the actors involved, resulting that the recommendations may be implemented by anyone of these actors.

1.3. *Methodology*

The methodology for the terminal evaluation of the project includes:

- i) review and analysis of documents provided by UNDP offices and National Project Coordination Units (Annex 2);
- ii) interviews with key stakeholders of the pilot essays considered under outcome and,
- iii) personal interviews at UNDP, SAyDS, and MVOTMA with project implementers, local government representatives and other participants (Annex III).

The aforementioned conducted interviews were semi-structured, aimed at administrative, executive and strategic levels, in accordance with the UNDP officials and with the national project management units. The questions were aimed to survey the state of the indicators defined in the LF of the Project as proposed means of verification in it (Annex IV). The interviews sought to evaluate compliance with the goals set at the stage of project formulation, and its approval. A list of documents and products provided by the Project Coordination Offices, and or obtained from the web or through the actors interviewed, were also revised (Annex V).

The terminal evaluation aims to conduct a comprehensive analysis of the project and its results, considering the criteria of relevance, effectiveness, efficiency, impact, sustainability and identify strengths and weaknesses in the process of achieving the goal set in the PRODOC.

In Annex VI an evaluation matrix is presented with the surveyed aspects and the questions asked in interviews

The questions are framed within the following topics:

- Institutional dimension: Levels of consensus achieved in the management of the project and about the institutional arrangements needed for the implementation of the SAP and the conditions for the binational coordination.
- Pollution: local, national and binational capabilities and tools to prevent and control pollution. Degree of implementation and effectiveness of the pilot projects, recommendations for its replication and / or for being supplemented by existing experiences in both countries. Participation of SMEs in the process of Cleaner Production (CP).
- Actors: Perceptions of key stakeholders on progress in pollution control and financial sustainability modalities for monitoring, evaluation and the Binational Integrated Management Information System.
- Best practices and lessons learned: Assessment of the institutional arrangements, specific activities in the field of CP and Public-Private Partnerships (PPP).

1.4. Structure and evaluation strategy

In the administrative subsystem, the financial and accounting responsible of the project were interviewed in order to collect information on the budget and on the economic structure defined in the PRODOC, and the resulting at the end of the execution. The costs projected by outcome are analyzed, and their evolution along the program execution according to the provisions in the PRODOC, and for the defined activities in the LF.

The annual and cumulative operational execution and implementation of the counterpart funds committed to the project are analyzed. The UNDP implementation offices responsible were interviewed in order to obtain information about the structure of monitoring system and their outcomes (Project Implementation Reports, semiannual monitoring reports, annual work plans, resource management, etc.).

In the operative-executive subsystem, the coordinators of each outcome and their national counterparts were met to discuss the achievements, the impact thereof, the transfer capacity of outcomes to the countries, and barriers identified during the implementation stage. At the political-strategic level, the analysis sought to determine the project capacity for being appropriated by the environmental authorities of the countries and by other governments and departmental or provincial agencies. The role of the Binational Commissions and their ability to drive changes and directives resulting of the project outcomes and to implement the needed strategies to make it sustainable was also evaluated.

In addition to field visits to project components in Buenos Aires and Montevideo, virtual interviews were made with the coordination of the UNDP (Panama and national offices in Uruguay and Argentina) to discuss strategies and adjust schedules and agendas.

2. The project and its development context.

2.1. *Start, project duration and stage of implementation*

The project agreement, between the governments of Uruguay and Argentina with UNDP, was signed in September 2009. The implementation began in November 2009, but the recruitment of the regional coordinator was in August 2010 and the inception workshop of the project was developed in November 2010. The executive team was finally consolidated in May 2011 with the appointment of national coordinators.

At the beginning of the commitment, it was estimated that the activities proposed in the project could be implemented in 48 months (four years from November 2009 - November 2013) but in practice, numerous changes in authorities and several problems in the internal management arrangements generated a delay in the execution of nearly a year.

It was established that the individual activities of each country would be implemented through UNDP offices in Uruguay and Argentina respectively, and regional activities through UNDP Uruguay. The executing agencies of the project were MVOTMA in Uruguay, and SAyDS in Argentina.

The planned total cost of the project was US \$ 18.020 million, of which US \$ 3 M corresponded to the GEF grant (US \$ 0,150M for project preparation through a PDFB, and US \$ 2.85 M for project implementation). The remaining \$ 15,020M corresponds to co-financing funds to be provided by the governments of Argentina and Uruguay. At the close of the project it was verified that the amount of executed co-financing was US \$ 1.55507 million representing just 10% of the committed amount in the PRODOC, including the contributions in cash and in kind, from both countries. The project donation resources (USD 3,300,000) committed in the PRODOC were fully executed, part corresponding to already executed funds at the stage of preparation (US\$ 150,000), part applied for administrative costs (USD 300,000) and the remaining \$ 2, 85 M, in the project development. The financial performance information and the contributions by country are presented in Annex 7.

2.2. *Problems that the project seeks to address*

The main problems affecting the River Plate described in the ADT were:

- i) large-scale nonpoint source discharges of nutrients;
- ii) pollution with heavy metals that accumulate in sediments from specific areas, and in the related water columns;
- iii) pollution of marine flora and fauna, including the contamination of edible fish (where evidence of heavy metals concentration was found), for bioaccumulation processes that eventually could be affecting human populations that consume them;
- iv) Pollution affects critical habitats and breeding of fish (which coincide with areas of accumulation of contaminated sediments);
- v) Weak or nonexistent adaptation processes to climate change, which among other things, could be causing flooding that would affect the riverside populations.

The pollution comes from the discharge of sewage from population centers (including the two largest cities in Argentina and Uruguay), industrial discharges (such as tanneries, agribusiness and

electroplating), intensive agricultural production, and the release of pollutants by the lift of dredging sediments.

The FREPLATA project made a diagnosis of water quality to state a baseline against to compare the efficiency and effectiveness of the environmental management actions; elaborated an initial legal and institutional mapping; and the beginning of binational interagency coordination process to deal with transboundary water problems. Despite these successfully reached milestones, the problems persisted due to the following causes:

- i) Institutional weaknesses in both countries make difficult to coordinate binational actions across sectors and to promote the private sector involvement (e.g., coastal programs are uncoordinated and fragmented as different authorities independently execute them).
- ii) Difficulties to deal with coordination processes generated during FREPALA, in spite of some instances of ministerial interaction in each country, these do not constitute a platform for inter-sectorial multidisciplinary dialogue to integrating cross-border problems (GTA and RIIGLO were not institutionalized and therefore were not permanent, except the CIN, of the OPDS).
- iii) the lack of compatible monitoring standards uniformed between organizations working in the environmental field;
- iv) lack of a permanent monitoring of common waters;
- v) Lack of an integrated decision support system, for obtaining technical inputs for political decision-making.

These weaknesses are very important, as it would require an effective and high-level coordination for binational responses to control pollution. There is also a need of strengthening of local authorities, who are still weak, in order to promote the involving of the private sector, generator of pollution, in the commitment with project objectives.

While there is a specific legislative framework in both countries for the treatment of sewage and industrial waste, its implementation has presented limitations, especially at the level of municipalities for their weaknesses to control and involve small and medium enterprises (SMEs) in the adoption of best practices and cleaner procedures for production.

2.3. Immediate and development objectives of the project

Longer-term objective defined in the SAP and the PRODOC: "Having safe water that is healthy for human health and recreational uses and development of aquatic biota"

General objective of the project: "Moving towards the sustainability of the uses and resources of the Rio de la Plata / Maritime Front through implementation of the Strategic Action Programme (SAP) concerning the reduction and prevention of pollution from land"

To achieve the overall objective, the project proposes four main outcomes:

- i. Implementation of institutional reforms and strengthening binational and national level, as proposed in the SAP, to address priority transboundary environmental problems.
- ii. Skills and tools to prevent and mitigate pollution promote greater collaboration between the public and private sectors, especially (provincial and municipal) locally
- iii. Implement a set of pilot activities that contribute to the reduction of priority pollutants.
- iv. Establish an Evaluation and Monitoring Program (M & E) and an information system to support decision makers and management of the RPMF.

Evaluation Results

2.4. *Design and Project Formulation*

The design was consistent with the objectives and appropriate to advance the implementation of the Strategic Action Plan (SAP). The LF, despite having some weaknesses identified in the mid-term review, was an appropriate instrument to monitor the project by providing information on the context, goals to achieve each result, baseline data, indicators, and means of verification thereof. While the effectiveness and efficiency of the project, should be assessed according to the scope of the goals established in the LF, it is noteworthy that during the implementation phase there were significant changes in the context situation that generated distortionary effects for this analysis. In particular, it is noted that:

1. Some tensions between the governments were verified along the execution of the project responding to differences regarding binational environmental issues related to the Uruguay river, particularly a conflict caused by the UPM (ex Botnia) cellulose production plant, which had led Argentina to denunciate the problem in the court of The Hague. This situation, despite the efforts made by the governments in confining the problems to the restricted area where there were originated, was not able to avoid indirect negative impacts in the management of environmental issues in all Binational Commissions. Because of these problems, the aspects related with transboundary pollution were avoided in the political agendas of the Binational Administrative Commissions, or at least were postponed.
2. The mentioned situation had repercussions on the planned outcomes in transboundary waters, particularly in relation to the development of the monitoring system and the integrated information system. The results of the interviews reported an implied agreement not formalized in the document, between each country to put emphasis on their own coastal zones and not in the binational-shared waters.
3. The reduction of the scope was not reflected in an amendment to the LF of the program, as was pointed out in the midterm evaluation, arguing that this procedure would have taken too long and it would have not justified a delay when the project was almost ended. However, the scope adjustment was not formally raised in the Steering Committee (SC) and was not documented in their records. The SC did not maintain a minimum frequency of meetings to ensure the transfer of implementing strategic directives to the operative level, nor to correct deviations in the scope of the objectives established in the PRODOC, this resulted in poor quality of execution. From May 2013 to November 2014 there were no meetings of the SC to follow the recommendations of the mid-term project evaluation (which was conducted in mid-2013) nor actions were performed to correct diversions marked by the monitoring and evaluation. This would also explain the difficulties presented in the process of recruiting a new regional coordinator, which was never materialized.
4. The weaknesses identified in the mid-term evaluation in relation to some aspects of the LF are shared in the terminal evaluation, despite considering that this do not invalidate its usefulness as an important instrument to monitor the project and evaluate its achievements.

The results of the terminal evaluation taking into account the previous considerations and from strictly assess the proposed goals based on the indicators of the LF matrix, are presented in Annex IV.

As result of the analysis, it can be concluded that the project failed in achieving several of the goals presented in the PRODOC, according to the scope originally envisaged in its LF. Project design had a management approach based on biogeographic criteria, so much so that the PRODOC clearly states that "GEF allocate resources strategically and incrementally in four main

areas that help to create a favorable environment for SAP implementation or that result highly catalytic:

- i) develop binational modalities for inter-jurisdictional cooperation and harmonization of standards and capacities for mitigation, prevention and control of pollution;
- ii) develop of innovative platforms to increase collaboration between public and private sectors and therefore compliance with the existing regulations established through approaches of Cleaner Production (CP) and Public Private Partnership (PPP) , to be receptive to specific requirements - such as municipalities and SMEs - which have great potential for replication and scaling to all industrial sectors;
- iii) a Binational Monitoring Program and a Binational Integrated Information System to provide management tools to support decision-making processes, planning and technical interventions and; a series of highly replicable pilot projects to be implemented in order to serve as pilot experiences of APP / P + L for the reduction of industrial pollution and new approaches to pollution abatement by wetlands systems. The three pilot projects have been selected so as to generate a spectrum of pilot experiences to reduce / prevent pollution from land-based point and diffuse ".

However, during the execution of the transboundary component, bilateral political criteria predominated over biogeographic ones. This was reflected in the failure to meet targets stated in the PRODOC, related to information exchange for transboundary environmental management; to design a binational monitoring system, and of an integrated information system. These outcomes, considered in the LF, relevant for preparing the implementation of actions identified in the SAP to achieve reduction and prevention of land-based pollution, were not achieved.

While a single project was developed in the design stage, because of administrative matters two documents were signed at the request of both countries; one with the Uruguayan government and one with the Argentine government. In practice, although in the first component transboundary outcomes were included, the regional coordination was weak, the same as the exchanges between national units, that showed to be tense with frictions and differences. This resulted in implementing the proposal as two separate projects, each focused in its own national jurisdiction zone.

According the results obtained and presented in Annex IV, evaluation scores are assigned for the following topics:

a) Relevance:

The question asked to assess this component is “How is the project related to the main objectives of the GEF focal area, and with the environmental and development priorities, at local, regional and national level?”

The project is relevant to the proposed objectives, although it seems insufficiently dimensioned for some outcomes proposed in the LF, particularly with the results of the quantitative indicators for pollutant reduction expected for Outcome 3. The project was from its formulation, aligned with the priorities of the GEF to address problems of transboundary water bodies, and to implement some actions identified in FREPLATA. In the interviews, all stakeholders recognized its importance and framing into the environmental priorities of both countries. The regional outreach as regards the management of border areas of the RPFM, and the high involvement of the environmental authorities for this purpose was highlighted by the actors as one of the project strengths. Assigned Rating: 2 (Relevant).

b) Effectiveness:

The question that guides this concept is to what degree has the project purpose been achieved?

In this regard, it is noteworthy that the project was not able to meet many of the proposed goals (Annex IV), mainly those related to transboundary areas. Assessment result: MU

c) Concept / Design:

The aim of the project was expected to be achieved through the implementation of four components:

1) Implementation of institutional reforms and strengthening binational capacities to address transboundary environmental problems. This component was well designed and provided for the establishment of intersectoral technical committees in each country to help SAP implementation. In addition, it sought to implement coordination mechanisms with other relevant GEF initiatives in the RPMF and its watershed.

2) Capacity building and tool design to prevent and mitigate pollution, and promoting greater collaboration between the public and private sectors especially at the municipal and provincial levels. This component sought to achieve unified management criteria and procedures including analytical, methodological and operational standards. The project also pretended to articulate inter-ministerial operational committees and promote locally public-private institutional arrangements as well as expand the RIIGLO strengthening capacities, and, standardizing processes to develop early warning system for harmful algal blooms at a binational level.

3) A set of pilot activities that contribute to a measurable decrease in pollutants concentration. These include the construction of an artificial wetland in San Clemente del Tuyu, Argentina, to reduce pollution by discharges of pathogens, nutrients and heavy metals by 50%. In addition, to adopt cleaner production systems in 10 companies in the tannery sector in Uruguay, and reduce by 80% discharges of chromium above the norm. These activities also sought to generate inputs for the establishment of environmental public policies for reducing coastal pollution.

4) An integrated monitoring system to support the decision making process in the RPMF. The outputs of this system were oriented to develop a sediment transport model. The expected outcomes also include the implementation of a monitoring system, and developing a bi-national integrated information system based on indicators for the GEF international waters. Binational agreements on water quality indicators at the national level and for transboundary waters of RPMF were also promoted as well as the development of a binational virtual node with operational information in the first two years of the project.

5) Monitoring and Evaluation Program (independent evaluations, dissemination of lessons learned, audits and technical reports).

These components are clearly related to the project objective, and were well evaluated by the GEF, in the selection process for funding. Despite this, the impacts expected for outcome 3, from the indicators included in the LF, are not consistent with the real dimension of the project nor with the available funds. TE score: MS

d) Involvement of stakeholders in the design:

The results of the terminal evaluation are consistent with the observations made in the mid-term review regarding with the high involvement of the countries according to the binational commitment to implement the Strategic Action Programme (SAP) proposed in the outcomes of FREPLATA and, as stated in the PRODOC. The Binational Commissions (CARP and CTMFM)

showed, at a political-strategic level, its commitment with the project and the need to strengthen the binational institutionalism to move towards the ultimate goal of environmental protection of the River Plate. However, weaknesses at the operational level of these organizations not foreseen during the design, made difficult and inefficient the monitoring and implementation of the objectives of the project related to transboundary waters. TE Rating: MI

e) Progress in achieving results and objectives:

Some aspects of the design, particularly the changes introduced in the governance of the project in relation to FREPLATA, resulting in the incorporation of environmental agencies of each country in the steering committee, generated some initial confusion in the perception of the role these institutions play. The PRODOC assigns to the binational administrative commissions (CTMFM and CARP) an assessor role while the environmental agencies (DINAMA and SAYS) shared the management responsibility

The Commissions agreed at the design stage the need for a binational monitoring program in transboundary waters, but did not state their requirements, nor the questions or issues it should meet to be useful for their tasks and strategic priorities. This and other aspects such as poor communication between the operative subsystem and the political-strategic one resulted in the fact that the project was not a major priority in the agendas of CTMFM or CARP, despite their commitments in binational waters and their protagonist role considered at the design stage.

The project had great sensitivity to changing political actors, particularly in Argentina where at the hierarchical level of the environmental agency there was high instability. This affected the implementation of the program as well as in the strategic orientation of the national coordination unit and in the regional coordination level. This situation resulted in the difficulty of coordinating the agendas of the SC, which had very few meetings, with more operative issues rather than strategic ones as can be inferred from the minutes of its meetings. The resolutions of the SC hardly reached the agendas of the binational commissions at an informative level, not as an input for their policies.

The above aspects show the loss of efficiency of the project for the management of transboundary resources because it is not enough with developing a monitoring system for the ecosystem, but the most important is political decision making, based on the inputs obtained from it. In this sense, the main customer of the Project are the organizations that conform its Steering Committee, because of their involvement with this task, but in spite of this, were not taken into account by that communication policies which were not focused in obtaining intermediate products of interest to the political system. The Project generated technical and operational reports not encoded as to meet the needs of policy makers, who require information products that synthesize the main ideas, issues and recommendations, in a very concrete way and expressed in plain language. Assessment Rating: MU

f) Efficiency:

Was the project implemented efficiently in accordance with the rules and standards International and domestic?

The project was implemented in accordance with national and international standards as reflected in the monitoring system itself. Nevertheless, if efficiency is evaluated by the success in the achievement of goals with the resources provided, it is evident that many of the outcomes were not achieved even though the GEF resources were totally executed. As an example can be

mentioned, the fail in achieving the outcomes related to binational monitoring system and binational integrated information system.

g) Cost-efficiency results.

Table 4 shows the planned budget considered in project design, and the real execution at the close the project, for the Uruguayan component.

Table 3. GEF Budget executed by outcome for the Uruguayan component of the project.

Outcomes	Total Budget in PRODOC	Executed budget	% execution
Outcome 1	150.000	229.164	152,78%
Outcome 2	231.800	325.804	140,55%
Outcome 3	430.000	310.536	72,22%
Outcome 4	249.000	194.740	78,21%
Total	1.060.800	1.060.244	99,95%

The data show a sub execution of the outcomes 3 and 4 (pilot projects, binational information system and monitoring), transposing funds for outcomes to 1 and 2, that were over executed. The components with the lowest performance were the most important in terms from the resources provided for implementation and where specific products were expected, while 1 and 2 were aimed the strengthening of coordination processes.

Table 5 shows the budget execution result for the Argentine component of the project.

Table 4 GEF Budget executed by outcome for the Argentine component of the project

Outcomes	Total Budget in PRODOC	Executed budget	% execution
Outcome 1	150000	232923,44	155 %
Outcome 2	498200	498247,75	100 %
Outcome 3	215000	131753,96	61 %
Outcome 4	249000	248925,25	100 %
Total	1.112.200	1.111.850,4	99,968%

The outcomes 2 and 4 show no deviations in the implementation that was as originally planned in the PRODOC. The execution of the outcome 1, as in the case of Uruguay, had an over performance (155%), receiving fund transpositions from outcome 3 (Pilot Projects), but an important difference, according to the financial execution data, was the greater efforts to develop the program of monitoring and the integrated information system to support decision-making and management of RPMF. These results were consistent with the findings in field visits of the TE. The financial performance in outcome 3 (pilot projects) in Argentina is closer to the expected in the PROCOM than in the Uruguayan component, which is also consistent with the interviews information.

Table 6 shows the budget execution result for the Regional component of the project.

Table 6 GEF Budget executed by outcome for the Regional component of the project

Outcomes	Total Budget in PRODOC	Executed budget	% execution
Outcome 1	100.000	36.998	37 %
Outcome 2	75.000	0	0 %
Outcome 3	25.000	0	0 %
Outcome 4	75.000	78.405	105 %
Outcome 5	402.000	522.208	130%
Total	677.000	637.611	94 %

The financial performance shows that the outcomes 2 and 3 in the regional component was zero in relation to the provisions of the PRODOC, and showed an under execution of 63% in outcome 1. These data reflect the aforementioned difficulties in project governance and limited capacities to articulate actors and linking political directives guidelines by regional coordination. The outcome 4, which was the most important in relation to targets of binational interest, although it had a performance slightly higher than expected in the design, did not achieve any of the expected results and showed the worst cost-efficiency performance.

In short, considering GEF resources, the financial implementation in Uruguay and Argentina components was very good, and most of the funds were executed as planned, but in the case of the regional component, the execution was not satisfactory. If counterpart contributions specified in the document are included, the efficiency is even lower. Considering all the variables mentioned the terminal evaluation score for this item is MS.

h) Sustainability:

To what extent is there financial, institutional, socioeconomic or environmental risks to sustain, the project results in the long term?

To evaluate this item a scale of four levels was used, where the lower value corresponded to the highest risk of sustainability included (1 = unlikely -High Risks-, 2 = somewhat likely -significant risks-, 3 = somewhat likely -moderated risks-, 4 = likely -insignificant risks for sustainability-). According to this, the project present moderate risk for its sustainability (score 3). The criterion is based on the evidence found in the SAYDS and MVOTMA regarding their plans to integrate the principal activities of the project in their organizational structures. In this regard, the MVOTMA has created an administrative unit in charge of marine issues, where there is high probability of retaining the human resources trained by the national coordinating unit; the same did the SAYDS, where the authorities are implementing similar plans. The degree of uncertainty that persists is because of both countries are near to change authorities in the short term because of the coming changes of government. As for the bilateral component of the project, both as the CARP and CTMFM recognize the need to broad the scope of their agendas with the incorporation of transboundary environmental issues. In this sense, the CARP is hiring staff to reinforce these processes, which depend on its Executive Secretary while the CTMFM presents a subcommittee on environmental issues to which it allocates a budget to work in. The challenge for the Commissions in this area is how to strength their link with the environmental authorities in both countries. For this objective, it is important to expand the vision of the Binational Commissions on environmental issues, because of their strong bias toward fisheries management and navigation matters, instead of the prevention of pollution and maintenance of water quality in the River Plate and its maritime front.

i) Impact:

Is there evidence that the project has helped to reduce environmental stress or improve the ecological status, or has allowed progress toward those results?

The TE found the project to have minimal impact in terms of the contributions to address the problems identified in the question; the fact is that it does not make any significant contribution towards reducing environmental stress nor to improve ecosystem conditions.

The transboundary outcomes despite being highly priority for a project presented to the international waters component of GEF, in practice it hardly addressed this objective, focusing in the coastal areas of each country. The monitoring program was not implemented and its design was more oriented to validate models of circulation of water bodies and sediments than to assess environmental pollution, objective more consistent with the purpose of the project.

Moreover, the monitoring only serves to generate useful inputs for decision-making and implementation of management plans and in this respect, the project had very little effect on the prevention of pollution. The pilot projects are an excellent tool as proof of concept but to achieve a significant reduction of pollutants as the result of implementing best practices and the cleaner production procedures need to be replicated at a higher dimension. The limited available resources did not allow expanding the outcomes of the pilot projects and limited its scope and effectivity, in the achievement of reducing land-based pollution as expected in the LF indicators. During the interviews, actors clarified that the pilots project did not pretend to be implemented at large scale at this stage where the outcomes are just to develop best practices and cleaner production procedures and to begin the diffusion of them to the industry. If this was the political-strategic approach originally handled, it seems to be some inconsistency between the scope envisaged by the project design and its implementation. Some indicators included in the LF seems not to be aligned with the aforementioned perception where the impact of the project in terms of SAP is relativized. In addition to the references to SAP implementation that holds the title of the project, and its strategic objective, quantitative indicators presented in the LF as in the verification means of some outcomes lead to interpret from designing, a greater scope of the project than the one assigned in the implementation. As an example, in the outcome 3, concerning the pilot projects, the LF indicators pretended a reduction of 50% inputs of nutrients, pathogens and metals processing plant in San Clemente del Tuyu, and 80% reduction in chromium discharges above the norm, for the entire Uruguayan tannery sector. These objectives are beyond the scope of a pilot test. The budgetary structure also support the vision of a more ambitious scope in project design, where the commitment of counterpart resources for the implementation were U \$ S 15 million, than in the implementation, when at the close stage, resulted to be just U\$S 1.55 million, near 10% of the counterpart budget agreed.

2.5. *Project Implementation:*

a) *Implementation Approach.*

LF use as a management tool:

During the design phase of the PRODOC it was decided to write two documents, one for each country (National PRODOC), as a mechanism to expedite the individual request to the countries. These are translations into Spanish of the chapters of the pilot projects, and the annexes for each country. The development of these National PRODOC, although it was for administrative purposes, weakened the biogeographical project approach. Observations made in the mid-term evaluation related to the confusion generated with this decision are shared, since it was sufficient to have the official PRODOC (which gives information macro) and in specific aspects of each country, set specific goals each in it. Despite this, the only document approved by the GEF was

PRODOC Compiler and thus is the only official document, which includes a single LF and a unique binational work plan. This aspects make the LF a fundamental tool for management.

Management arrangements and adaptive management:

In the PRODOC, is stated that UNDP would implement the project, seeking to improve capabilities in both countries, at both public and private level, to develop the SAP. During the implementation it would sought a progressive transfer of responsibility for the execution toward the institutions of each country. The design included a governance composed by MVOTMA, SADYS, CARP and CTMFM, conforming a Steering Committee (SC). In addition, the PRODOC stated that UNDP could participate in the SC at the request of the parties. At the operational level, in each country a focal point was conformed to manage local issues of each of these projects. The institutional arrangement was completed with a Regional Coordinator to act as Technical Secretary of the SC, which should hold meetings at least quarterly.

In the final evaluation weaknesses in the governance of the project that may explain the loss of effectiveness in meeting the established goals originally in PRODOC, were identified. The appropriation of the results of the project by the Binational Commissions was weak and very few positive externalities were generated for them. Efforts in the design of binational environmental information system did not fulfill all expectations, failing in establishing itself as a useful tool to manage transboundary resources. The same happened with the monitoring system, which despite significant investments made to develop and validate models of water flow and sediment distribution, currently the only available finished product is the FREPLATA ADT. This is just conformed by static maps not allowing simulating different scenarios regarding discharges and sediment transport supplies, necessary both for the management of waterways, and for contingency plans for oil spills or other pollutants. The project was implemented with great autonomy of the political-strategic subsystem and in the end; it made independent from it because of limited monitoring and control capabilities of the Binational Commissions.

The project incorporate national environmental authorities of each country in the SC together with the CARP and CTMFM. This represents a substantial improvement over previous instances as the vision of the binational commission on environmental issues expands and notoriously increase the chances of project results to be appropriated for governments.

This organizational design shown in Table 7.

Table 5 Organizational Structure of PIMS 4055



The project governance presented a strategic level (level I) and an operating one (level II). In this two layers arrangement, the strategic level has very limited capacity to control the level II because it must address issues of higher priority in their agendas. It also happens that their representatives are not paid for this work and it is the political agenda of their organizations that set the priorities. The codes that rule the political-strategic subsystem are also different from the ones ruling the operating level, which is focused in technical issues instead of strategic ones.

This administrative structure led the regional coordinator to make decisions that often correspond to the political arena according to his criteria, or based in implicit guidelines of political issues. The regional coordinator had limited connection with the level I (did not participate in the meetings of the Binational Commissions or in meetings of the environmental authorities) and weak political support. This situation led to deteriorate the relations between the two levels, and in the end, to the need of removing the regional coordinator. The Steering Committee attempted to overcome this situation by eliminating this position and reassigning the functions thereof to the two national coordinators (one of each country).

This management model moved the problems raised with the regional coordinator to the national coordinators, generating different criteria and priorities and causing tensions between them. The operating adjustment did not solve the problem because the system continued being managed at two levels, but now with shared leadership at the operational one, instead of being concentrated in the regional coordinator. This situation made the project to be inefficient and not focused on transboundary issues (which is the line of GEF the project applied and where it was selected). The results of this impact were reflected in the change of priorities and in the scope for the development of the environmental information systems and binational monitoring binational as well as in the development of common protocols.

Tensions between governments outside the project environmental issues, rather than being settled and limited to level I, affected indirectly at the operational level where national coordinators interpreted these differences and transferred them to the management. In this respect, the integrated system of binational information could have been developed smoothly, advancing in the database design and systems architecture. For testing purposes the system could have been loaded with non-conflicting data from the political point of view, such as physical parameters (temperature, salinity, wind speed, wave height, depth, etc.) in order to let it operative to be enriched afterwards with the entry of other more sensitive environmental data when politically agreed. The same applies to the monitoring system. The operating subsystem works in a development that does not meet requirements of strategic policy subsystem but is its own interpretation of what is considered technically relevant. In fact, the system develop did not

respond to questions about the fluctuation of pollution levels in RPMF but is mainly oriented to validate or adjust current circulation models.

While the communication strategy can be considered successful in presenting environmental issues to stakeholders, omits the main customer is the political system. The project outputs are not coded to be understood or easily appropriated by political actors who do not have time to read, voluminous and technically complex documents, as most of the products of the project, but require a synthesis of the main problems, key ideas and solutions, presented in a plain language for decision making.

Poor communication of problems to be addressed by the project, low contribution to requirements for the management and low feedback from the Steering Committee, were the most frequently highlighted issues in the interviews conducted in the political-strategic level. At meetings of the Binational Commissions, issues related to the project were poorly represented and were limited to operational queries and not with possible inputs for decision-making. Some important decisions on facts that modified the scope envisaged by the LF were not documented in minutes. Many of these problems, but presented differently, were mentioned in the mid-term evaluation but no remedial measures were adopted.

To take advantage of the experience of PIMS 4055 and generate lessons learned, it seems more efficient to have an institutional arrangement of 3 layers instead of the two described above. A model example of this structure is presented in Table 8:

Table 8. Organizational Structure of PIMS 4055 three level proposal



This model integrates an intermediate level of management including the technical secretaries of the binational technical committees (Chief Executives Officers) and advisors of political confidence of the directors of environmental organizations. This level of coordination between the political-strategic subsystem and the operative subsystem, has the advantage that technical secretaries participate in all board meetings of the binational commissions and have clear political positions from them in relation to different environmental issues, knowing which are priorities, and which not, and when should consult to the boards. Besides of that, the members of this level are paid and have high dedication and experience in management. They are able to monitor the execution and performance of the project and follow up the implementation of suggested corrective measures. This structure allow to reduce pressure to the operative subsystem that no longer must to interpret the policies, but implement the priorities defined in the layer I which are decoded and transmitted from the layer II.

In short, the commitment and participation of all stakeholders with the program and design can be seen both in the political-strategic level and at operational level. It cannot be concluded that the agencies conforming the Steering Committee are not concerned with project issues nor show no commitment with the outcomes, nor to the objectives. There was only verified that project issues are included in a broader agenda where are added to other issues with higher urgency levels that are prioritized because of being more closely linked to the substantive purposes of their organizations. In the absence of the middle layer of strategic-operational coordination, mechanisms for monitoring and controlling the execution were weak and very inefficient.

The establishment and use of electronic information technologies to support implementation:

Despite the project has not made intensive use of ICT, has developed sufficient instruments for management. There were no need to adopt software for workflow, nor support decision systems. Notwithstanding this, the coordinating units have resolved these issues efficiently with less sophisticated instruments. There were not problems in implementation but rather aspects of coordination with the political subsystem as previously mentioned.

The working relationships between the participating institutions and others. How these relationships have contributed to effective implementation and the achievement of project objectives.

There were tense relation at both the Regional Coordinator with the Steering Committee, and between national coordinating units. This issue was discussed earlier and explained by some design issues of governance outlined above.

Technical capabilities associated with the project and its role in the development, management and achievements.

The technicians involved in the project, at the level of national coordinating units have a high level of competence and professionalism, having shown a great commitment to the project although with different management styles. The low efficiency in project achievements is not considered to be caused by technical incompetence, but to structural issues, context situations, and poor adaptive management. In this regard regional management coordination was weak and did not act as an interface between the political-strategic subsystem and operating subsystem, as should have had. The SC correctly identified the fault at this point and removed the regional coordinator, and eliminated in fact this role reassigning the function to national coordinators (one for each country) whom should have acted more articulately.

Rating Assessment to Implementation Approach: MS

b) Monitoring and Evaluation (M & E)

In the implementation process several instruments were used for operational monitoring, particularly the analysis of progress reports, the contribution of evaluations conducted by UNDP through project implementation reports (PIR) showing the progress in relation to the provisions in the ML, and the mid-term evaluation of the project. The TE found there was an appropriate M & E, with funds provided by the project for its implementation, and the use of international

standards towards achieving the results and objectives of the project. What is not so obvious is how the inputs from these instruments have served to the project. It is not verified in the minutes of the Steering Committee any directives nor actions to correct project deviations in the achievements of the goals, or changes in the LF reported by the monitoring and evaluations processes.

Neither are found any corrective actions taken against the observations made in the mid-term evaluation. Changes in the scope of the projects were agreed at a political level and were not recorded nor in the minutes of the steering committee nor in other official documents. However, it is important to differentiate the actions and processes of monitoring and evaluation, from those used for implementing corrective measures. The latter depend on the decision makers and the functioning of the Steering Committee, whereas was already mentioned some opportunities for improvement were found. In this respect, the project compliant with all the provisions regarding monitoring and evaluation, both in the PRODOC, and the processes UNDP. The monitoring and evaluation was effective, detecting project deviations in the PIR reports, in quarterly reports, and annual reports in the midterm evaluation. Despite these instruments helped to identify many of the problems mentioned in this work, no corrective measures were adopted. Assessment Rating: S

c) The participation of stakeholders

Mechanisms for information dissemination

The project does not present a common communication policy but each national coordinating unit has its own management strategy. In the Uruguayan component, it is understood that the main activities were broadcasted through the website of the project and accompany some communication activities in the coastal zone from ECOPLATA project. The UNDP hired a communication specialist in the regional component to help in the implementation of the identified actions.

The Argentine component had a communications specialist with a more comprehensive view of the whole project perspective and proposed a marketing plan with actions at the national, provincial and municipal levels. The focus was on actors specialized in environmental issues (research centers, NGOs, etc.) from cultural and educational sectors, because they were opinion makers on pollution prevention, and on general public. The communication plan had actions to publish bimonthly newsletters, a press release, and the presentation of an itinerant environmental sample to communicate RPFM environmental problems in schools and to the public. It also included the preparation of brochures, contents for awareness workshops, the design of audiovisual material as well as a proposal for the creation of an observatory of environmental conflicts. In short, it was a comprehensive proposal with a clear strategy.

The results obtained by the Argentina component comprised the publication of 12 newsletters with different project issues distributed by mail to 1500 people. It was also published in the web site, some graphic documentary material from interesting areas of the RPFM (historical photos, landscapes, etc.). This strategy reached an audience of 110,000 people and communication products were transferred to schools to be used in environmental training activities to more than 600 pupils. This result is relevant and aligned with the objectives of Component 1 of the project.

The overall communication policy could have had higher impact if it had deepened the operational coordination between the national units of the two countries, promoting the exchanges of strategies, success stories, products and lessons learned.

In the pilot projects both the significant volume of information generated in cleaner production processes, and the training activities, acted as disseminating key actions to promote SAP. Because of the project, and its achievements in improving processes for the management of waste and effluents in dairy industry, some educational agreements were made with agricultural schools of the UTU in Uruguay, to include a course with this topic, in the study plan of the agro industrial tertiary career. An important work was also performed in dissemination and communication to agricultural producers and trade associations. Project results were also transferred to the environmental authority (DINAMA) because of the fluid relation generated with the project along its implementation. These results were used as an important input in the Management Plan of the Santa Lucia River Basin where the dairy industry is present and actions are needed to reduce the contamination of the effluents of milking yards. The project also interacted with the MGAP, facilitating the communication with the DINAMA in order to unify management criteria. The MGAP productive approach put less emphasis on the management of effluents while for the DINAMA these are considered key actions to reduce contamination in the Santa Lucia river basin. Project efforts were not enough for the approximation of these two different visions emerging from political-strategic level rather the operative, but were important to initiate actions for improving intergovernmental articulation processes. The project also made important advances in transferring the developed best practices to producers, particularly to CONAPROLE (National Cooperative of Milk Producers) to promote their involvement in effluent treatment as part of corporate responsibility to the environment.

In the CP pilot project in the tannery sector in Uruguay, a training program with the Uruguayan Association of Technicians Chemical Industries (AUTIQ), the Faculty of Engineering, the University of Montevideo and the LATU, was also developed. The project had an important role as a link between academia and industry, enabling the development of a manual of good practices and training on CP of nine of the twenty companies operating in the sector. The training, consisted in workshops and technological counseling in enterprises, and allowed to identify specific issues in each tannery and to develop proposals to address them.

In Argentine component related to CP, training for SMEs in the coastal districts were also performed. Including the performance of three courses in the south and coordination with IDB program CP to seek complementarities. Argentina has been developing for years a national policy on cleaner production, which showed important results in the CBA. As part of the project the National Technological University (UTN) was hired to develop products to support the CP and the creation of a working group with entrepreneurs and INTI, was promoted to exchange views on them.

Despite the artificial wetland in San Clemente, planned to reduce the load of organic pollutants in the bay of Sanborombón, was not constructed, important results were achieved by the project in promoting communication between various actors. Among them, the organization of two workshops with the participation of the National University of La Plata. This institution was hired to develop the wetland and make the Management Plan (MP). Despite the efforts made, very little involvement of society with the proposal was found. This has also happened with other similar programs, in which the INTA and the NGO Vida Silvestre Argentina (VSA), developed a manual of good practices for livestock producers in the area, but had showed weaknesses in reaching the objective audience. Although the MP is reported as developed, up to the closing date of the project, the government has not approved it and this goal is estimated difficult to achieve in the short term by the start of the election period.

During the execution of the component, it was found that the treatment plant of solid waste in the area was inoperative for years and efforts should be directed to make it working, before the construction of the wetland. Although the intended goal was not achieved, the project helped to

identify major weaknesses in environmental management in Sanborombón Bay. A work done for the VSA indicate that on a scale of 0-100 the efficiency, of all the five protected areas are defined in Sanborombon, scored between 35 and 50. The MP proposed an extension of the estuary water area to be protected but these results show the convenience of improving the efficiency of existing protected areas currently defined instead of increasing their areas or creating new ones.

The participation of local users and NGOs in project implementation and decision-making:

One of the most important achievements of the project was the mobilization and involvement of key actors in the generation and transfer of results. The scope includes the government, academic and business sector, and civil society at both national (municipal, provincial, etc.) and regional level.

There was broad engagement to prepare the project monitoring system, although not proven successful from the point of view of the scope envisaged by the LF, it was in promoting synergies in the transboundary area. In this sense, key actors have participated in different instances, among them, representatives of the UBA, UDELAR, INA, DINAMA, SAYDS, the SOHMA, SHN, INIDEP and DINARA, institutions that besides the important role played at the operational level, are also clients of the monitoring system products as part of their duties.

According to the objectives of the CTMFM, CARP, and the national environmental agencies of the governments, is evident that these institutions are the main customers of the monitoring system. Despite this, their participation in its construction was limited due to non-effective communication of their management needs and the strategic inputs to be considered. The sustainability of this monitoring has not been yet resolved.

The Argentine coastal component has higher level of institutional complexity in relation to the Uruguayan one because of the increased territorial dimension and heterogeneity of the actors in governance. That is the case of the Plan Management for the Arroyo El Gato in the area of La Plata, where many environmental problems were identified in different areas of the basin ranging from water discharges runoff from agricultural areas in the headwaters, to download of industrial and urban effluents in the middle part and at the mouth. The project had to involve several agencies working on these issues as well as to drive the process and its outputs to conform the management plan (MP).

This strategy joined the Provincial Agency for Sustainable Development (OPDS), the ADA Water Authority and the Provincial Directorate of Sanitation and Water Works (DIPSOH) under the Ministry of Infrastructure, to work together in harmony, using the capabilities of the project as a catalyst, facilitator and coordinator of participatory processes among stakeholders. All the involved actors recognize and highlight the success in this goal and the role of the project in this achievement. The MP was presented at the Basin Committee of the RDP, which depends on the ADA, and is integrated into its Steering Committee of representatives of the municipalities and chaired by the Mayor of La Plata. These efforts had important effects to achieve the signing of a commitment to implement the MP but it is still not stated the responsible institution for it.

The RIIGLO, had not reached a sufficient degree of ownership by the actors nor having budgetary support for its sustainability (some laboratories and municipalities lack the resources to outsource the analysis) at the end of FREPLATA, but at this stage met an important human capital at municipal level with the help of the project. These results allowed some resilience to political and administrative changes, because in case that a technician is removed because of institutional changes, other net members help to train the substitute. The project also specifically worked on the sustainability of the net through transferring the coordination role of the project, to the SAYDS.

This was done through the adoption of resolution 520/14 by the Secretariat, which creates the program Water Quality of the southern coastline and refers to SAYDS assistance in coordination tasks and to RIIGLO.

In the Uruguayan coastal zone, monitoring component is not seeking to rebuild the network according to FREPLATA proposal as requested by the municipalities during project implementation because the ECOPLATA program solved these issues creating a coastal monitoring network coordinated by DINAMA. This has enabled the creation of a national environmental system with 50 sampling stations where the municipal governments are involved. The project has strengthened this program by supporting training activities and incorporating new sampling equipment in municipalities with more weaknesses. The challenge of the articulation of DINAMA monitoring network with the RIIGLO remains to be achieved as well as standardizing of gathered information in both countries, in order to achieve synergies, as envisaged in the PRODOC.

Partnerships and cooperative relations between the project and local, national and international entities, and the effects on the implementation of the project.

The previous section refers to some specific cases of alliances and cooperative relations made between the project and local and national institutions. It also identifies some efforts made to develop environmental information systems according to the transboundary objectives proposed at binational level. Despite this, some barriers were found that eventually impede the achievement of the proposed targets. The lack of a unified approach among national coordination work in including the coastal problems in the system, and lack of trust among stakeholders to share information, can be mentioned as some examples of this. At a national level, the situation was different, and each party independently, made incremental innovations with the help of the project, on the information systems already running by the environmental agencies.

Despite other initiatives supported by the GEF are being developed in the basin, no evidence was found on the developing of coordination processes with them. The Steering Committee specifically instructed the Regional Coordinator to promote these instances with the ICC (Intergovernmental Committee of the River Plate Basin) but there were no response nor follow up of the actions to reach this commitment.

In the last stage of the project, before finding an exit plan to be implemented after completion, institutional arrangements with the CARP were made to host again the RIIGLO, as it did in FREPLATA. The institutional arrangement of PIMS 4055 strengthens the consortium created in the previous step, which articulated the CARP and CTMFM incorporating environmental authorities of both countries in its Steering Committee.

Argentina is intended to offer an integrated coastal zone management agenda at the Federal Environment Council (COFEMA), which in case of being approved by a national decree could give sustainability to the monitoring and implementation of the SAP nationwide. The proposed objective is to achieve the creation of a Federal Plan of Integrated Coastal Management between the five provinces that share this area.

Participation of government institutions in the implementation of the project; the degree of government support to the project.

Several examples of involvement and commitment of government institutions of both countries in the implementation of the project were already referred. The final proof of this commitment

will be the achievement of project sustainability and of the realization of the SAP activities, necessary to achieve the overall objective proposed. This issue has not been resolved yet, although significant progress was made as, the inclusion of the Uruguayan coastal monitoring component in the structure and budget of the DINAMA, the creation of a monitoring program by the SAYDS and actions promoted to retain the human resources formed by the project.

Despite these achievements, some actions should be taken to promote greater coordination among the binational commissions and national environmental authorities with regard to the identification of strategic agendas to ensure the quality and use of water resources in RPMF. The objectives in transboundary zones, at binational level, promoted in the original project design, were neglected during implementation stage and should be redefined, as well as a strategic consensus on a medium-and long-term priorities should be reached. Rating Assessment for stakeholder participation: S

d) Financial Planning

(I) Actual costs of the project objective, results and activities.

At the end of the implementation period, the project had a cost of USD 4,404,064. Of which USD 1,879,500 corresponded to the Uruguayan component (USD 1,060,000 donation and USD 819.500 national counterpart), USD 677,000 to the regional and USD 1,874,564 to the Argentine (USD 1,112,000 donation and USD 735.564 national counterpart). This represents the implementation of 100% of the funds provided by GEF financing and only 10% of the counterpart funds committed in the PRODOC. The analysis of financial planning is consistent with a scenario in which the project scope was limited, mainly with respect to the components 3 and 4.

(II) The financial management.

The project is of national implementation (NIM). As agreed in the PRODOC, management of funds of the Project Coordination Regional Unit (PCRU) and the Project Coordination National Unit (PCNU) of Uruguay is administered through UNDP Uruguay, and funds from the PCNU of Argentina through UNDP Argentina. The way of payment management varies in the two countries. By decision of the implementing agency (DINAMA), the activities of the PCNU of Uruguay and the PCRU wages and allowances, were paid directly by UNDP through disbursement requests authorized by the national counterpart. In the Office of the PCNU Argentina and in PCRU, the accounting procedures involved revolving funds against expenses reports. For both, a separate account was opened with a revolving fund that allowed them to make direct payments (prior authorization from the national authorities) of up to USD 10,000. In the case of PCRU, this fund was intended for basic operating costs, acquisition of basic computer equipment and third party travel expenses.

Under the regulations of the UNDP-GEF, the calls for tenders are made by UNDP offices. The contracts of Uruguay and binational agreements, by UNDP Uruguay, and contracts of Argentina by UNDP office in this country. The PCNU or PCRU manages all ex ante contract proceedings. There have also been agreements with institutions, which were specifically identified in the PRODOC as participants, necessary for the implementation of SAP with defined roles (UNT - CTS for the program BUE CP government of the CABA, ULP, INA, and UBA). The approval of some actions and expenses have been specified in the meetings of the SC, where UNDP has participated as a guest but had no vote.

The proposed co-financing in the PRODOC was USD 15,020,000. However, in practice, as was previously mentioned counterpart contribution has been significantly reduced. The details of this co-financing is presented in Table 9, and part of Argentina contribution, mainly corresponds to the budget committed to build the sewage treatment plant in San Clemente del Tuyú. Uruguayan counterpart was USD 178,000 in cash, and the rest in species (various government contributions), representing 11.23% of the originally estimated budget to compromise by the country.

As reported in the PIR 2012, this low level of co-financing may be partly due to staff turnover in governments.

e) Procedures for the execution and implementation

Efficiency and effectiveness of the mode of implementation and execution of the project;

According to reports and minutes of the SC, it approved the definition of expenses, and contracting were made according to UNDP procedures, through this body. No problems were detected regarding procedures.

The parties involved highlight the quantity, quality and timeliness of revenues (inputs) for the project provided by UNDP in time and in accordance with established contracts or agreements.

Effective communication with critical actors to respond to the needs of implementation

Management arrangements have been discussed in Section 3.2, where the problems that hindered communication between the political-strategic level and the operating subsystem were described. There were also reported some difficulties and tensions between the SC and the Regional Coordination, and between national coordinators, that have affected the efficiency (by generating delays) and the effectiveness of the project.

Administrative costs

The administrative costs under the PRODOC (Salary RC, RC assistant, travels, office supplies, annual meetings of the SC, etc.) originally represented a total of US \$ 290,000 equivalent to 10.18% of the donation. Despite total operating costs were difficult to calculate because many of them were distributed between different results, it can be estimated that exceed the 20%, doubling the amount initially foreseen in the donation. This may be explained by the changes made during the implementation in the operational management, particularly the inclusion of salaries for coordinators and assistants to the national offices, and the extension in the scheduled execution time. Even considering the whole project budget, including counterpart funds, this cost equal widely exceed the estimated in PRODOC forecasts. This numbers could be better interpreted and justified considering that the project acts not only managing resources but also through the articulation of key actors generating synergies and innovation processes in organizational models which more resource plaintiffs.

f) Achieved Results

a) *Achievement of outputs, outcomes and objectives:*

The project plays an important role in the articulation of key actors, and their strengthening to meet the range of objectives. Despite this, the LF indicators are very difficult to measure and do not allow an effective quantification of project contributions for achieving many of the outcomes.

In the LF, four indicators of purpose are presented, in order to verify actions to achieve management criteria agreed and validated by both countries to be applied in transboundary waters. In the terminal evaluation, no evidence of compliance with many of these goals and to justify this fact, the parties argue these objectives were postponed by changes in context situations already mentioned, focusing project actions in the coastal areas of national jurisdiction of each party. Based on the indicators and means of verification presented in the LF, many outcomes were partially reached and others not achieved at all (Annex IV).

The outcome I of the project, seeks the implementation of inter-institutional articulation processes and strengthening the institutionalism at binational and national level, as proposed in the SAP, to address priority transboundary environmental problems. The project has been successful in many respects, particularly in promoting actions in both countries to integrate the capabilities generated in DINAMA and SAYDS during the implementation. The communication strategy successfully involved local authorities, sectorial groups, and most of coastal municipalities in both countries in achieving the objectives and commitments with medium and long-term results. The main weakness was that the authorities have not yet managed to approve a diagnostic report on inter-jurisdictional / legal international frameworks for prevention, reduction and control of pollution from land as a basis for the definition of the reforms required for the implementation of the SAP.

Outcome 2 seeks to achieve "skills and tools to prevent and mitigate pollution to promote greater collaboration between the public and private sectors, especially (provincial and municipal) local level". The final evaluation found evidence of satisfactory compliance with the outcome. The project made important contributions in promoting agreements between coastal municipalities, and unifying management criteria and procedures, for environmental quality control through the RIIGLO (and in the near future by the SAYDS) in Argentina and DINAMA in Uruguay. This was made possible by strengthening areas that generate synergies with provincial and national authorities (Coordination Unit of Integrated Coastal Management of the Province of Buenos Aires, OPDS, ECOPLATA, UDELAR, AySA MVOTMA, MGAP, MDN, MINTURD) and by the harmonization, and development of relevant regulations within each country. The weaknesses found for compliance with this result, and in which the project has been less efficient, was in capacity building in the municipalities of RPFM to promote public-private initiatives and processes to develop effective investment arrangements. The private sector participation in environmental management is limited, despite the efforts still perceived as a service provider not involved with environmental management locally. The project also failed to promote the standardization of environmental regulations and standards to be applied in transboundary waters.

In the Outcome 3 (pilot projects), there have also been some important achievements, particularly concerning the scope of sectorial agreements, between provincial and national governments, and civil society, in the construction and operation of the artificial wetland in San Clemente. Despite not being successful in this achievement, the project has played a substantial role as a catalyst and promoter of synergies allowing solving long-standing problems such as the ineffectiveness of the treatment plant of solid waste, and inputs generation for the development of a management plan.

Pilot projects in tannery sector had significant achievements in the development of cleaner production processes (CP), that will significantly reduce inputs of pollutants produced by industry

and discharges into the environment, when implemented. The project made an effective communication work with most companies in the sector and developed a methodology based on technical consultancies in the tanneries to identify specific problems and opportunities for improvement to develop plans for CP in each of these. The scope of the objective of implementation for the CP developed plans resulted from the consultancies, was reduced to a single company, just as a proof of concept and to seek further support to expand the experience to the entire sector. At the close of the project, the Uruguayan environmental authority was negotiating a loan with the World Bank for this purpose.

The project was less successful in the objective aimed at achieving burden reduction of chromium discharged outside the rules in the tannery sector in Uruguay. This is because, as was mentioned, the pilot test was implemented only at a very small scale and to the difficulty of attributing these achievements just to the project effects when there is also happening a tightening of environmental monitoring by DINAMA.

Similar results were detected in the pilot trial in the dairy sector aimed at incorporating CP processes and best practices to reduce discharges of industry. The project has developed efficient and effective procedures to improve the management currently taking place in the farms, reducing the load of pollutants in discharges. The strategy has been similar to that described above for the tanning industry, which has involved key producers committed with the developed CP and allowed to transfer these results to a small number of dairy farms as proof of concept.

The project also had important achievements in developing communication procedures of CP and events to transfer the outcomes, to the main cooperative of producers in the country. It also created value through innovative processes for waste treatment in the dairy sector, and contributions of valuable information for environmental management, to the DINAMA, facilitating the articulation with the MGAP to seek for solutions to the dairy sector environmental problems. At the close of the evaluation, the DINAMA was evaluating actions to expand the pilot results to all the farms in the Santa Lucia Basin as part of a project with the IADB.

The original target present in the LF was to reach 60 producers with the pilot project. Even achieving this goal the project would not present any significant effects on the reduction of pollution in the coastal zone because the fact that there are 1,800 dairy farms, and the scope provided in the design is insignificant for anything other than seek an experience to be used as a demonstrative example of best practices. It also happens that DINAMA is demanding for producers with over 500 cows, to submit an effluent treatment and wastewater management plan, and is strengthening the control on the industry outputs. Because of these facts, it is difficult to attribute any improvement in dairy sector environmental conditions concluded from the project indicators, only because of its effect. This also question the efficiency of the indicator present in the LF for measuring the impact of CP pilot projects in reducing contamination from the dairy sector as in the case of the tanneries.

The outcome "Integrated established to support decision-making and management RPMF Program monitoring / evaluation (M & E) and Information System" showed the poorest execution results according to the scope and goals set out in the matrix of LF. Despite the advances and exchanges between the technical groups of both countries, no formal agreement was reached at a binational level, about which would be the parameters to be included in the comprehensive program of monitoring water quality and sediment.

The main problem is that political actors like Binational Commissions, did not manage to define their requirements to the monitoring system nor the expected outputs needed for their policies and institutional priorities. Because of this, the systems has been constructed from a bottom-up logic

where the requirements and outputs have been defined by the operational level instead of the political-strategic one.

The Binational Commission when consulted on the expected outputs from a monitoring system, many of their expectations dealt with pollution and water quality issues, despite the monitoring is not being specifically designed to reach this goal. It worth noting, that if the monitoring system aim to track the evolution of the discharges of heavy metals, chromium, or any contaminants of organic origin from the contributions of coastal areas, these parameters should be relieved by it, a fact that does not happen in the planned design. In addition, the system should be articulated with the efforts of the CIC, because the RPMF is the outlet of the entire basin and collects contaminants from the whole ecosystem.

It was reported that the current circulation models are available in the research groups of both countries but to access them, and decode scientific information to decision making, the Binational Commissions should have greater capacities of articulation with scientific-technological system. Currently the Technical Secretaries of these institutions do not have support staff for these tasks and must address other issues of higher institutional priority.

At the close of project the binational monitoring system was not implemented, neither the programed oceanographic surveys, because of problems with the availability of vessels to collect oceanographic data in the transboundary zone and from oceanographic buoys (which still were not operating at the time of the evaluation).

The environmental information system has not being yet implemented and because it is not considering political needs of inputs for decision-making in environmental issues of RPMF, is not resulting a priority for policy makers. The project failed to achieve this result and all the conditions of the baseline remained as shown in the LF despite it pretended to be changed.

The current situation shows that there is no bi-national information management system and no mechanisms to facilitate the exchange of information permanently and consistently, between the two countries, at all levels. The information-required for understanding the environmental status of RPMF continues dispersed among various institutions and agencies, and there are no formal arrangements to share it.

Despite the external factors that could have affected many outcomes set out in LF there were also problems in the organizational design, where weakness was found in the role played by the Regional Coordinator that failed to transmit the political-strategic priorities, from the Steering Committee, to the operative subsystem. The internal communication policies also failed to promote these exchanges, and in creating instances of strategic discussion.

The outputs of the monitoring instruments of project implementation submitted by UNDP, (such as PIR, mid-term evaluation and progress reports) warned of many of these problems and limitations on the scope, which are verified in the results of this terminal evaluation report. The monitoring of project execution was effective in detecting deviations issues but the management system showed no contingency plans to overcome these problems and in many cases with the conviction that this was not necessary. The operative subsystem interpreted the changes in project scope as the result of informal agreement between the parties not recorded in the minutes of the Steering Committee and not transferred to UNDP-GEF. This situation affected the implementation of the results with binational scope, where major differences of interpretation between the national coordinators, were found.

b) Project contribution to improving the skills at binational, national and local level.

Despite the evaluation results, the project made important contributions and generated positive externalities, not recorded by the LF indicators, that worth to be highlighted. In particular, the project helped to maintain RPF environmental issues in the agenda of the main political actors dealing with the administration of the transboundary areas under study. The project also facilitated the inclusion of the environmental authorities of each country in the SC, which is considered as an important organizational innovation in relation to FREPLATA. This organizational arrangement has allowed to broad the vision on environmental issues of the CARP and CTMFM, that was more focused on issues related to fisheries management, and recording of physical-chemical and oceanographic parameters potentially useful for dredging (particularly in the case of CARP). The interaction with environmental authorities that started with this project, should be strengthened in the short and medium term, to continue implementing the SAP and achieve the goal of long-term PRODOC.

The project has also enhanced capabilities for monitoring transboundary waters by training key actors (the RIIGLO, provincial and municipal organizations, NGOs, etc.) on issues of CP, water analysis, and other relevant issues to environmental management. Another important achievement was to have strengthened the links between the academia, business sector and government, both qualitatively and quantitatively.

The project has also promoted the creation of an environmental innovation system, aimed to generate knowledge and apply it to improve the quality of RPF. This process strengthened the academic system in both countries by involving universities and technological adapters as generators of knowledge, attending the environmental specificities of RPF.

c) Sustainability:

The exit strategy of the project includes the transfer the outcomes to the governments by incorporating the conformed management capacities, in their institutions, to ensure continuity in the implementation of the SAP and their commitment to the long-term objectives. Both DINAMA as SAyDS have taken action to retain the skills generated during the implementation phase of the project and incorporate them into their operational structures. This strategy is being implemented and is evidenced by creation of a national monitoring system within SAyDS aimed at coordinating the RIIGLO, and the creation of a department of marine area in the DINAMA. This will allow incorporating the knowledge accumulated by the national coordination units to meet the SAP. There are also some actions initiated to strengthen the coordination mechanisms between CARP, CTMFM and the national environmental authorities, to maintain the commitment to the project objectives. The creation of positions in the framework of the CARP to support the Executive Secretary on issues related to ecosystem monitoring, and the resources allocated by CTMFM to the binational oceanographic surveys are proofs of the commitment to environmental issues in the transboundary area. Coordinated efforts among all the institutions of the SC must to be done in order to incorporate the SAP in the new five-year government budget and ensure the sustainability of the project. This goal is likely to be achieved because of the existing institutional maturity and the commitment shown by all stakeholders to the project. The terminal evaluation, based on the scale of the UNDP-GEF, assigned a score for sustainability of level 3 (somewhat likely with moderate risk).

d) Financial Resources

Some financial resources, as reported in interviews, would be available to continue with the objectives of the PRODOC, particularly with the support of the Binational Commissions, which have reserved some budget from items not executed. The problem does not seem to be on the availability of funds but in agreeing on goals and priorities at political level between the key players. Some complementarities with other ongoing projects financed by IADB and WB are

identified for the CP pilot projects, as well of opportunities to replicate the results across the industry, leveraging this context.

3. Conclusions and recommendations

3.1. *Final comments on relevance, effectiveness and efficiency*

The project is likely to generate positive effects of various kinds, at global and national levels, including health benefits of a high percentage of the populations of Argentina and Uruguay, and the conservation of biodiversity in reserve areas. The scope of the long-term objective exceeds the executed stage and requires sustained efforts of both countries to achieve their productive development with environmental sustainability. The contributions and the lessons learned are particularly relevant to the new challenges both countries are planning to take in coastal areas, likely to impact in the transboundary zone. This include a deep-water harbor in the Atlantic zone of Uruguay, the exploitation of hydrocarbons on the continental shelf, dredging for navigation channels and the development of new waterways.

Despite not achieving the results expected in the PRODOC, the project have generated important positive externalities that cannot be quantified by indicators designed in the LF, but deserve to be highlighted by the impacts and unplanned catalytic effects which has achieved. Some of these are:

1. Maintaining commitment to environmental issues and water quality RPMF in the agendas of both governments,
2. Strengthening the governance for addressing transboundary environmental issues involving environmental authorities with the CTMFM and CARP.
3. The beginning of the consolidation of a regional innovation system on environmental issues, that articulates the academic, government and business sectors of both countries, to generate environmental value.
4. The contribution to the national research system in both countries for the development of disciplines related to geosciences and marine science
5. Strengthening local capacities by actions that contribute to product and innovation processes development among which the following can be mentioned; a) the redesign of information systems of the DINARA to provide oceanographic data, b) increasing the capacity of SOHMA to systematize historical data inaccessible systems, c) strengthening research groups in oceanography, hydrography and engineering fluid mechanics in both countries.

An evaluation item has been added to the matrix presented in Table I, to summarize the results of all the indicators used in the evaluation contextualizing them according to substantive impacts and externalities. Based on these considerations the project deserves a satisfactory overall assessment score (S).

3.2. *Final comments on the progress in achieving the objective of the project results*

Changes in context conditions, the lack of foresight of some risks, in the design stage of the PRODOC, or the underestimation in the likelihood of others, resulted in that there was not an ex-ante contingency plan to implement in occurrence of any critical factor.

The UNDP could have been a political mediator in a contingency plan to overcome strategic differences between the parties and agreements to modify the scope of the expected results, because its commitment with the donor agent in maintaining the outcomes as stated in PRODOC because funds are provided as the result of an evaluation process, which considered this contents. The UNDP can also be a strategic partner in the implementation of future stages of the SAP, and in consolidating the sustainability of the governance system, providing professional management skills according to international standards, and officiating as an articulator between the parties. The contribution value of this relationship would be independent of the source of funds for financing a new phase, as it applies to new donations, international loans and provision of funds by the countries themselves.

3.3. *Corrective actions for the design, implementation, monitoring and evaluation;*

The corrective actions for the design, implementation, monitoring and evaluation at the close stage of the project, are just relevant as lessons learned for the developing of future instances for achieving long-term goal. The most important were mentioned in Section 3.2 and consisted in setting responsibilities in the implementation of projects to assure they meet the needs of political subsystem, which is the main customer of the results. Thus, the project is just an instrument to achieve strategic goals that respond to the collective interest and strategic directives are transmitted to the operative level of implementation to achieve the results. Some design weaknesses were found particularly in the communication between the policy generator subsystem and the executive level, led by a regional coordinator who failed to drive this process. In future instances, this interface should be more consistent and therefore will require the involvement of the executive secretaries of the binational commissions, and hierarchical positions of trust of the environmental agencies in the regional coordination.

The methodology for the design meets international standards but for future instances, more focus should be put on risk analysis and in the design of contingency plans to overcome the occurrence of critical events or important changes in context situations.

Any changes that will affect the scope of the initial objectives of PRODOC or its LF should be recorded and reflected in changes to the project itself or at least in the SC minutes.

The monitoring and evaluation instruments were useful to identify deviations and risks during the implementation but the outcomes were not taken into account nor were translated into corrective action plans by the national implementation units. The SC, as reflected in the minutes of its meetings, neither discussed these recommendations and was not enough involved with the project follow up. An example of this were the directives to the regional coordination, to strengthen cooperation with the CIC, not implemented because of weak political control of the execution and insufficient involvement in products design. This can be explained by the numerous changes in the authorities, mainly in the Argentina component, that did not help to maintain a shared strategic vision and consensus throughout the process. It is not possible to shield the operative subsystem

of the political changes above mentioned because of the risk converting the project in a final goal and not as a mean to drive a dynamic process for building systemic capacities. An improvement opportunity identified to mitigate this situation is through communication policies targeting the political sector in the design and implementation stage, as one of the main clients of the project. This requires the preparation of specific products of communication, to reach this target, and meet their needs in the time required.

3.4. *Follow-up actions to strengthen the initial benefits of the project.*

Some advices in order to comply with the results that still have not been achieved and continue with the implementation of the SAP are presented as follows:

- Maintaining the project SC, even once it ends. This, could initially be done, perhaps with the aim of analyzing the results and lessons learned,
- Develop SAP adjustments in order to update it to new context situations,
- Develop a five-year management plan with input from all stakeholders,
- Develop a new communications plan that includes political actors in the target.

These instances would only require a facilitator because institutions already have their own resources to do it. The Five-Year Management Plan should include actions to strength the links between all parties and move towards the expected results in the transboundary zone and the improvement of coastal monitoring plans of RIIGLO-SAyDS, and DINAMA with other departmental and governmental actors.

3.5. *Proposals for future guidelines to strengthen the achievement of the main objectives of the project.*

The strengthening of the supra-institutional coordination level is a key directive to the achievement of project objectives as each institution has in itself an organizational culture that will not allow generating different results to the already obtained if changes are not implemented. The CARP and CTMFM vision on environmental issues is consistent with its main institutional objectives, and in order to increase the scope it is necessary to incorporate new actors, including the social sciences as a complement to the geosciences and sciences life.

Another recommendation would be to include other key actors in the implementation of the SAP, such as ANCAP and national harbors administrator commissions, of both countries. These institutions are involved in the design of future engineering projects that will affect the ecosystem and have the resources to support monitoring systems and follow-up actions. The ANP and ANCAP of Uruguay, as well as for the harbor authority of Argentina, could be probably interested in supporting the installation of oceanographic buoys, even increasing their number, if the information provided by them is useful to developing contingency plans for oil spills or dredging of canals and waterways. ANCAP is already making important investments supporting R & D activities of the UDELAR on issues related to the project but not coordinated with it. In a next stage, it would be advisable to have ANCAP participation in the SAP.

Table 10 Summary of Recommendations and improvement opportunities.

Rec #	Recommendations	Responsible Entity
A	Outcome 1:	
A.1	Maintaining commitment to environmental issues and water quality RPMF on the agendas of both governments	MVOTMA, SAyDS, CTMFM, CARP, MREE
A.2	Strengthening governance for addressing environmental issues in border areas produced by the inclusion of the environmental authorities in the Board of the project, along with the administering binational commissions with jurisdiction in these areas	MVOTMA, SAYDS, CTMFM, CARP
A.3	The start of the consolidation of a regional system of environmental innovation that links to academic, government and business sectors of both countries in order to promote their ties to generate environmental value.	MINCYT, ANII, National Agency for Scientific and Technological Promotion, MVOTMA SAYDS, etc.
B	Outcome 2:	
B.1	The strengthening of inter institutional coordination is a key directive for the achievement of project objectives as each institution has in itself an organizational culture that does not generate different results than those obtained to date if changes are not made	MVOTMA, SAyDS, CTMFM, CARP, PNUD
B.2	Include other key actors in the implementation of the SAP, it is particularly recommended strengthening ties with ANCAP and harbor management agencies of both countries.	ANCAP, Universities, ANP, DNH, Deputy Ports and Waterways, etc.
B.3	Develop communication tools in future projects at the design stage and in the implementation, to consider political actors as target clients.	
C	Outcome 3:	
C.1	The adoption of best practices for implementing CP processes that have involved the industrial sector and in the medium term is expected to be widely adopted by it under the pressure of environmental public policies that guide.	MVOTMA, MGAP, MIEM, SAyDS, Production Ministry, municipal and provincial governments, Industrial Sector.
C.2	Promoting linkages between binational commissions and the environmental authorities with the national research system in both countries for the development of disciplines related to geosciences and marine science	NII, National Agency for Scientific and Technological Promotion, CTMFM, CARP, MVOTMA SAyDS
C.3	Strengthen the monitoring and the implementation of environmental policies and projects developed for RPMF (Environmental Monitoring)	MVOTMA, SAyDS
D	Outcome 4:	
D.1	Completing the development of binational monitoring system and bi-national environmental information system	CTMFM, CARP, SAyDS, MVOTMA
E	Other recommendations:	
E.1	UNDP can be a strategic partner in an operational level, in order to help finish consolidating the governance system, and project sustainability, providing professional management skills according to international standards, and officiating as a coordinator between the parties.	UNDP, Government agencies

4. Lessons learned.

Is there anything worth mentioning that is special or critical we learned during implementation of the project that is important to share with other projects so that they can avoid this error or use this opportunity?

In future initiatives more attention should be directed to project governance and the alignment with the sectorial policies in which it is framed. These points were mentioned and developed in paragraphs 3 and 4 and are relevant to the appropriation of the project by the main institutions with responsibilities at the study area.

Another consideration is the development of specific communication plans targeting high-level political sector to maintain project issues in the political agenda. The plan should be designed to generate information products, concise, in plain language, with clear proposals and recommendations to address major environmental problems identified.

What would you do differently if the project started again?

The project governance should have been modified or more care put in choosing the regional coordinator because of the important role played under the management model. The technical capabilities of the regional coordinator are not as important as the ability to relate empathy and skills to articulate actors and create synergies. Empirical evidence shows that these points had not enough weight in the selection. The involvement of key stakeholders of the strategic- political level with the project was weak, particularly in transferring directives to the operative level and doing the follow up, so perhaps some actions should have been taken to promote these articulations.

A systemic approach must be promoted from the initial stages of implementation, and this requires making every effort to strengthen the links between actors and align them on a common vision of the problem, and in the implementation strategy where their actions are complementary and not competitive.

Another important aspect that emerges from the lessons learned is the need to strengthen mechanisms for monitoring the implementation and implement efficient procedures for corrective action if appropriate.

How does this project contribute to the transfer of technology?

The major contributions of the project in technology transfer were in the component of pilot projects, particularly to introduce best practices of CP in the tanneries and dairy sector, as well as contributions in the management of protected areas. In all cases, the coordinating role of the project was found effective to promote the synergistic relationship of the academic, government and business sector. The project allowed the identification of best practices to reduce pollution from industrial effluents, developed a specific methodology for it and allowed to generate useful outputs for the development of environmental public policy and management information. Actions were also identified to replicate the findings to the entire industrial sector that can be supported with funding from national or multilateral credit agencies.

The results obtained in project implementation show the need of improving the efficiency of current protected areas before proceeding administratively to creating new ones.

5. Annexed to the Evaluation Report attached to the document:

- 1 Terms of reference of the consultancy
- 2 Work Plan, Schedule and itinerary
- 3 List of Interviewees
- 4 Evaluation of results according to goals LF
- 5 List of documents reviewed
- 6 questionnaires used in the evaluation
- 7 Summary of financial performance of each result