Annex 1
PROJECT RESULTS FRAMEWORK

Introduction

Given the fact that this project is a foundational capacity building project focusing on the formulation of management tools, thereby equipping the La Plata Basin countries with an hydro-climate Strategic Action Programme (SAP) for the sound management of the basin, the execution of this planning phase is to be viewed as an enabling process which will ultimately contribute, through the implementation of the SAP, to improved La Plata ecosystem functioning. The basin-wide Transboundary Diagnostic Study – TDA - once completed will form the best possible baseline against which improvements in ecosystem functioning, to be achieved through the execution of the SAP interventions, can be prioritized, measured and reported.

In this context, the planning process to be executed under this project will facilitate achievement of the indicators noted below, especially within the pilot demonstration project sites. Extension of the lessons learned through these site specific projects will necessarily remain qualitative and descriptive, but will inform recommended strategies for future replication within the transboundary basin, subject to future actions by governments and other stakeholders. Building on the principles of adaptive management, during the project inception phase as described in the Monitoring and Evaluation Plan, indicators, baseline information and mid-term and final targets will be reviewed, refined, and approved. During project implementation, the baseline values may be adjusted as data and information become available, and new indicators and/or parameters may be added as information becomes available. This is specifically relevant to the pilot interventions specifically in terms of the feasibility, practicality, and effectivity of the specific interventions.

Below, the first table describes the project intervention logic, indicators, their means of verification—quantified to the extent possible-- and their inherent risks and assumptions. The second table provides an overview of the currently available baseline, mid-term targets and final targets. Those indicators will be reviewed and refined during the inception stage. This review will confirm that the indicators currently identified are appropriate and sufficient to monitor project progress. Overall, it is fair to say that once the baseline is refined during the first six months of project execution or latest by the end of the first year of project execution, it is likely that completion of 30% of the programmed actions constitutes a realistic target at mid-term whereas completion of 60% of the programmed actions will form a reasonable target at project completion.

1. Results Framework

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
GEF Strategic Objective Foster international, multi-national cooperation and transboundary action on priority water concerns Enhanced basin-wide capacity for adaptation to climate change and variability	The riparian countries agree to balance overused and conflicting demands on surface and groundwater through adaptive integrated water resource management practices Increased capacity and public awareness on climate change decreases vulnerability, through adaptive integrated water resources management (IWRM) practices[1]	The Strategic Action Program (SAP) provides a platform for coordinated sustainable adaptive-IWRM in the La Plata River Basin (LPB) Climate, meteorology and forecast services available for agriculture and navigation at the basin and sub-basin level Coordinate operations for basin-wide meteorological alert and civil defense systems in the five riparian countries in the LPB	The riparian governments support the developing a program of activities at an institutional and political level Specialized institutions of the five basin countries encourage and support the activities and provide information and data, and technical support Civil society and educational institutions countries actively participate and collaborate on LPB transboundary basin issues
International Waters Objectives Effective multi-national coordination and stakeholder involvement in SAP formulation Priority activities and pilot demonstrations demonstrate stress reduction measures on priority concerns Methodologies for adaptive-IWR increase sustainable and efficient water use	The hydro-climatic SAP, formulated on the basis of the issues, root causes and transboundary priorities outlined in Transboundary Diagnostic Analysis (TDA), is endorsed by the five riparian countries. Structural and non-structural measures successfully piloted in basin hot-spots Sustainable and effective best practices are scaled-up from project pilots and priority activities	The TDA with issues and root causes, and recommendations Endorsed SAP and financing plan Guidelines, directives and sectoral strategies for sustainable management practices	The riparian governments support the SAP and financially commit to SAP implementation Civil society and stakeholders of the LPB countries actively participate and collaborate in project pilots and priority activities Civil society and stakeholders are willing to engage and scale up project pilots and priority activities
Project Objective Strengthen transboundary cooperation among the riparian country governments of Argentina, Bolivia, Brazil, Paraguay, and Uruguay[2] to ensure management of shared water resources of the LPB in an integrated sustainable manner, within the context of climate variability and change, while capitalizing on development	Strengthened institutional and technical capacities of the LPB CIC representing the riparian governments will increase the number and scope of coordinated agreements and collaborated actions identified in the SAP Water sector activities provide an information foundation for adaptive IWRM in the LPB Hydrologic risk map identifies basin	Institutional coordination and transboundary cooperation agreements for formalized projects Established information resources and data network for IWRM IWRM SAP identified activities reflect integrated planned actions, implementation schedules, with satisfactory	Sustainable environmental development continues to be a priority in the public agendas of the LPB riparian countries The CIC is fully integrated and effective with the appropriate personnel and equipment Financial programs and strategies to support the LPB organizations are integrated and acceptable to all stakeholders

[1] Adaptive integrated water resources management considers conventional IWRM principles within the context of climate adaptation
[2] The riparian governments operate within the framework of the Intergovernmental Coordinating Committee for the LPB countries (CIC), as the agreed intergovernmental organization set forth for this purpose in the La Plata Basin Treaty.

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
opportunities	vulnerabilities and catalyzes the identification adaptation measures for the LPB The TDA and formulated hydro-climatic SAP provides the visionary foundation for sustainable management of the LPB water resources while providing increased investment opportunities	monitoring and evaluation (M&E) compliance	Stakeholders and business community are interested in participating in the LPB activities and contributing to its long-term sustainability
Project Purpose To enable the riparian governments and stakeholders to obtain the institutional and analytical tools to prepare the LPB TDA, and to formulate the SAP for adaptive and sustainable water resources management	The project contributes to achieving the higher objective set forth by the five riparian, signatory countries to the LPB Treaty -Argentina, Bolivia, Brazil, Paraguay, and Uruguay - to coordinate actions and investment for the sustainable integrated water resources management (IWRM) in the LPB The project supports creating the institutional and legal framework, and technical capacity for SAP formulation and eventual implementation The project initiates efforts to better understand adaptation to climate variability and climate change, with a goal to mitigate the negative impacts while capitalizing on potential opportunities	Inter-ministerial meetings effectively function in all five riparian countries and each National Project Units (NPU) act as the Secretariat Reports from adaptive measures initiated in the basin Pilot and priority activities completed with results documented and analyzed for scaling-up TDA and SAP completed and endorsed by the five riparian countries under the CIC Financial commitment and support for SAP implementation	The riparian governments continue encouraging and supporting the CIC, its national agencies and its Secretariat The CIC appropriate mechanism to coordinate strategic actions within the LPB Component bodies of the riparian countries collaborate, support and agree on recommendations for the conceptual legal framework Stakeholders and business community are interested in participating in the LPB activities and contributing to its long-term sustainability
Component I Strengthening Basin-wide Cooperation Capacity for Integrated Hydro-Climate Management			
Subcomponent I.1 Harmonizing the institutional and legal framework			
Outcome/Result Institutionalized legal, administrative and managerial tools, including a decision support system and public engagement, for sustainable utilization of the land and water resources of the LPB, within the context of climate variability	Strengthened institutional capacities in CIC and participating National institutions, increases the number and scope of coordinated agreements and collaborative actions to be incorporated into the SAP With informed capacity, riparian countries, through the CIC, agree to recommendations for compatible legal agreements that identify specific climate and water management actions for the LPB An agreed upon operationalized multi-sectoral decision support system (DSS)	At least 20 agreements signed by the SG/CIC with specific executing institutions for activities included in the Project Implementation Plan by the 1st year. Records of the establishment of the national Inter-Ministerial Committees and Thematic Working Groups as well as minutes of meetings. Recommendations for specific harmonized legal instruments related to water pollution control and IWRM. IWRM SAP-identified activities reflect integrated planned actions and implementation schedules, with satisfactory monitoring and evaluation (M&E) compliance.	The environmental development aspects continue to be a priority in the public agendas of the LPB riparian countries The CIC is working in an effective, efficient and sustainable way, with the appropriate personnel and equipment Financial programs and strategies to support the LPB organizations are integrated and acceptable to all stakeholders. Stakeholders and business community are interested in participating in the LPB activities and contributing to its long-term sustainability.

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
		DSS technical databases produce thematic map for LPB	

Outputs and Activities Subcomponent 1.1 Harmonizing the institutional and legal framework

Output I.1.1 Strengthened technical institutional capacity for LPB-IWRM
- a) Facilitate basin-wide cooperation for adaptive-IWRM
- b) Balancing national capabilities for TDA and SAP preparation
- c) Implement institutional capacity building program
- d) Organize inter-institutional knowledge exchange program

Output I.1.2 Conceptual legal framework
- a) Compile and prepare an adaptive-transboundary IWRM conceptual legal framework
- b) Agree on recommendations for conceptual legal framework

Output I.1.3 The LPB-Decision Support System
- a) Coordinate and assess LPB national databases under institutional and legal agreements
- b) Operationalize LPB-decision support system (LPB-DSS)
- c) Complete water resources users and stakeholder reference system
- d) Compile digital map for LPB

Subcomponent 1.2 Stakeholder Participation, Communication and Education			
Outcome/Result Enhanced communication and public participation increase stakeholders and civil society public awareness, facilitated through the Public Participation Fund (PPF), engage in basin activities and formulate the SAP	With transparent access to information about the importance of IWRM and of the quality of natural resources, increased participation of stakeholders and civil society, in the implementation of priority activities, the TDA and SAP formulation Through a public education program, courses, workshops, and seminars, stakeholders are prepared to participate responsibly in the process of the integrated management of water resources Fund promotes public participation with operating rules of procedures, eligibility criteria, funding and other requirements supports	Web page hits and visits, inquiries, postal mail and electronic mail, telephone inquiries, etc, made by stakeholders recorded with a certain periodicity (monthly, half-yearly, and annually) Course training, workshop and seminars materials Workshops and seminars programs and list of participants (recipients and professors/ speakers) Operating Manual for the Public Participation Fund developed within the six first months and approved by the Project Steering Committee. At least 30 project proposals from NGO, civil society organizations, universities or municipalities approved under the Public Participation Fund, by middle of year 2. Progress and final reports of Fund's awarded projects	The relevant stakeholders support the public participation program and actively participate in LPB IWRM activities The relevant stakeholders prepare projects to bid for funds to foster public participation Stakeholders receive and provide reliable information about their needs and concerns

Outputs and Activities Subcomponent 1.2 Stakeholder Participation, Communication and Education

Output I.2.1 Public participation program
- a) Engage stakeholders involvement in managing the LPB
- b) Document good practices and lessons learnt for preparing the TDA and SAP
- c) Prepare and implement communication plan
- d) Engage local participation in priority activities and pilot demonstrations

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
Output I.2.2 Public awareness education program a) Compile and prepare education and training material b) Sign conventions and agreements between CIC and institutions for knowledge exchange **Output** 1.2.3 Public participation fund for IWRM a) Establish a PPF for IWRM; b) Organize and facilitate the first call for proposals; c) Organize and facilitate the second call for proposals			
Subcomponent 1.3 Monitoring and Evaluation Plan			
Result/Outcome The progress and performance in all project components, and achieving the development objective are monitored and evaluated with satisfactory ratings	Through a project management information system (MIS), the five riparian countries' (NPUs and CIC) have increased capacity to monitor and report on activities related to IWRM The Mid-Term Review (MTR), Final Evaluation (FE) and Project Implementation Review (PIR) reflect satisfactory project implementation and achievement of the development objective	Project MIS and project reporting NPU's monitoring and evaluation personnel assigned, project baseline completed, and performance and achievement indicators published Quarter Operational Reports, Half-yearly Reports, Terminal Reports, and Mid-Term and Final Reviews Program activity planning and programming reports Reports of the Inter-ministerial and Thematic Groups meetings; Quarterly Expenditure Statements prepared by the OAS, and Counterpart Expenditure Reports	Governmental and non-governmental participating institutions systematically collect and make available relevant and timely information The riparian governments support a transparent monitoring and evaluation process
Outputs and Activities Subcomponent 1.3 Monitoring and Evaluation Plan **Output** I.3.1Project progress monitoring networks a) Collect and analyze data **Output** I.3.2 Performance evaluations a) Evaluate progress toward achieving project objective; b) Conduct Mid-term Review (MTR) and Project Implementation Reviews (PIR)			
Component II Integrated Water Resources Management			
Subcomponent II.1 Integrated Water Balance			
Outcome/results An integrated water balance (IWB) methodology, including surface and groundwater resources developed for the LPB, and endorsed through the CIC in support of adaptive IWRM in the Basin. LPB (1.300.000km2) IWB GIS map, including depictions of water demand and supply (Sc. 1:100.000) prepared.	With technical assistance from UNESCO-IHP, development of a methodology for LPB integrated water balance (IWB) that is recognized and accepted by the 5 riparian countries through the CIC. Supply and demand of IWB outputs, in a GIS format, identify the availability of resources for developing recommendations and criteria for the sustainable integrated water resources management, identified by end of project	Methodology and guidelines for IWB are endorsed by the riparian countries through the CIC by the end of the 1st year. The IWB methodology procedures / guidance manual available by the end of the 1st semester of Year 2. 5 courses for approximately 30 national and sub-national institutions of the LPB trained in IWB, by the end of year 2.	Technical cooperation from UNESCO-HIP is available and an IWB methodology is adapted and used in the LPB. Specialized institutions of the five basin countries encourage and support IWB activities and provide information, data, and technical support The governments of the five basin countries support WB activities at the institutional and political level

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
	year 2 Information, through multi-media sources, is disseminated and informs the public on the issues and the availability of basin water resources	Reports from CIC meetings endorse the LPB IWB methodology by the end of the 1st year. Harmonized LPB IWB available and endorsed by the countries through their technical representatives to the CIC by the end of the 1st year. LPB IWB maps (1:100.000) and reports are available to support the TDA preparation and the planning process (SAP) by the end of the 1st semester of year 2.	The relevant stakeholders of the different public and private agencies of the LPB support the development of the SWB activities Active participation and collaboration of civil society and educational institutions of LPB countries
Output and Activities II.1 Integrated water balance **Output** II.1.1 Operational IWB (including water demand and supply) and documented in maps (1:100.000) and reports, available for planning (TDA-SAP) and dissemination. a) Develop a IWB methodology b) Prepare guidelines and manuals for the LPB IWB preparation. b) Agree to and adopt IWB methodology **Output** II.1.2 IWB for LPB a) Compile information and generate database b) Develop capacity for understanding LPB's water balance c) Calculate Phase 1: surface water balance for the IWB, maps and reports prepared (Sc. 1:100.000) d) Asses water use and demand **Output** II.1.3 IWB information disseminated a) Disseminate water balance information			
Subcomponent II.2 Water Quality Monitoring and Assessment			
Outcome/results Through the regional water quality knowledge base, institutions responsible for water quality monitoring, agree to a protocol and remedial actions	Institutional staff trained in water quality monitoring at national and local level. Water quality database available from 40 strategic stations located in 5 major rivers of the LPB, together with inventory of water pollution sources as well as identification of mitigation actions. LPB environmental degradation model is operational including prognostic options. Trained staff contribute to preparing the water quality action plan	Training manuals by the end of year 1 55 institutional staff from the 5 countries trained in water quality monitoring by the end of the project. Operating database based on 4 campaigns/year covering 40 stations in 5 major rivers Transboundary water quality assessment incorporated into the TDA process and document. Network plan completed and lab inter-comparison reports produced with QA/QC procedures in place by the end of year 1. Basin-wide water quality directives endorsed by the countries through their representatives to the CIC, by the end of year 2.	The governments of the riparian countries and relevant stakeholders of the different public and private agencies of the LPB are interested in addressing water quality and contamination issues The specialized institutions of the riparian countries collaborate on and support the activities, providing information, data, and technical support.

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
		Water quality action plan included in the SAP by the end of the Project.	
Subcomponent II.2 Water quality monitoring and assessment **Output** II.2.1 Water quality information base a) Strengthen water quality riparian institutions b) Integrate basin-wide water quality monitoring network (in coordination with II.1.3) c) Inventory sources of pollution **Output** II.2.2 LPB environmental degradation model a) Inventory existing environmental degradation models used in the LPB b) Develop an environmental degradation forecasting model c) Consolidate and integrate data systems into the LPB-DSS **Output** II.2.3 Water quality action plan a) Identify legal framework for water quality objectives b) Prepare a water quality management training program c) Train and disseminate water quality information d) Prepare water quality action plan			
Subcomponent II.3 Integrated Groundwater Management			
Outcome/results Pilot groundwater activities provide information to formulate preliminary guidelines for integrated management of surface and groundwater resources of the LPB	Transboundary aquifers of the LPB are identified, characterized and mapped in GIS, with emphasis on the characterization of the SAYTT aquifer (Ar-Bo-Py). SAYTT groundwater management guidelines address issues such as artificial recharge, protecting recharge areas, recharge continuity, and quality and conjunctive uses of surface and groundwater The five riparian countries accept guidelines for integrated, basin-wide groundwater management of the LPB, inclusive of transboundary legal, institutional, and socio-economic situation	Hydro-geologic map for the LPB including transboundary aquifers (Sc. 1:100.000) and database, including detailed scientific and technical information needed for managing the SAYTT aquifer, (over 352.000km2) at a scale of 1:250.000. A hydro-geologic database with the basin aquifers and sub-basins SAYTT activity include integrated surface and groundwater management practices form the Guarani Assessments SAYTT-specific TDA Atlas of LPB sub-basin aquifer contributes to the UNESCO-OAS-ISARM Americas´ Program Guidelines for integrated, basin-wide groundwater management of the LPB, incorporating legal, institutional, and socio-economic information and building on the Guarani experience. SAYTT (352.000km2) transboundary aquifer management plan included in the LPB's SAP	The governments of the riparian countries and relevant stakeholders of the different public and private agencies of the LPB are interested in addressing groundwater issues The specialized institutions of the riparian countries collaborate on and support the activities, providing information, data, and technical support for groundwater modelling and policies

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
Subcomponent II.3 Integrated groundwater management **Output** II.3.1 Priority Activity: Sustainable Management of the Yrenda –Toba-Tarijeno Aquifer (SAYTT) system a) Establish technical coordination unit b) Conduct a specific transboundary hydro-geologic analysis for the SAYTT (AR-Bo-Py). c) Analyze the transboundary groundwater legal, institutional and socio-economic Situation) Conduct consultations and synthesize information e) Prepare a SAYTT strategy f) Prepare and execute a SAYTT pilot demonstration **Output** II.3.2 Guidelines for integrated basin-wide groundwater management of the LPB a) Conduct transboundary hydro-geologic analysis for the entire basin b) Characterize basin aquifers c) Integrate regional experiences d) Prepare guidelines for conjunctive management of surface and groundwater			
Subcomponent II.4 LPB ecosystem management			
Outcome/results Informed riparian countries formulate a water-related biodiversity strategy and execute priority strategic actions in the Paraná Basin up to the Itaipú dam (Prana III) to address water pollution issues.	The north-south wetland-corridor protection strategy and management plan is prepared from the Pantanal in the upper Paraguay basin, to the Paraná Delta and Uruguay River mouth. Activity in the upper Itaipu Dam area (Paraná III) engages 70 local stakeholders (in 29 municipalities) to implement measures to reduce water pollution and to protect the ecosystem in 2 sub basins in the upper Paraná River basin, as part of the Itaipu Cultivando Agua Boa Program Inventory and assessment of the aquatic ecosystems health, with particular emphasis on exotic species and most commonly used fishing practices in the Paraná, Paraguay and Uruguay Rivers, documenting as well existing legal frameworks in the 5 riparian countries. An ecological corridor in the upper Paraguay, Parana and Uruguay sub-basins is defined and agreed upon by competent institutions coordinated by the CIC	Water-related biodiversity conservation strategy for the Upper Paraná sub-basin (Paraná III) Management Strategy involving stakeholders (NGOs, riparian farmers and municipalities) for the Paraguay-Parana wetland corridor 70 farmers directly involved in micro-basin management in the Parana III basin. Reports from 3 technical groups working on: monitoring system for controlling exotic species; aquatic biodiversity status, and fishery activities and its regulation in the 5 countries, including identification and assessments of transboundary issues. Agreement proposals for regulatory fishery measures between the riparian governments prepared with key stakeholders. Technical proposal documented and strategy defined with Itaipú, Yaciretá and Salto Grande dam commissions to create and support the ecological corridor in the upper LPB covering 500.000km2 from the upper Paraguay, Paraná and Uruguay rivers basins, including AR, Br. Py and Ur).	The governments of the riparian countries and stakeholders of the different public and private agencies, civil society and NGOs of the LPB are interested in addressing water-related biodiversity conservation The three upper basin dam agencies agree to support the upper LPB ecological corridor initiative; and the CIC initiative is accepted and integrated into the national policies within the context of the UN Biodiversity Convention The specialized institutions of the riparian countries collaborate on and support the activities and provide information and data, and technical support monitoring and controlling exotic ichthyic-fauna

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
Subcomponent II.4 LPB ecosystem management **Output** II.4.1 North-south wetland corridor management strategy a) Compile and integrate existing basin ecosystem information b) Design a north-south wetland corridor management strategy **Output** II.4.2 Priority Activity: "Cultivando Agua Boa (CAB)" in the Itaipu dam's reservoir sub-basin a) Plan and design CAB priority activity b) Identify and plan specific farm intervention c) Implement specific farm interventions d) Monitor and evaluate intervention activities **Output** II.4.3 Sustainable biodiversity management strategy a) Prepare sustainable management framework for biodiversity / fisheries / aquaculture resources b) Design of an ecological corridor for biodiversity conservation and water protection in the upper catchments of the LPB			
II.5 Controlling Land Degradation			
Outcome/results To harmonize national actions including key stakeholders, to take cooperative-joint actions to control land degradation LPB wide, and to protect a critical ecosystem over 348.000km2, 4 million inhabitants, in line with the objectives outlined in the United Nations conventions UNCCD, CBD, UNFCC and other international agreements	Diagnostic analysis of LPB critically-degraded lands, based in a GIS map generated on the basis of existing information from national actions and GEF and other projects (Gran Chaco, Guarani, Bermejo , Pilcomayo and Pantanal). Priority activity to protect the Selva Misionera-Paranaense forest ecosystem (348.000km2, 2,4 million inhabitants) identifies root causes of land degradation in a diagnostic analysis, and defines erosion control and soil rehabilitation measures to protect 48.000 km2 of the eroded ecosystem - 1/5 of the original ecosystem area. Lessons learnt and good practices for sustainable land management is illustrated in the basin-wide land degradation control strategy	- Basin-wide LPB GIS maps (common projection and a 1:100.000 scale), on land-use, soil-suitability, and erosion, by the end of the 2nd year. - Report on use of technology and agro-chemicals, best practices for SLM and driving forces for land degradation, by the end of the 1st year. - Land and soil erosion analysis by the end of the 2nd year. - Information dissemination by year 3. - Detailed GIS maps for the Selva Misionera-Paranaense forest ecosystem (348.000km2, esc. 1:250), by the end of year 2. - Diagnostic on the Selva Misionera-Paranaens forest (348,000km2) with an inventory of mitigation and rehabilitation measures and key local and national stakeholders' roles, included in the LPB TDA. Basin-wide land degradation control strategy and agreed-upon actions included in the SAP Actions to protect 48.000km2 of the original SMP ecosystem, and introduce sustainable land use practices over 60.000km2 of the degraded land, are incorporated in the SAP.	The governments of the riparian countries and relevant stakeholders of the different public and private agencies, civil society and NGOs of the LPB are interested in addressing water-related biodiversity conservation The specialized institutions of the riparian countries collaborate on and support the activities, providing information, data, and technical support for the monitoring and controlling exotic ichthyic-fauna

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
Subcomponent II.5 Controlling Land Degradation **Output** II.5.1 Land degradation diagnostic analysis a) Assess and compile basin-wide data and information on land degradation b) Evaluate the soil erosion processes in the basin c) Collect, compile and disseminate information on best-practices for land degradation control for the LPB **Output** II.5.2 Priority Activity: "Selva Misionera Pranaense (SMP)" a) Compile and analyze available technical information to be considered in the LPB TDA. b) Prepare SMP priority activity c) Introduce SMP priority activity in SAP preparation. **Output** II.5.3 Basin-wide land degradation control strategy a) Compile and integrate information and SLM lessons learnt b) Prepare basin-wide land degradation control strategy and actions for the SAP.			
Subcomponent II.6 Sustainable Development Opportunities			
Outcome/results Opportunities made available to mobilize financing for sustainable development of clean technologies for the LPB, and to protect natural and cultural heritage sites within the context of recreational and ecotourism development in the Lower Uruguay River	Selected municipalities and small farmers organizations from the 5 riparian countries are trained to identify and prepare strategic actions and projects using clean technologies and greenhouse sinks by the end of the 2nd year of the project Private companies and nautical clubs from Argentina and Uruguay, in coordination with participating national institutions, co-finance activities related to cultural and natural heritage protection and sustainable use, developing nautical eco-tourism in the lower Uruguay River and the Paraná Delta.	5 project proposals by the 3rd year, involving municipalities and/or civil society/private small farmers organizations (one in each of the riparian countries) selected as demo project for solid waste disposal and Carbon sequestration, using clean technologies and greenhouse sinks. 5 different experiences used for the SAP preparation by the 3rd. quarter of year 2. - A public-private project prepared and feasibility studies done for nautical eco-tourism by the end of the 1st year. - Binational agreements Ar.-Ur, to facilitate access and immigration controls in protected areas accessible by boat at the end of year 1. -4 management plans to protect selected natural and cultural heritage at the end of the 1st.year. - 2 binational nautical route or circuit agreed, operated by private companies or clubs, by the end 2nd year. 4 protected areas included. - Private investments for the sustainable use of the cultural and natural heritages by the 3rd. year. TORs for up scaling the experience of the priority project to the basin in the SAP. Public education and awareness plan	Cost-effective and appropriate clean technologies available for investment . Private tourism companies and nautical clubs from Buenos Aires (Ar) and the Department of Colonia (Ur) are interested to invest in nautical eco-tourism, having access to natural and cultural heritages in islands and coastal areas National environmental, hydrological, and tourist institutions join efforts to support private tourism companies and clubs to develop the project by the 1st year, and upscale actions are included in the SAP by the end of the project. Local communities and private sector supports recreational and eco-tourism development in the Lower Uruguay-Parana/Delta River.

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
Subcomponent II.6 Sustainable development opportunities **Output** II.6.1 Priority Activity: Clean-technologies to protect water resources from solid waste contamination and to mitigate climate change a) Explore opportunities for clean-technologies to capture greenhouse gases in the basin to recuperate natural forests b) Select areas for mutual cooperation and secure financing **Output** II.6.2 Priority Activity: Nautical Ecotourism in the Lower Uruguay River/Parana Delta a) Study the socio-economics aspects of nautical/cultural tourism b) Study the environmental aspects of nautical/cultural tourism c) Assess the opportunities and investment potential d) Develop project proposals for eco-cultural nautical tourism e) Implement and prepare implementation and financial framework to replicate priority activity in the SAP			
Subcomponent II.7 Pilot Demonstrations Projects			
Outcome/results Based on the pilot demonstrations, a set of sound recommendations and agreed upon actions, on pollution and erosion control, early warning systems, water conflict resolution and biodiversity conservation, are formulated for inputs into the SAP	1. *Biodiversity conservation in the Regulated Parana River*. A Biodiversity Management Plan, reflects the findings of the complete ichthyic-faunal biodiversity evaluation in critical habitats, together with a fisheries sector socio-economic analysis, and provides recommendations for sustainable fishing methods and investment opportunities completed in year 3	Trinational (Ar. Br. Py) commission established for Pilot Project execution by the end of the 1st year. Complete ichthyic-faunal biodiversity inventory and evaluation at the regulated Paraná River, between Itaipu and Yacireta dams (500kms, 2 dams' reservoirs) by the end of the 2nd year. Fisheries sector socio-economic analysis, including more than 1000 fishermen and indigenous inhabitants from Br. Py and Ar.) by the end of the 2nd. year. 3 national legal frameworks for fisheries and aquatic biodiversity management assessment, by the end of the 2nd. year Biodiversity management plan for the three riparian countries communities and the ITAIPU and Yacireta dams commissions in the regulated Parana River (500 km and 2 dams' reservoirs) at the end of the 3rd. year Number of hits at the Project Web site, IWRN node and IW-Learn. A scaling-up strategy for biodiversity management for the LPB rivers' system at the end of the PP execution available for SAP preparation.	Public and private institutions in the pilot areas collaborate and participate in pilot implementation Coordination with the other flood control projects that are taking place in Argentina Civil society and stakeholders understands the need for international coordination for biodiversity management Bolivia's COMIBOL, collaborates with relevant institutions and is effective and involved Appropriation of the demonstration project by the inhabitants of the project area The municipality of Cotagaita included the implementation of natural resources management practices, to reduce erosion and silting, in its annual operating plan Effective stakeholder involvement and collaboration in the Yaciretá Bi-national Entity (YBE Argentina – Paraguay) and Itaipú International (Itaipú Bi-national Entity. Brazil – Paraguay) in the developing the demonstration project activities Political will and commitment by the stakeholders to support the management plans

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
	2. Trinational (Ar, Br. Py) Hydro-Environmental Alert System at the Confluence of the Paraguay and Parana Rivers. A pilot local hydro-environmental alert system model predicts floods, droughts and contamination spills, and contingency plans take into account safety guidelines in hydro-regulation structures, operationalized in project-year 3	Trinational (Ar,Br and Py) Transboundary Water Alert Committee at the Parana-Paraguay confluence established with reports and minutes of meetings available by the 1st year. Data base and vulnerability maps (Sc. 1:250.000 and 1:50.000) for different scenarios of climate change and hydro-climatic model covering the Paraná River from Yacireta dam and the Paraguay river from Asunción to its confluence (including network of affluent rivers) and the municipalities-cities of Resistencia and Corrientes in Ar., and Pilar in Py; by the end of the 2nd.year. Forecasting reports and alert communications available to all sub-basin communities by the 2nd year Contingency plans completed for floods, droughts and contamination spills by the 3rd. year. 3 international workshops, reports and training courses by the 2nd year. Number of hits at the Project Web site, IWRN node and IW-Learn. A scaling-up strategy for a basin-wide Hydro-Environmental Alert System at the end of the PP execution, available for SAP preparation.	Basin stakeholders and institutions have enough capacity to adjust to the change promoted by the project

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
	3. Water Use Conflict Resolution in the Rio Cuareim/Quarai Basin (14.685km2). A conflict resolution process in place for sustainable environmental flows in the bi-national Cuareim/Quaraí river, border between Brazil and Uruguay	Two Basin Committees (Br and Ur) strengthened/created to coordinate public participation at the existing Binational Commission. Inter-ministerial working mechanism established to coordinate actions at the national level by the end of the 1st year. Existing national basin information systems articulated and database harmonized, available and accessible by internet, and IW Learn, by the first year. Local alert system and contingency planning for floods and droughts strengthened, including maps (Sc. 1:100.000 and 1; 50.000) of flood vulnerability, by the 2nd year. By the end of the 2nd year, a Bi-national information system in place, a rice irrigation board created for rice irrigation rationalization with 1/3 of the rice producers included, two public campaigns and four training courses (80 farmers trained). At least four rice producers, as demonstrative farms, use less water consuming technologies in the production of rice, by the end of the 3erd. year. Feasibility plans for micro-hydraulic infrastructure and measures designed for the cities of Artigas (Ur) and Quaraí (Br) by the end of the 2nd year. Formal educational program on water management prepared by the end of the 2nd year. Cuareim River environmental flow determined and accepted at the Binational Commission level. Public awareness and community outreach for water resources cooperation A scaling-up strategy for a basin-wide water use conflict resolution control for the LPB rivers' system at the end of the PP execution, available for SAP preparation.	

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
	4. *Pollution and Erosion Control in the Cotagaita sub-basin (20.000km2, 10.500 families) of the Pilcomayo River.* Sustainable soil conservation practices implemented by local farmers; reforestation measures in the Cotagaita basin and a project to reduce mining contamination in the Tasna District are fully implemented by the end of the project	- Agreement between COMIBOL, the local Mining Cooperative, the organization of local farmers, and the Bolivian pilot project PCU signed by the end of 1st year. - Final feasibility project study for rehabilitation of the Tasna-Buen Retiro dam for mining pollution control, including analysis of environmental impacts and benefits for local communities, completed by the end of the 3rd year. - 1/3 of the farmers informed and trained in sustainable agriculture practices, water and soil protection and reforestation, by the end of year 1. - Best practices manual for reducing mining contamination in the sub-basins and 4 training courses covering at least 100 families in total, completed by the end of the 2nd year. - Sustainable soil conservation practices and reforestation measures introduced in at least 44 farms by the end of year 3. - Demonstration project reports available at the basin level, the CIC Project Web Page, in the IWRN node and on the IW.Learn platform - A scaling-up strategy for basin-wide pollution and erosion control for the LPB rivers' system, available at the end of the PP execution for the preparation of the SAP	

II.7 Pilot demonstrations and scaling-up strategy

Output II.7.1 Pilot Demonstration: Biodiversity conservation in the regulated Parana River

a) Establish pilot-demo coordination unit
b) Evaluate of basin's ichthyic fauna habitats
c) Define a socio-economic legal framework for the aquatic biodiversity
d) Prepare a biodiversity management plan and scale-up strategy
e) Monitor and evaluate 4 pilot demonstration experiences to be used for up scaling in the SAP.

II.7.2 Pilot Demonstration: Hydrologic alert system at confluence of Paraguay and Parana Rivers

a) Establish pilot-demo coordination unit
b) Develop an operational forecasting and hydrological observation model
c) Develop an operational model for contaminant spill
d) Develop DSS for a bi-national hydro-environmental alert system
e) Prepare contingency plans
f) Prepare hydrological alert system manual and scale-up strategy

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
g) Monitor and evaluate activity Output II.7.3 Pilot Demonstration: Water Use Conflict Resolution in the Rio Cuareim/Quarai Basin a) Establish pilot-demo coordination unit b) Formulate an integrated management system c) Assess sustainable use of water resources in pilot area d) Put in place mechanisms for water resources conservation e) Monitor and evaluate activity and prepare scale-up strategy Output II.7.4 Pilot Demonstration: Pollution and Erosion Control in the Cotagaita micro-basin of the Pilcomayo River a) Establish pilot-demo coordination unit b) Identify control and mitigation measures for mine contamination in Tansboundary waters, and train Tasna stakeholders on environmental management systems c) Evaluate and approved integrated management plan for the Tupiza and Cotagaita basins d) Design and implement, in coordination with subcomponent II.2, a water quality monitoring system for the pilot area e) Monitor and evaluate and prepare scale-up strategy			
III HYDRO-CLIMATIC MODELS AND SCENARIOS FOR ADAPTATION PLANNING			
III.1 Hydro-climatic scenarios			
Outcomes/Results Improved riparian countries' capacity to better understand climate variability related impacts, identified through the hydro-climatic scenarios, enable the definition of measures to address basin challenges for incorporation in the Basin SAP	Hydrologic risk models and hydro-climatic scenarios are available for basin-wide adaptation planning for the LPB The vulnerability assessment and hydrologic alert risk map, based on the hydro-climatic scenarios, provide the basis for estimating climate change impacts in the LPB Through the basin-wide communication and outreach effort, stakeholder and institutions participate in identifying and formulating adaptation measures to be included in the SAP	A centralized clearing house at the CIC for accessing information and data from national academic institutions of the LPB and form the LPB-EU project (co-financing) including existing assessments and CC models by the 1st year. Adaptation planning tools for the LPB including: a) hydro-climate forecasting system; b) integrated hydro-meteorological and atmospheric scenarios and models; c) thematic vulnerability assessments, and d) related risk maps of the LPB (Sc. 1:100.000 and detailed maps Ssc. 1:250.000 and 1:50.000), by 3rd year, are available for the TDA. Technical reports from the national agencies multi-country commissions, waterway-navigation and water supply agencies adopting proposed weather scenarios Training manuals and five seminars (one in each riparian country) for the use of hydrological model. Communication tools available and reports posted on the Project Web page, IWRN node and IW-Learn during all projects execution Information accessible for vulnerable communities and activities, by the 3rd year.	The relevant players of the different public and private agencies of the LPB support the development of the Program activities The governments of the five Basin countries support the development of the Program activities at an institutional and political level. The specialized institutions of the five Basin countries encourage and support the activities providing information and data, and technical support. Collaboration and active participation of the social and educational institutions participating in the LPB-EU project, NGOs and representative universities. Key users of water resources in the LPB are concerned and interested in scientifically and technically identified vulnerabilities as well as adaptation measures to climate variability and change at the basin wide scale..

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
		Contingency plans completed and adopted by stakeholders in the Pilot Project for *Alert System at the Confluence of the Paraguay and Parana River*up scaling for LPB in the SAP, by the 4th year Adaptation measures for water related sectors (hydro-energy, water supply and sanitation; navigation, agriculture/irrigation and tourism) identified and prepared in a participatory process, for inclusion in the SAP, by the end of the 4th. year	
Subcomponent 1.1 I Hydro-climatic scenarios Output III.1.1 Basin-wide climate scenarios a) Plan and provide training for climate issues b) Complete a basin-wide gap analysis of basin models c) Using the LPB-CLARIS model, develop hydro-climatic scenarios for the LPB Output III.1.2 Vulnerability Assessment a) Prepare hydrological alert risk map from hydro-climatic scenarios b) Estimate climate change impacts Output III.1.3 Adaptation measures and public awareness a) Formulate a set of adaptation measures to be incorporated into the SAP b) Communicate with public on issues and adaptation measures			
IV STRATEGIC ACTION PROGRAMME (SAP) FORMULATION			
Component IV TDA and SAP			
Outcome/Result Transboundary Diagnostic Analysis (TDA) completed and Strategic Action Programme (SAP) formulated and endorsed by the five riparian countries, within the framework of the CIC	The TDA, the basis for the SAP, identifies the priority hydro-climatic transboundary issues and root causes, identifies adaptive IWRM measures for the LPB The five riparian countries endorse the formulated SAP for the LPB, inclusive of an institutional framework and financing plan, by the end of the project	Reports on priority activities and pilot demonstrations, and scaling-ups strategies Complementary studies from priority activities and pilot demonstrations A completed TDA A formulated SAP Letters of endorsement for the SAP and TDA from the five riparian countries Letters of commitment for financing SAP recommendations A SAP workplan	The governments of Argentina, Bolivia, Brazil, Paraguay and Uruguay through in-kind contributions, support the implementation of SAP recommendations Stakeholders participate actively and responsibly in the development of SAP The riparian governments provide the political and technical support to the CIC and its executing body
Subcomponent 1.1 TDA and SAP **Output** IV. 1.1 Hydro-climatic assessment for TDA a) Prepare hydro-climatic assessment for TDA b) Generate forecasts and adaptation scenarios			

Intervention Logic [Outcome/Result]	Verifiable Achievement [Performance Indicators]	Means of Verification	Assumptions/Risks
c) Identify vulnerabilities and risks d) Compile and integrate supplemental studies that support the TDA e) Riparian counterparts endorse TDA **Output** IV.1.2 SAP formulation a) Collaborate with stakeholders, incorporate TDA-identified issues, and findings from priority activities and pilot-demonstrations into the SAP b) Riparian counterparts endorse SAP and pledge financing			

2. Indicators – Baseline - Targets

Sub-component Objective and Outcomes	Description of indicator	Baseline level	Mid-term milestones	End-of-project milestones
Objective I.1: Establish the technical and legal conditions necessary for providing the CIC and the participating national institutions and organizations with the capacity for integrated hydro-climate management in the La Plata basin (LPB) and for the formulation of the SAP, and its subsequent implementation	1. Institutional capacity building program	Baseline TDA identifies need to integrated management	75% of the capacity building program implemented	100% of the capacity building program implemented
	2. Conceptual legal framework	*Five different country legislation related to IWRM*	*Common concepts, principles for transboundary IWRM identified*	*Five countries agree upon conceptual legal framework*
	3. The LPB-DSS	Agreement for the creating a DSS with approval from the Gov. of the five countries	Water Resources Reference System and Digital Map 50% complete	Water Resources Reference System and Digital Map 100% complete
Outcome 1.1.1: Strengthened institutional capacities CIC, National coordinators, and Working Groups, increases the number and scope of coordinated agreements and collaborated actions identified SAP	Inter-ministerial planning mechanism established	0	100% planning mechanism established and operating	100% operating with internal national agreements to sustain future action in the LPB under CIC coordination.
	Project Steering Committee established and # of meetings	CIC Project Group as a base for the Project Steering Committee	50% of the regular meetings	100% of the regular meetings planned
	Project Director	Steering Committee acknowledges need for Project Director	Project Director 100% operational	Project Director satisfactorily supervise project
	National Coordinators established in each country.	0	100% named and operating	National Coordinators manage the project in a satisfactory manner
	# of working groups for coordination of thematic issues	0	6 thematically organized working groups created and operating	4 new thematically organized working groups created and operating. Total of 10 working groups
Outcome 1.1.2: With informed capacity, riparian, through the CIC, agree to recommendations for compatible legal agreements that identify specific climate and water management actions for the LPB	Agreements at the basin-scale address key water/climate management actions	Working methodology for water quality monitoring agreed under the PDF B phase	Preliminary recommendations at the CIC for countries technical legal agreements related to protect water quality and for the creation of alert systems in the LPB.	Agreed upon recommendations for compatible legal agreements at the country levels
	Recommendations for legal harmonization for TDA & SAP	0	2 national and regional legal workshops implemented	legal recommendations identified and proposal prepared & included in the TDA and SAP
	# of Inter-institutional knowledge exchanges	0	7	15
Outcome 1.1.3: An agreed to operationalized multi-sectoral decision support system (DSS)	Agreement for the creating a DSS with approval from the Gov. of the five countries	Digital Map Approved by the CIC	Approval of the creation of the DSS in the CIC	First: Phase of the DSS of the LPB functioning in a network with the national institutions.
	DSS technical training operational	Office of the Digital Map established with equipment and CONICET-Arg	Equipment and programs installed for phase 1.	DSS functioning with assigned CIC assigned personnel.

Sub-component Objective and Outcomes	Description of indicator	Baseline level	Mid-term milestones	End-of-project milestones
		personnel.		
	Contribution of information and cartography	Existing CIC national information and GEF Project. basic digital maps (Guaraní & Alto Paraguay and FREPLATA)	Links with national water & climate info. Institutions established, & SG/CIC management. Capacity available - Base map of the LPB produced	Documentary information and thematic maps of the LPB produced and accessible, with geo-referenced data in a SIG.

Subcomponent I.2

Sub-component Objective & Outcomes	**Description of Output indicator**	**Baseline level**	**Mid-term target**	**End-of-project target**
Enable increased awareness to strengthen active, structured and responsible multi-stakeholder participation in the formulating the SAP and engaging in basin activities.		0 Communication Plan 0 media options	8 media options identified and framework for material prepared	Communication plan access 8 different media sources with appropriate material related to LPB IWRM and SAP engagement
	Public Education Program with knowledge exchange material pertaining to SAP	0	10 courses in centers of excellence pertaining to SAP	20 courses in centers of excellence pertaining to SAP
	Number of projects completed, using the PPF	0%	40%	100%
Outcome 1.2.1 With transparent access to information about the importance of IWRM and of the quality of natural resources, an increase in stakeholders and civil society, participation involved in the pilot projects, the TDA and SAP formulation	1.www.cicplata.org; 2.Online interactive virtual forum; 3. Monthly bulletin; 4.Videos and TV spots; 5.Publications with support from sponsors and thematic committees; 6. Press data and information bulletins; 7. Contests and festivals related to themes in the SAP; 8. Information channels.	Various forms of media exist in the basin	Framework for media material prepared for different media options	Communication plan access 8 different media sources with appropriate material related to LPB IWRM and SAP engagement
Outcome 1.2.2 Through a public education program, of courses, workshops, and seminars stakeholders are prepared to participle responsibly in the process of the integrated management of water resources	20 workshops and seminar programs (4 per country)	0	50% of work workshops accomplished.	100% completed
Outcome 1.2.3 Fund promotes public participation with operating rules of procedures, eligibility criteria, funding and other requirements supports	Number of projects completed, using the PPF	0%	40%	100%

Subcomponent II.1

Sub-component & Work Element Outcomes	**Description of indicator**	**Baseline level**	**Mid-term target**	**End-of-project target**
II.1	1. IWB methodology	UNESCO-IHP	River basin IWB	100% IWB methodology

Sub-component & Work Element Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
La Plata River water supply and demand water balance instrument supports adaptive integrated water resources management in the Basin			methodology established is recognized and accepted by the riparian countries	adopted and operational
	2. Regional information bank	Various basin-wide data sources	Basin-wide data sources identified and data aggregated	Project year-3 LPB IWB defined and information disseminated
	3. Institutions and media sources	Various media sources	IWB process and preliminary findings reported and information disseminated	Project year-3 LPB IWB defined and information disseminated
II.1.1 With technical assistance from UNESCO-IHP, a methodology for LRB Integrated Water Balance, is recognized and accepted by the riparian countries	Dynamic Methodological Guide	UNESCO-IHP	Dynamic Methodological Guide endorsed by the five countries	IWB methodology implemented by end of project year-3
II.1.2 Supply and demand integrated water balance outputs, in a GIS format, identifies the availability of resources for developing recommendations and criteria for the sustainable integrated water resources management	Integrated Water Balance available in GIS Format	Various basin-wide data sources	Basin-wide data sources identified and data aggregated	Project year-3 LPB IWB defined and information disseminated
II.1.3 Information, through multi-media sources, is disseminated and informs the public on the issues and the availability of basin water resources	Documentation of all Water Balance activities and products to governmental level, academia and of the population in general.	Various media sources	IWB process and preliminary findings reported and information disseminated	Project year-3 LPB IWB defined and information disseminated

Sub-component II.2

Sub-component Objective & outcomes	Description of output indicator	Baseline level	Mid-term target	End-of-project target
Objective The objective is to cooperate with the national institutions responsible for water quality and contamination monitoring to develop a regional knowledge base within the framework of the CIC, and to establish a common set of parameters and a protocol for the monitoring of water quality.	Data entered into the database about the total information available	No database currently exists	50%	100% completion of the database
	Models in operation and personnel qualified to operate them	Not in existence	40% of the models to be formulated (none operational)	100% of the models operational and scenarios defined
	Definition of the program	Not in existence	20% of the common norms defined and a dissemination program being executed	100% of the program defined

Sub-component Objective & outcomes	Description of output indicator	Baseline level	Mid-term target	End-of-project target
Outcome II.2.1 Trained staff Information available to assess water quality and actions to mitigate pollution sources	Data sampling Equipment	Not in existence	Monitoring equipment operational Samples taken 4 per year taken at 40 sites, with 46 parameters	Established and funded water quality monitoring network with funded sampling protocol
Outcome II.2.2 LPB environmental degradation model operational with forecasting capability	Models in operation and personnel qualified to operate them	Not in existence	40% of the models to be formulated (none operational)	100% of the models operational and scenarios defined
Outcome II.2.3 Trained staff contribute to preparing the water quality action plan	Inter-calibration program of the participating laboratories. Training protocol for water quality	Not in existence	Inter-calibration program of the participating laboratories 75% compliant. 75% of participating staff training in water quality protocol	100%, all participating laboratories comply with inter-calibration program 100% of participating staff trained in water quality protocol

Subcomponent II.3

Objectives and outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
Objective: Assisting the countries sharing the Plata Basin to move towards the integrated groundwater management of both the surface water and the groundwater resources of the Basin, based on the experiences of the Guarani Project and the execution of the SAYTT Priority Project.	Surface and groundwater inventory	Surface and groundwater managed separately	50%	100% - An inventory of the La Plata Basin transboundary aquifer systems integrated into the CIC Information System.
	Groundwater guidelines	Not existent	Draft guidelines	Guidelines for the integrated management of surface and ground waters in the La Plata Basin developed and adopted by the CIC.
Outcome II.3.1 SAYTT groundwater management guidelines address issues such as artificial recharge, protecting recharge areas, recharge continuity, and quality and conjunctive uses of surface and groundwater, which provide the basis of the SAYTT groundwater strategy	- A transboundary diagnostic analysis of the SAYTT agreed upon by the countries - A SAYTT Strategy includes climate change adaptation strategies, prepared and endorsed at ministerial level	The ISARM Program has identified the SAYTT as one unique transboundary aquifer system.	100% TDA for the SAYTT	100% SAYTT strategy
Outcome II.3.2 The five riparian countries accept guidelines for integrated, basin-wide groundwater management of the LPB, inclusive of transboundary legal, institutional, and socio-economic situation	- Adoption of a harmonized guidelines for the integrated management of surface and ground waters, based on the experience of the Guarani Aquifer and the SAYTT demonstration project. - An assessment of priority aquifers for the implementation of the conceptual framework, and a characterization of selected transboundary aquifers, completed.	Fragmented actions on groundwater management, not integrated into a basin management framework.	10%	100%

Subcomponent II.4

Work Element Objective and Outcomes	Description of output indicator	Baseline level	Mid-term target	End-of-project target
II.4 objective: Harmonize national biodiversity strategies within the La Plata Basin, consolidating the actions of the riparian within the context of the United Nations Convention on Biodiversity	1. North-south wetland corridor management strategy	Existing sub-basin biodiversity reports, UN Convention on Biological Diversity	50% of strategy drafted in framework format	100% of strategy completed, incorporating findings from priority activities and pilot demonstration, inclusive of recommendations for SAP
	2. Farm interventions	Intervention methodology developed by ITAIPÚ	53 (75%) farm interventions being implemented	100% of the 70 farms implement good farm practices interventions
	3. Sustainable biodiversity management strategy for the upper catchments of the LPB	GEF Bermejo, Pantanal and Freplata projects	50% of strategy drafted in framework format	100% of strategy completed, incorporating findings from priority activities and pilot demonstration, inclusive of recommendations for
II.4.1 The north-south wetland-corridor biodiversity conservation strategy and management plan is prepared on the basis of the Itaipu priority activity	Common strategic actions identified at the basin level for the conservation and sustainable use Riverine wetlands and ecosystem	0%	100%	100%
II.4.2 The priority activity in the upper Itaipu area engages local stakeholder to implement measure to reduce water pollution within the corridor ecosystem	Interventions at the farm scale assisted with plans and investments grants.	0 farm	53 farms	70 farms
II.4.3 An ecological corridor in the upper Paraguay, Parana and Uruguay sub-basins is defined and agreed upon by competent institutions coordinated by the CIC	Common strategic actions to preserve and sustainable manage biodiversity corridor to be included in the SAP	0% of key stakeholders involved Possible biodiversity interventions	30% of key stakeholders involved Sustainable biodiversity interventions for the ecological corridor identified	100% of key stakeholders involved Appropriate sustainable biodiversity interventions incorporated into the SAP

Sub-component II.5

Subcomponent Objective and Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
Objective To harmonize national actions related with control of land degradation within the La Plata Basin, consolidating regional strategies under the United Nations Convention on Desertification.	*Land degradation diagnostic analysis*	*Existing databases and information sources*	*Diagnostic analysis 85% complete*	Findings from diagnostic analysis incorporated into SAP
	Priority activity proposal and co-financing	*Other GEF sub-basin activities*	*100% complete*	Findings and lesson incorporated into SAP
	Basin-wide land degradation control strategy	*Individual sub-basin initiatives*	50% complete, framework for Basin-wide land degradation control strategy agreed upon	100% completed and agreed upon Basin-wide land degradation control strategy
Outcome II.5.1 Maps generated on the basis of existing information from the Bermejo, Pilcomayo, Pantanal, and Grand Chaco priority activity provide soil and critically-degraded information	- Geo-referenced database, will include land use, soil suitability, erosion vulnerability layers and land degradation map - Diffusion material and events held in each of the countries about best practices.	An integrated base does not exist.	50%database compiled	100% completed
Outcome II.5.2 The priority activity, in the Selva Misionera-Paranaens forest, identifies root causes of land degradation, and defines erosion control and soil rehabilitation measures by the end of the project	- A GEF project document of medium size for Selva Misionera	Not in existence	100%completed	Findings and lesson incorporated into SAP
Outcome II.5.3 Lessons learnt and good practices for sustainable land management is illustrated in the basin-wide land degradation control strategy	Common agreed actions in the La Plata Basin, complementing the National Action Programs against Desertification	Not in existence	20% framework for agreed to action	100%common agreed actions

Sub-component II.6

Subcomponent Objective and Outcomes	Description of Output indicator	Baseline level	Mid-term target	End-of-project target
Promote clean technology activities that promote activities such as navigation, responsible and sustainable tourism	*Clean-Technologies inventory* Training	*Individual efforts in the micro-basins*	*100% completed inventory*	*100% training completed* Clean technologies promoted by the riparian
	Nautical Ecotourism project document proposal structured and evaluated	Not in existence	100% complete	Clean technologies are scaled up and principles included in the SAP
II.6.1 Activities using clean technologies and greenhouse sinks are identified and formulated by the end of the project	Projects selected in the regional framework and promotes the search for funding at the national level	Not in existence	50%	100%
II.6.2 Activities promoting	Nautical Ecotourism	Not in existence	100% complete	Clean technologies are scaled

Subcomponent Objective and Outcomes	Description of Output indicator	Baseline level	Mid-term target	End-of-project target
sustainable tourism within appropriate cultural and historic venues	project document proposal structured and evaluated			up and principles included in the SAP

Sub-component II.7.1

Subcomponent Objective & Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
Contribute to the conservation of the biodiversity of the ichthyic resources in the Paraná River by promoting the development of management capacity of existing institutions in the Paraná River Basin at the river reach comprising the confluence of the Paraná and Paraguay Rivers	Regional strategy for biodiversity for the regulated Paraná river and the wetland corridors.	0	50% pending completion of technical support studies and activities.	100% Strategy completed and findings incorporated into the SAP
I.7.1 A Biodiversity Management Plan, reflects the findings of the complete ichthyic-faunal biodiversity evaluation in critical habitats, together with a fisheries sector socio-economic analysis, and provides recommendations for sustainable fishing methods and investment opportunities	Project well coordinated and adapted to the reality	0	- Documented execution arrangements	
	Improved knowledge for the conservation of the fish population and biodiversity in the regulated Itaipu and Yaciretá reservoirs Better diagnosis and planning Support programs for the control of the golden mussel	0	- An ichthyic biodiversity evaluation in critical habitats, including control measures of exotic species. - Study on the cause-effect relationships between flows, water quality, and critical habitats - Synthesis of migration patterns. Impacts of the golden mussel on the ichthyic fauna. - Compilation on the fishing biology including species of the economic and ecological importance	
	Implementation of sustainable fisheries management by the three countries	0	- A socio-economic study on sport and commercial fishing, including recommendations on fishermen activities, and a proposal for legal harmonization - Involvement of stakeholders at different levels - Dissemination of educational and training material	
	A regional strategy for biodiversity conservation shared by the three countries, for the regulated Paraná river and the wetland corridors. Improved control of fishing activities Environmental sustainability	0	- An environmental management plan for the area encompassed by the pilot project, agreed upon and implemented with the main stakeholders	
	Lessons learned and recommendations for the sustainability and replication of the Pilot Demonstration	0	- Progress and final reports on the Project implementation performance and expected results compliance	

Sub-component II.7.2

Subcomponent & Objective Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
Improve the capacity to forecast, communicate and act upon the occurrence of extreme hydrological events and spills (contamination) in the metropolitan areas of Resistencia, Corrientes and Pilar	Hydro Environmental Alert System	0	50% of alert system is in preparation in coordination with interdependent activities	100% alert system operationalized
A simulation hydro-environmental alert system model predict floods, droughts and contamination spills, and contingency plans take into account safety guidelines in hydro-regulation structures, oprationalized in project-year 3	Compliance with PD objectives, budget and timing	0	Measures and Reports on the mobilization of resources and associated results for the implementation and management of the Pilot Demonstration	
	Adaptations/actions to address the hydrological effects of climate variability and change, to prevent flood and drought-related disasters.	0	A system based on institutional coordination for hydrological models for flooding and drought related disasters	
	Adaptations/actions to address the effects of upstream contaminant spillages, to prevent related disasters.	0	A system based on institutional coordination, hydrological monitoring, and spillage routing to predict its effects.	
	Organization of information and use of the models from the Activity 2 (prediction of floods and droughts) & 3 (modeling of spills) for decision-makers.	0	A Binational Hydro-Environmental Alert System.	
	Implementation of mitigation actions, in partnership with Civil Defense authorities.	0	Contingency Plans for mitigation of effects of floods and droughts, as well as of upstream contaminant spillages	
	Reliable and operational models and forecast systems	0	Specific project and studies for the development of Activity II and III	
	Support and corrective measures at higher administrative levels aiming at the sustainability and replicability of this Pilot Demonstration.	0	Follow-up & evaluation reports	

Sub-component II.7.3

Subcomponent Objective & Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
Project objective and Outcomes Objective To resolve water use conflicts in the Río Cuareim/Quarai Basin, situated on the border between Brazil and Uruguay	1 - Institutional frameworks at basin level within each country and in the binational context are functional	Existing institutions created by Binational Cooperation Agreement lack power and recognition	Countries decided to implement a Pilot Demonstration to develop experience on local conflict resolution	A conflict resolution environment is consolidated at basin level through institutions and procedures
	2. - Conflicts are solved within the basin management context	Conflicts still occur	Negotiation tables were formally proposed and are being formed	Negotiations tables are operating and effective
	3. - Environment conservation policy is recognized by stakeholders	Not recognized	An environmental mitigation and control plan of measures and an education program were developed	Environmental mitigation and control measures and environmental education are being implemented
	4 - Public participation mechanisms are operational in both countries	Very low degree of participation	Motivation and mechanisms for consensus building within the basin were devised and are being discussed with stakeholders	Participation mechanisms and fora implemented and active with a significant degree of public participation
1. Institutional strengthening for a coordinated basin management	There are formal coordination institutions within each country and at the binational level to deal with the issues of the Pilot Demonstration	They are weak	Basin Committees were created in each country and at the binational level	Committees implemented and functioning

Subcomponent Objective & Outcomes	Description of indicator	Baseline level	Mid-term target	End-of-project target
2. Agreed instruments, operational procedures, and experimental measures to reduce irrigation related conflicts	There are mechanisms, operational and experimental measures to reduce irrigation related conflicts	Not enforced	Robust operational procedures were designed and are under analysis and discussion by stakeholders	Management Tools , Conflict resolution and Operational procedures were consolidated and implemented in both countries
3. Environmental Information System	Information systems and management tools exist and are useful for conflict resolution	Present systems are not coordinated nor are operational in a basin basis	An integrated baseline and hydrologic and land use monitoring were developed and are operational	A water and land use basin model is being used as a management tool
4. Establishment of mechanisms to mitigate impacts on health and environmental quality	Environmental mitigation and control measures are being used and are effective	Law enforcement lack behind of what is needed	Mechanisms to improve water quality and reduce soil erosion are being implemented on a basin wise basis (50% completed)	Eco-hydrologic measures implemented in critical areas and show good results in improving water quality and soil erosion. Environmental flows are being enforced.
5. Establishment of mechanisms to mitigate natural and anthropogenic risks	Natural and anthropogenic risks are known and are under control to the extent possible	Very little knowledge is available. Damages have been very high	Vulnerability to extreme events (floods and droughts) have been determined Contingency plans were developed and are being handed over to municipalities	Municipalities are improving readiness and resilience to face extreme events based on a contingency plan. Land use control is being enforced based on legal instruments. An Alert system is functional.
6. Preparation and implementation of a formal educational and training program on water management in the basin and stakeholder participation at all levels	Stakeholders and citizens are aware of the problems caused by the land and water overexploitation resources and agree to implement management and control tools	There are some initiatives towards improving the degree of consciousness about the existing problems in the Basin	Education and training programs have been developed and implemented. At least 50% of the Basin population have attended at least one of the courses and workshops	Increased motivation and participation shows a higher level of social drive towards better living standards, base on public opinion surveys.

COMPONENT III

Project objective	Description of Output indicator	Baseline level	Mid-term target	End-of-project target
To enhance the capacity of the basin countries to anticipate and adapt to climate change and variability related impacts.	Ensemble of regional climate and hydrological projections at basin level	Isolated climate scenarios developed in the countries either from ensembles of global model outputs or single runs of regional models in the three countries	Developing a system to produce a consensual ensemble of regional climate and hydrological scenarios based on regional models nested on global models	Mid-term target plus Improving the system to include scenarios of probability functions of relevant hydrological variables. Capacity building to produce regional climate and hydrological scenarios in all the CIC countries

Project objective	Description of Output indicator	Baseline level	Mid-term target	End-of-project target
	Assessment of vulnerability to climate change in some representative cases	Risk maps of present climate in part of the flood valley of the Paraguay river. General assessment of vulnerability to climate change in some sectors and regions developed during SCN enabling activities.	Assessment with quantitative indicators focused on representative cases of vulnerability to climate change covering the issues of - firm energy of hydroelectric facilities -urban vulnerability to the most frequent intense rains - agriculture -floods	Mid-term target plus risk maps in the more important flood valleys of the Paraná and Paraguay rivers.
	Adaptation measures for agriculture, water supply and intense rains	Low general public awareness on climate change impacts. Autonomous adaptation in the agriculture sector. Reactive adaptation to increased floods.	First report on measures and policies in representative cases to: - palliate incomplete adaptations in agriculture - overcome water supply problems - mitigate the effects of extreme rainfall events	High awareness in the stakeholders related to agriculture, water supply, and intense rain. Measures and policies developed for representative cases to: - palliate incomplete adaptations in agriculture - overcome water supply problems - mitigate the effects of extreme rainfall events

COMPONENT IV

Sub-component Objective and Outcomes	Description of output indicator	Baseline level	Mid-term target	End-of-project target
A Strategic Action Program (SAP) for the la Plata Basin, technically sound and agreed, will be prepared to advance and better define priority actions identified in the framework program, based upon a TDA focused on critical sub-basins and issues	Endorsed SAP Commitments to financing the SAP	Baseline TDA Framework Program	20%	100% endorsed SAP and 100%, all five riparians commit to financing the SAP
- The TDA, the basis for the SAP, identifies the priority hydro-climatic transboundary issues and root causes, identifies adaptive IWRM measures for the LPB The five riparian endorses the formulated SAP for the LPB, inclusive of an institutional framework and financing plan, by the end of the project	Hydro-climatic TDA	Baseline TDA (from PDF-B)	60%	100%
	SAP & Financing Plan	Framework program (from PDF-B)	20%	100%