



BINATIONAL COMMISSION FOR THE  
DEVELOPMENT OF THE UPPER BERMEJO  
RIVER AND GRANDE DE TARIJA RIVER BASINS



GLOBAL  
ENVIRONMENT  
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OF AMERICAN  
STATES

# STRATEGIC ACTION PROGRAM FOR THE BINATIONAL BASIN OF THE BERMEJO RIVER

A R G E N T I N A • B O L I V I A



## ≈ PUBLIC PARTICIPATION ≈



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**PUBLIC PARTICIPATION IN THE STRATEGIC ACTION PROGRAM  
FOR THE BINATIONAL BASIN OF THE BERMEJO RIVER**

Report summarizing the public participation mechanisms utilized in the formulation of the strategic Action Program for the Binational basin of the Bermejo River (SAP-Bermejo), conducted during the period 1997-2000. The document outlines the major activities that were conducted to ensure the active participation of basin communities, local, regional and national authorities, academia, and NGO's into the preparation of the SAP. While not comprehensive, it is intended to provide some guidelines as to methods of public participation, so as to assist other GEF international water's projects.



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# **1. | THE STRATEGIC ACTION PROGRAM FOR THE BINATIONAL BASIN OF THE BERMEJO RIVER**

## **1.1. BACKGROUND**

This project financed by the Global Environment Facility (GEF) provides technical and financial assistance to the Governments of Argentina and Bolivia to formulate and implement a Strategic Action Program (SAP) for the Binational Basin of the Bermejo River. The principal aim of the project is to promote sustainable development, and to help alleviate the main environmental problems affecting the basin, particularly the de-

gradation of soil and water resources.

The formulation and implementation of the SAP is a joint effort of the Governments of Argentina and Bolivia, through the Binational Commission for the Development of the Upper Bermejo and Grande de Tarija River Basins. Support is being provided by the General Secretariat of the Organization of American States, which acts as regional executing agency for the project, and the United Nations Environment Programme-UNEP, as implementing agency for the GEF.

## 1.2. OBJECTIVES

The main objective of the SAP Bermejo is to promote the sustainable development in the basin by incorporating environmental concerns into development policies, plans and programs for the basin and installing an integrated approach to the basin and to the management of its natural resources.

To achieve these objectives, transboundary activities and specific investment projects were identified during the SAP formulation phase, developing mechanisms to control the generation and transportation of sediments, reduce biodiversity loss, and prevent and/or revert soil degradation processes through agricultural and forestry practices and implementation of sound environmental management practices.

The specific objectives of the SAP formulation phase were:

- ✱ To formulate an environmental diagnosis of the basin to identify the environmental problems affecting the basin, their transboundary manifestations and the direct and basic causes underlying them.
- ✱ To formulate a Strategic Action Plan (SAP) for the Binational Basin, considering the different focal areas of the GEF, to help solve priority environmental transboundary issues, particularly those related to management of water and other natural resources.

- ✱ To assist the Governments of Argentina and Bolivia to incorporate transboundary environmental concerns, including soil and water degradation and protection of biodiversity, into development policies, plans and programs for the basin.

- ✱ To conduct a series of pilot demonstration activities to implement the SAP in order to obtain the information needed for natural resources management in the basin.

- ✱ To assist both countries in introducing public consultation instruments in the implementation of the basin development projects, to ensure their environmental sustainability and social acceptability.

The specific objectives of the SAP implementation phase, currently in execution, are:

- ✱ To establish a framework for regional harmonization and coordination of transboundary efforts undertaken by the various jurisdictions in the basin, while facilitating the work within each jurisdiction, thereby contributing to the harmonious and sustainable management of the basin's natural resources.
- ✱ To deepen and keep up-to-date the environmental diagnosis of the basin in order to identify and characterize priority transboundary environmen-



tal problems and their related sectoral issues.

- ✱ To strengthen water and other natural resource management practices and to promote environmental protection throughout basin.
- ✱ To support the establishment of a proper planning system and the implementation of a consultation and coordination mechanism, both among jurisdictions within each country, and within the basin as a whole.
- ✱ To promote the incorporation of transboundary environmental concerns into development policies, plans and programs for the basin.
- ✱ To continue implementation of pilot demonstration activities, as a mechanism for direct public involvement, and to help keep updated information for SAP implementation.
- ✱ To strengthen public consultation and participation processes in the planning and implementation of developing projects.
- ✱ To implement prevention and remediation activities and projects to deal with priority transboundary environmental problems, particularly those related to soil erosion and degradation, water quality, habitat destruc-

tion and biodiversity loss, flooding and other natural disasters, and deteriorating living standards.

- ✱ To undertake activities and projects for the sustainable use of water resources, within the context of an integrated natural resources management approach.
- ✱ To promote public awareness activities.

### **1.3. BERMEJO RIVER BASIN**

#### **CHARACTERISTICS**

The basin of the Bermejo River, shared by Argentina and Bolivia, is an important area of the La Plata river region. It embraces some 123,200 km<sup>2</sup>, of which about 11,900 km<sup>2</sup>, or 10 percent, belongs to the Bolivian portion and the rest to the upper and lower basin in Argentina. The River itself has a length of about 1300 kilometers and passes through the entire extent of the huge Chaco plain, serving as a link between two important geographic features of southern South America: the Andes Ranges and the Paraguay-Paraná river system. In this way, it provides a corridor connecting the biotic elements of the Andean mountains and the Chaco Plain. There is an exceptional diversity of habitat all along the course of the river, as well as great potential for human deve-

lopment and the sustainable exploitation of its resources. Erosion and sedimentation are serious problems. Studies indicate that the Bermejo river produces about 80 percent of the sediment load (mud and clays) that flows into the La Plata river through the Paraguay-Paraná river system.

Intense natural resource use, and inappropriate development schemes have resulted in serious environmental degradation processes and low quality of life standards. Traditionally, the perception and implementation of solution programs to these environmental problems have been fragmentary and inefficient. Despite these problems, the basin's natural resources provide an important economic potential and development opportunities for its estimated 1.2 million inhabitants

#### **1.4. WORK ELEMENTS**

The SAP formulation phase was structured in three main work areas, including general activities and specific work program. The areas and corresponding work elements were the following:

##### **A) WORK AREA I:**

###### TRANSBOUNDARY DIAGNOSTIC

It was designed to obtain and analyze information for the water problems, regional erosion and sedimentation diagnosis, and the evaluation of the actual and emergent main environmental

transboundary problems of the basin. The information generated provided a solid scientific and technical base for the identification of remediation actions. It included the following work elements:

- \* Contaminants Transboundary Movement, Binational.
- \* Water Sources Classification, Bolivia.
- \* Bermejo River Lower Basin Land Utilization, Argentina.
- \* Erosion Control, Santa Ana and Camacho River Basins, Bolivia.
- \* Land Property, Central Valley of Tarija, Bolivia.
- \* Pasture Management, Central Valley of Tarija, Bolivia.

##### **B) WORK AREA II:**

###### PILOT DEMONSTRATIONS

Under this work area, demonstration projects were implemented to help ascertain the technical, economical, and social feasibility of proposed actions, and to assess public participation methods. Work elements were:

- \* Pastures Management in the Humid Chaco, Province of Formosa, Argentina.
- \* Transition Forest, Province of Salta, Argentina.
- \* Sustainable Development in the Yungas Forest , Province of Salta, Argentina.
- \* Tolomosa River Basin Management, Bolivia.
- \* Development Restrictions Removal

in Dry and Humid Chaco, Province of Chaco, Argentina.

- \* Environmental Education, Province of Formosa, Argentina.

**C) WORK AREA III:**

STRATEGIC ACTION PROGRAM  
DEVELOPMENT

The SAP formulation was the main activity during the first phase of the Bermejo River Basin program, as it combined the integration of the results and recommendations of the transboundary diagnostic analysis, public demonstration projects, and public participation

process, including the compilation of on-going and proposed initiatives for the sustainable development of the region. Work elements were:

- \* Hydrometeorological Network, Binational.
- \* Environmental Legislation, Binational.
- \* Baritú - Tariquía biological corridor, Binational.
- \* Transboundary Migrations, Binational.
- \* Strategic Action Program formulation, Binational.
- \* Public Participation, Binational.



## **2. | LEGAL AND INSTITUTIONAL FRAMEWORK FOR PUBLIC PARTICIPATION DURING SAP FORMULATION**

The legal and institutional framework is different in both countries. In Argentina the current Constitution explicitly establishes public participation. Nevertheless its implementation is quite new and heterogeneous. As a federal country, the circumstances in each Argentinian province must be considered in particular. In the provinces of Formosa and Salta for example, public participation legislation includes public audience, people's initiatives and public consultation instances, though its implementation is in its initial stages. There are other sector instances, which consider community awareness, such as National Parks Administration and several national infrastructure projects

(for example: electricity, gas, etc.).

Bolivia has been undergoing a strong administrative decentralization process transferring duties and competencies and assigning financial resources from national to regional (Prefectures) and local (Municipalities) governments. Such process has significantly altered the decision-making mechanisms and the national economic policy of the country.

The two basic laws of the decentralization process are: (I) the Public Participation Law: (April 20th, 1994), which promotes public participation of farmers' communities, urban organizations, and aborigine communities recognizing the legal entity of the so-called

“Territorial Base Organizations” delegating to them the power and monitoring control of the Municipalities’ financial resources, and (II), the Administrative Decentralization Law (July, 28th, 1995), which transfers and delegates political, technical and administrative attributions to Department Prefectures. There are nine Prefectures with regional planning and investment project execution responsibilities.

The main feature of this administrative decentralization is the regulation and institutionalization of the public participation in the use and manage-

ment of financial resources through prefecture and municipal participation planning. Municipalities are required to elaborate their short, middle and long-term plans with citizen participation, providing guidelines and technical support to carry out such planning system. The institutionalization of public participation methods as public policy, applicable to all development projects, facilitated its inclusion into the SAP formulation stage.



### **3. PUBLIC PARTICIPATION DURING THE STRATEGIC ACTION PROGRAM FORMULATION (1997/2000)**

#### **3.1. PUBLIC PARTICIPATION REQUIREMENT**

The challenge of fostering sustainable development in a broad area with a complex social and institutional setting that includes two countries, great ethnic, cultural and ecological diversity, five administrative units (the Department of Tarija in Bolivia and the Provinces of Salta, Jujuy, Chaco and Formosa in Argentina) demanded strong participation by the different stakeholders involved.

This public participation was carried out not only by means of Specific Work Elements (considered since the initial stage of the Strategic Action Program and which continues during its implementation) but also through the design and execution criteria of all Work Elements.

#### **3.2. STAKEHOLDERS INVOLVED**

Public participation mechanisms are being applied respecting each case (implementation phase, program stage, cultural framework of each project, specific objectives, etc.).

The Work Elements of the SAP formulation incorporated the whole diversity of stakeholders in the basin (**table 1**):

- \* The government sector (national, provincial, departmental and municipal) with jurisdiction in the basin, both through direct participation of their authorities and through their technical and decentralized institutions. In the case of Argentina, this sector has been the most active, and its participation

has produced a tangible element of institutional strengthening.

- \* The academic sector, which participated in the generation of new knowledge, basic or applied, through research institutes and local universities or through outside universities studying the basin.
- \* Nongovernmental organizations (NGOs), including those with social or environmental agendas, as well as producer and business groups.
- \* Private businesses and mixed enterprises.
- \* Private landowners and local community groups, as sponsors or beneficiaries of several demonstration projects as sponsors or beneficiaries of several demonstration projects.

### 3.3. PARTICIPATION MECHANISMS

A great variety of public participation mechanisms were used during the SAP formulation phase. These included seminars and workshops, working groups, working meetings, modern communication media (email, mailing lists and the Internet), interviews with key individuals, surveys, meetings with institutions, direct participation in pilot demonstration projects and community ac-

tivities, etc. **Table 2** shows mechanisms applied for each SAP work element.

The specific implementation of these mechanisms varied depending on the objective, the issues under consideration, and the context. They differed according to its application: defining priorities and proposals, validating results, demonstration projects, or public consultation on specific issues

#### A) SAP FORMULATION

The final SAP product was the result of a wide participation and negotiation process with the authorities and users of the basin (**tabla 3**).

In Bolivia, the process began with an Initial Workshop Seminar (July 1997) with the participation of the Municipalities of the Upper Basin, local political institutions and local Universities. This was followed by a regional workshop (May 1998) with the participation of stakeholders (governmental institutions, private sector, Universities, NGO's, Municipalities and baseline organizations) in which the objectives and scope of each work element, and the overall proposed SAP formulation process were presented and discussed. Albeit only a moderate reaction was obtained, the comments and recommendations were included as part of the workshop conclusions, which were subsequently distributed among different institutions, together with a request for information on project ideas/proposals

for the sustainable development of the binational basin.

In Argentina, the formulation phase included an initial Workshop Seminar (December 1997) with the participation of local authorities, representatives of five (5) universities located in the Provinces of the Basin, local institutions, and NGOs. Recommendations of this event were disseminated and its implementation was followed up. A second Workshop (May 1998) was conducted to intensify a dialogue with all active NGOs in the Basin, helping to establish a permanent communication and participation mechanism with the SAP. In all cases most documentation related to the SAP was distributed among participants. A third Workshop (November 1998) focused on analyzing and summarizing the environmental concerns of the basin, mainly on their transboundary components, their direct or root causes and the strategic actions to mitigate them.

Additionally, a communication system by means of modern tools such as internet and e-mail was continuously used in sharing information among the different stakeholders of the basin.

#### **B) PUBLIC PARTICIPATION AND DEMONSTRATIVE PROJECTS**

In Bolivia, the Pilot Project of the Tolomosa Basin had two components: Agricultural and Pastures Practices and Sediment Control Works. Although a Seminar was carried out with the parti-

cipation of various stakeholders of the basin in order to explain and gather different opinions, it was necessary to perform and continue to provide workshops and meetings to schedule implementation of works in their properties. This permanent motivation was important to obtain the direct participation of the implementation works beneficiaries (fences, forest and pastures plantation, micro-irrigation works etc.).

The remaining work elements were related with studies on specialized subjects previously identified, which provided required data of Transboundary Diagnosis of the basin and definition of projects for the implementation stage of the SAP.

Public Participation also varied depending on the objective, the issues involved, and the context of the program element under consideration. Erosion Control studies of the Santa Ana and Camacho Rivers and Baritú - Tariquía Biological Corridor implied an intense participation process of stakeholders: explanation, validation, polls, field work, interviews, inter-institutional coordination workshops and meetings.

Likewise, technical workshops were conducted on environmental legislation, and erosion control techniques. These were complemented with inter-institutional meetings, polls and interviews with key individuals.

In Argentina, a variety of public participation mechanisms were used, including seminars and workshops. Particu-



larly important was the participation of the Academic sector, especially in Work Areas I and II. In the case of the component “Sustainable Development in Las Yungas”, there was an active participation of local stakeholders in its planning and execution, particularly in the application of production strategies, improved production and commercialization systems, and community organization. In the Pilot Project focused on ecotourism development, technical meetings and fieldwork with inter-institutional participation were conducted, articulating efforts and interests of the national-/provincial administrations, intermediate associations and private landowners, conforming a group with the common

objective of identifying sustainable environmental economic alternatives.

In general, the interaction with local stakeholders generated important feedback information which was included and/or adapted into the specific objectives and implementation plan of the different work program elements, increasing their possibility to succeed. For example, in the Environmental Education Project component, actions of governmental authorities (provincial and municipal) and educational institutions were put together with inputs coming from agricultural stakeholders so as to develop a program for the sustainable use of native vegetation.



## 4. | PUBLIC PARTICIPATION RESULTS

### 4.1. SUCCESSFUL RESULTS

- \* Significant participation of institutions in the execution of the program. A total of 98 institutions were directly involved in the formulation of the SAP.
- \* Institutional and stakeholders participation in seminars and workshops was wide and active, providing for an environment of overall cooperation and support.
- \* Pilot demonstration projects provided a concrete “hands-on” experience for local communities, promoting a general acceptance of the Program and encouraging their active participation.
- \* Technical dialogues conducted for specific issues generated or renewed integration and coordination between institutions and specialists working in the ba-

sin, which were essential to achieve the proposed SAP objectives of coordinated and participatory planning. The elaboration of digital cartography and the design of a hydrosedimentologic model for the entire basin, are some of the examples in which the need to integrate equipment and intersectoral studies provided an excellent opportunity for interaction among the provincial states and local Universities, not commonly utilized.

- \* The continuous work through planning and execution of different projects, Workshops and work meetings, has accentuated in the participants a sense of belonging to the basin.
- \* The request for project ideas dealing with development and environmental issues provided an opportunity for local communities to present their hopes and aspirations.

## **4.2. PROBLEMS AND DIFFICULTIES ENCOUNTERED**

- \* The discussion and dialogue on the SAP frequently received preexistent demands and conflicts, interfering with the specific SAP objectives. Nevertheless, it had also enriched the SAP as regards to content adjustments and work strategies.
- \* Institutional, local, and personal participation frequently materialized after an awareness of concrete and short-term benefits.
- \* Several times individual interests predominated over common interests, and local perception dominated regional issues.
- \* Lack of knowledge and information, and previously unaccomplished expectations, provided for a limited credibility of the SAP and its Work Elements in the beginning of the formulation phase, demanding renewed and increased efforts at the project's onset to gradually overcome the initial apprehension of local stakeholders.
- \* Local and regional events (i.e. flooding during the 1997/98 El Niño Event) proved critical in diverting attention towards more urgent and immediate needs, losing the momentum generated from public participation efforts.
- \* The response of local and regional NGOs, and the private sector, was less than expected.
- \* Difficulties in getting full and active participation of local communities, which in some cases meant having to relocate or modify engineering designs (for sediment control structures). This problem was caused for the underlying economic conditions manifested in lack of interest in long-term gains (soil conservation measures); the lack of motivation to carry out activities upstream to benefit downstream populations; and the general mistrust by local farmers of projects managed by professionals not belonging to their communities, and by some negative experiences with previously executed projects.
- \* Significant difficulties were encountered for stakeholder participation in the binational events (regional workshops), due primarily to the lack of financial resources, time constraints, or bureaucratic authorizations in case of public officials and personnel traveling to the counterpart country.
- \* The seminars and workshops, although successful, had limited impact due to the absence of top-level representatives with decision-making authority.

## 5. | LESSONS LEARNED

- \* The international framework of the SAP facilitated a positive involvement of institutions (governmental and academic).
- \* In general, the possibility of accessing financial sources facilitated community involvement in the program.
- \* The private sector was the most difficult to integrate for the dialogue on the development of the Bermejo Basin, reflecting a general lack of interest on environmental matters.
- \* Incorporating public participation strategies at the project's onset proved vital in obtaining credibility and support to the design and development of the SAP program.
- \* Existing legal and institutional frameworks are insufficient to ensure active public participation.
- \* The use of electronic means for public participation can have positive results, but limited to those with access to systems and technical expertise.
- \* The establishment and implementation of small working groups, integrated by representatives of provincial governments, environmental and water resource sectors, technically qualified and with decision-making capacity, significantly facilitated the preparation -in a participative/consensual manner- the contents of the SAP and Project Document.
- \* SAP Formulation phases should be completed timely, so as to avoid the risk of political discontinuity, which can severely disrupt the established SAP institutional framework and participative processes.

\* Given the overall lack of interest among impoverished landowners for incorporating environmental protection measures which do not present a profit or production increase in the short term, it was important to complement and/or associate proposed measures with practical production schemes. In the case of Bermejo, these included construction of small sediment control structures, together with small irrigation, agricultural and pasture development.

\* The coordination and joint execution of the project with existing communi-

ty organizations proved vital for the project's success.

\* The knowledge of the community from a social and anthropologic point of view is essential to facilitate the design and implementation of public participation mechanisms.

\* Preparing in advance methodological guidelines for public participation greatly facilitates its incorporation during the execution of the project.



## **6. CHALLENGES FOR THE STRATEGIC ACTION PROGRAM IMPLEMENTATION (2001/2005)**

- \* To increase and stimulate the participation of all the stakeholders, mainly NGOs and productive sectors during project execution.
- \* To develop and consolidate sustainable structures for public participation.
- \* To strengthen and promote the public participation in the legal and institutional frameworks at both provincial and municipal levels.
- \* To promote multi-sectoral dialogue and information sharing to achieve consensus and harmonization of interests among the different stakeholders of the basin.

SAP Bermejo implementation phase will be carried out in both countries within a very complex political, social and economic scenario. Stakeholders' participation is essential for the success of the SAP Bermejo implementation phase.

To assist in coping with the challenges described above, the project will establish and institutionalize the following components during the implementation phase: (I) Public participation Program, (II) Regional Coordinating Committee, (III) Inter-ministerial Committee, (IV) Regional Advisory Committee, and (V) Awareness and Environmental Education Programs.



**ANNEX  
TABLES**

**TABLE 1 | SECTORS INVOLVED IN SAP FORMULATION**

WORK PROGRAM ELEMENTS	GOVERNMENTAL INSTITUTIONS				DECENTRALIZED INSTITUTIONS UNIVERSITY		PRIVATE SECTOR COMMUNITY AND STAKEHOLDERS		ENVIRONMENTAL AND SOCIAL NGOS EXPERTS	
	N	R	PD	M						
1.1 Transboundary Pollutant Movement - Digital Thematic Cartography (Bin)	•	•	•		•	•	•		•	•
2.1 Stream Classification (Bol)						•	•			•
2.2 Erosion Control, Santa Ana / Camacho (Bol)				•				•		•
2.3 Land Tenure, Tarija Valley (Bol)								•	•	
2.4 Range Management, Tarija Valley (Bol)					•			•		•
2.5 Land Use in the Lower Bermejo River (Arg): a) Socioeconomic and community assessment, b) Fluvio-sedimentologic dynamics, c) Digital thematic cartography	•		•		•	•	•			•
2.6 Management of Forage Humid Chaco (Arg)	•	•			•		•	•		•
3.1 Ecotourism in the Transition Forest (Arg)	•	•	•		•		•	•		
3.2 Tolomosa Watershed (Bol): a) Agro-forestral Forest-cattle raising practices, b) Sediment Control Tablada								•	•	•
3.3 Sustainable Development in the Yungas - Community of Los Toldos, Salta. (Arg)				•		•		•	•	•
3.4 Removal of Constrains restricting development (Arg)		•	•		•			•		
4.1 Hydrometeorological and Water Quality Networks (Bin)	•	•	•	•	•	•	•			•
4.2 Environmental Law (Bin)		•	•							•
4.3 Ecological Corridor Baritu - Tariquia (Bin)	•	•	•		•	•		•	•	•
5.1 Transboundary Migration (Bin)						•			•	•
5.2 Environmental Education (Arg)		•	•		•			•		
6.1 Formulation of the Strategic Action Program (Bin). Transboundary Diagnostic Analysis - TDA. Bermejo river basin and its regional framework. Ecological and environmental zoning. Impacts of climate change. Socio-economic analysis. Regional survey of projects and initiatives.	•	•	•	•	•	•	•	•	•	•
6.2 Public Participation (Bin)	•	•	•	•	•	•	•	•	•	•

(Bin) - Binational (Arg) - Argentine (Bol) - Bolivia N NATIONAL R REGIONAL PD PROVINCIAL OR DEPARTMENTAL M MUNICIPAL



**TABLE 2 | PUBLIC PARTICIPATION MECHANISMS USED DURING SAP FORMULATION**

WORK PROGRAM ELEMENTS	PUBLIC PARTICIPATION MECHANISMS								
	WORKSHOPS	INSTITUTIONAL MEETINGS	COMMUNICATION MEDIA	MEETINGS WITH COMMUNITY MEMBERS	MEETINGS WITH STAKEHOLDERS	COMMUNITY WORKS	POLLS	KEY PEOPLE INTERVIEW	COMMUNICATION NETWORK
1.1 Transboundary Pollutant Movement - Digital Thematic Cartography (Bin)	•	•						•	
2.1 Stream Classification (Bol)		•							
2.2 Erosion Control, Santa Ana / Camacho (Bol)	•	•		•	•		•	•	
2.3 Land Tenure, Tarija Valley (Bol)							•	•	
2.4 Range Management, Tarija Valley (Bol)	•	•					•	•	
2.5 Land Use in the Lower Bermejo River (Arg): a) Socioeconomic and community assessment, b) Fluvio-sedimentologic dynamics, c) Digital thematic cartography	•	•					•	•	
2.6 Management of Forage Humid Chaco (Arg)	•	•			•			•	
3.1 Ecotourism in the Transition Forest (Arg)	•	•	•	•	•			•	
3.2 Tolomosa Watershed (Bol): a) Agro-forestral Forest-cattle raising practices, b) Sediment Control Tablada	•	•		•	•	•			
3.3 Sustainable Development in the Yungas – Community of Los Toldos, Salta. (Arg)	•	•	•	•	•	•		•	•
3.4 Removal of Constrains restricting development. (Arg)	•	•	•	•	•	•		•	
4.1 Hydrometeorological and Water Quality Networks (Bin)		•			•			•	
4.2 Environmental Law (Bin)	•	•						•	
4.3 Ecological Corridor Baritu – Tariquía (Bin)	•	•	•	•	•		•	•	•
5.1 Transboundary Migration (Bin)		•					•	•	
5.2 Environmental Education (Arg)	•	•	•	•	•	•		•	•
6.1 Formulation of the Strategic Action Program (Bin). Transboundary Diagnostic Analysis – TDA. Bermejo river basin and its regional framework. Ecological and environmental zoning. Impacts of climate change. Socio-economic analysis. Regional survey of projects and initiatives.	•	•	•		•			•	•
6.2 Public Participation (Bin)	•	•	•	•	•	•	•	•	•

(Bin) - Binational (Arg) - Argentine (Bol) - Bolivia

**TABLE 3 | INDICATORS OF PUBLIC PARTICIPATION DURING FORMULATION OF THE SAP**

INDICATOR DESCRIPTION AND CONTENT		VALUE
<b>First regional working meeting,</b> Argentina, December 1995	Participants	176
<b>Second working meeting,</b> Bolivia, 1996	Participants	84
<b>First regional workshop,</b> Chocloca, Bolivia, August 1997	Participants	23
<b>First regional workshop on the SAP,</b> Salta, Argentina, December 1997	<ul style="list-style-type: none"> <li>• Participants</li> <li>• Documents and discussion materials handed out to each participant</li> <li>• Assessment forms filled out by participants</li> </ul>	178 14 82
<b>Regional seminar-workshop for the formulation of the SAP,</b> Tarija, Bolivia, May 1998	Participants	132
<b>Second regional workshop on the SAP,</b> Formosa, Argentina, May 1998	<ul style="list-style-type: none"> <li>• Participants</li> <li>• Documents and discussion materials handed out to each participant</li> <li>• Assessment forms filled out by participants</li> </ul>	75 10 41
<b>Seminar-workshop on environmental law,</b> Tarija, Bolivia, September 1998	Participants	60
<b>Third regional workshop on the SAP,</b> Jujuy, Argentina, November 1998	<ul style="list-style-type: none"> <li>• Participants</li> <li>• Documents and discussion materials handed out to each participant</li> <li>• Assessment forms filled out by participants</li> </ul>	102 13 65
<b>Seminar-workshop on erosion control experiences,</b> Tarija, Bolivia, December 1998	Participants	52
<b>IV regional seminar-workshop for the formulation of the SAP,</b> Tarija, Bolivia, May 1999	Participants	79
<b>V regional seminar-workshop for the formulation of the SAP,</b> Tarija, Bolivia, June 1999	Participants	80
<b>VI regional seminar-workshop for the formulation of the SAP,</b> Tarija, Bolivia, July 1999	Participants	28
<b>Contracts executed</b>	<ul style="list-style-type: none"> <li>• Experts/consultants</li> <li>• Institutions</li> <li>• Contracted construction companies</li> <li>• Orders for major equipment</li> </ul>	80 20 4 10

**TABLE 3 continued | INDICATORS OF PUBLIC PARTICIPATION DURING FORMULATION OF THE SAP**

INDICATOR DESCRIPTION AND CONTENT		VALUE
<b>Compilation of plans, programs, projects, and initiatives</b>	<ul style="list-style-type: none"> <li>• Project description files distributed</li> <li>• Projects and initiatives compiled</li> <li>• Plans and programs compiled</li> </ul>	700 250 103
<b>Preliminary compilation document of distributed projects and initiatives</b>	<ul style="list-style-type: none"> <li>• Printed format</li> <li>• Diskette</li> </ul>	45 120
<b>Public communication</b>	<ul style="list-style-type: none"> <li>• Electronic addresses</li> <li>• Registered with SAP-NET as of 6/99</li> <li>• Visits to website since 6/99</li> <li>• Active records in the mailing</li> </ul>	172 31 130 731
<b>Institutions participating in program elements</b>		30
<b>Specialists and technicians participating in the SAP</b>	<ul style="list-style-type: none"> <li>• Individual and institutional contracts included (approx.)</li> </ul>	260
<b>Reports produced</b>	<ul style="list-style-type: none"> <li>• Final reports and progress reports submitted by consultants and executing agencies in charge of program elements</li> <li>• Terms of reference</li> </ul>	46 60

