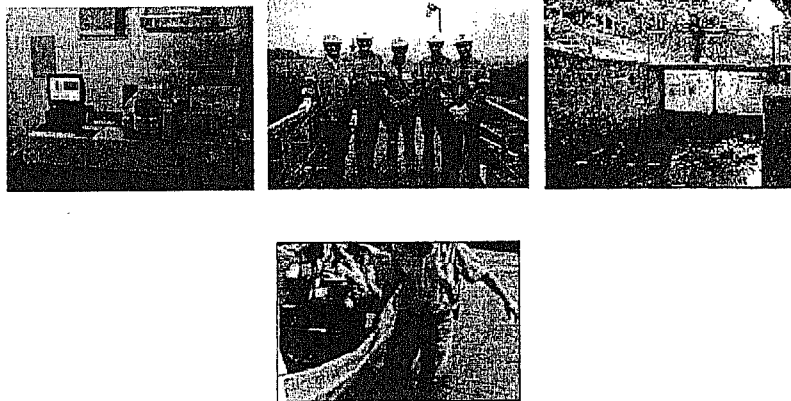


## 3. Pertinence or Relevance of the Project



*P*ertinence or Relevance: it refers to the validity of the objective of the project and its final goals in connection with the policies of development of the Paraguayan government, as well as with the necessities of the beneficiaries.

This section tries to respond the follow questions:

1. Is the project pertinent or relevant for the development of the environmental policy and for the National Plan of Development?
2. The office of the JICA-PY anticipated and responded to significant changes in the environmental institutional sector that affected the environmental area specifically?

### 3.1 Pertinence with the National Plan of Development

The identified objectives of the Government Program of Development 2003- 2008 are:

1. To recover the confidence in the institutions of the State and their representatives.
2. To promote the active participation of the citizenship for the construction of the institutions of the democracy.
3. To reactivate the economy and to create jobs, within a new model of sustainable development.
4. To fight the poverty, the corruption and the insecurity.

In the mentioned Program some particular considerations of sustainable development are present:

- to promote the conservation and rational management of natural resources;
- intensification of the direct sowing and the intensive use of organic fertilizers;
- to promote the conservation of soil and freshwater resources in projects and programs of farming and forest development; and
- to adopt measures for the territorial management based in natural systems, the river basins, being used as basic units.

The project is fully adapted to the objectives of the Program of Government. The implemented activities within the framework of the Project contribute to improve the Water Resources Policies and the National Environmental Policy but also the Paraguayan environmental diplomacy.

### **3.2 Relevant changes in the environmental sector**

Once the Project was implemented and initiated, a series of complex institutional changes took place in the environmental sector, as it was mentioned in the previous chapter. In addition an inadequate inter-institutional management existed related to the environmental health sector, key sector for the human development in Paraguay: integral management of urban solid wastes, management of hospital & pathological wastes, integral management by river basins, lack of a national policy of water resources, discontinuity in the interventions directed to the decentralization of the environmental management, persistent environmental degradation.

Also the priorities of the donors in the environmental sector have changed recently. The GTZ, an important partner of the GdPY in the environmental sector, changed its strategy in the 2004 deciding to work more closely in policies of reduction of the poverty, the strengthening of local governments and civil society, leaving an emptiness very important to fill at the national level, in the support to the strengthening of the Environmental Authority and the Environmental National Council.

It is very important to emphasize the role of facilitator developed by the main consultant who: a. It canalized necessary means and resources (office materials, fuel and travel allowance) in time for the accomplishment of the activities of survey and sampling, anticipated within the chronogram, making possible to obtain the predicted results and; b. It transferred the data to the SEAM to elaborate the norms of planned water quality.

### **3.3 Analysis of the Logical Framework**

In relation to the environmental sector an acceptable coherence is observed between **the Logical Framework** and the governing principles and enunciated strategic lines in the Environmental National Policy<sup>3</sup>. The subjects defined in both documents are so closely tied being able to enrich and strengthen their process of implementation.

Therefore the answer to the first question is affirmative. The outcome of the project defined within the logical framework includes the following sectors: institutional policies, institutional capacities and environmental preservation. All these activities have an objective: the sustainable development and the improvement of the quality of life of the population from the area of the project. These actions attack the problems of environmental pollution, environmental health, and the institutional weakness. Without any doubt, all the interventions have been strategic and relevant to the mandate of the JICA having in sight the Millennium Development Goals.

Also the project, from the point of view of the necessities of the sector was perceived like very relevant. Although DIGESA in this sector (environmental quality) has received in previous decades a strong support of the JICA and that the SEAM counts on a project of Institutional Strengthening from Project I.A.D.B. OC-1300, the relevance of the Japanese attendance for the sector is very important due to the out of date of the technology and knowledge within DIGESA and because at the SEAM, this subject was not taken sufficiently in consideration by the loan program OC-1300.

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<sup>3</sup> <http://www.seam.gov.py/politica.php>

As recommendation in this aspect is due to mention the necessity to give greater diffusion of the results at the local level or the communities of the area of the Project and at the level of the international cooperation.

The project was pertinent like a strategy for achieving the expected outcome for the development of the sector, since previously, the SEAM had never used this methodology for planning their policies of control of industrial waste water quality nor in the preparation of their norms of environmental quality. For that reason it is emphasized that at the level of the Direction of Control of Environmental Quality and at the Direction of Planning of the SEAM it exists the conscience of the importance and necessity to use the technological tools and of knowledge transferred by the JICA for the preparation of norms and for the update of the National Environmental policy. Nevertheless synergies were not generated with the program OC-1300, in particular with the Fund for Small Investments in studies of environmental quality.

It is to emphasize that in the case of the SEAM, a suitable process of selection of the technical beneficiaries of the assistance did not happen. This affected the efficiency of the assistance when limiting the transfer of the knowledge and its later profit.

Another remarkable aspect is the correct selection of the origin of the technology, especially the “soft assistance”, originated from Brazil. Without any doubt, all transfer of knowledge facilitates when the consultants or experts know the culture and its particularities. This has allowed that the project surpassed key problems of the national counterpart:

- absence of management in the SEAM and lack of coordination and between SEAM and DIGESA,
- bad selection of technicians at the SEAM,
- lack of implementation of Manual of Procedures and Functions, etc.

Considering key issues of gender and vulnerable groups, it is to emphasize that there was no affectation of interests, on the opposite; the project included the diffusion of the results to vulnerable groups of the society, which has been valued like highly positive.

Considering the immense necessities of the environmental sector of Paraguay, any activity selected by the JICA and executed indeed by counterparts, it will be in conformity with the national priorities, it will leave its fingerprint and it will teach that the intervention is relevant, often thanks to the flexibility of the administrative system and to the internal system of decision making at the JICA. Proof of this has been the flexibility of the main Consultant in extending the number of actors, promoting greater public participation and diffusion, extending the number of campaigns of sampling of quality of water, in spite of the breach on the part of the Government of its commitments of financial counterpart. The challenge is that the JICA makes remarkable contributions, which are distinguished of those made by other donors and where they can give a real added value. From the side of counterparts, an important lesson emerges, as it is the necessity to improve the fulfillment of the commitments of investment in financial counterpart, so that the impacts are tangible, demonstrable and sustainable.

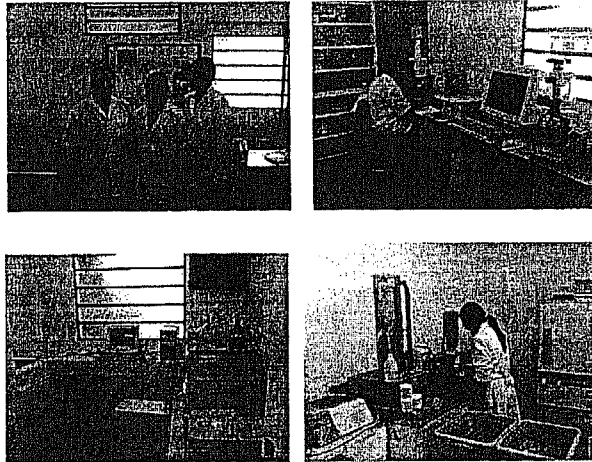
The office of the JICA-PY anticipated and responded to significant changes in the environmental sector that could affect the project specifically? The facts indicate that this has happened partially. This it is the first project of the JICA executed with the SEAM, thus is comprehensible the difficulties of the SEAM in understanding the procedures follow by the Agency.

Also it is to emphasize the absence of managerial capacity and coordination within the SEAM, which affected the management of the project. Nevertheless the JICA demonstrated flexibility and capacity of adaptation, which allowed the main Consultant to position itself strategically, constituting itself, in spite of not being its function, as facilitator between the SEAM and the DIGESA, when this last one, had serious problems to fulfill the budgetary commitments, and when assuring the effective transmission the data of environmental quality generated by DIGESA and process by the SEAM for the promulgation of Resolution 255/06/06. Also the continuous changes of institutional authorities (3 ministers in 2 years) and the creation of DIGESA have forced the JICA to react quickly and to use the capacity of “advocacy” so that the continuity of the execution of the project is not affected, a merit that is due to emphasize.

This is a very dynamic sector, and the institutional changes have also affected the priorities of the international cooperation in the environmental sector, affecting in particular the policy of management of the GTZ, an important partner of the GdPY in the environmental sector, from the decade of the 90. The GTZ changed for that reason its strategy in the 2004 deciding to work more closely in policies of reduction of the poverty, the strengthening of local governments and civil society, leaving emptiness very important to fill at the national level, in the support to the strengthening of the Environmental Authority and the Environmental National Council.

Another significant change that challenges reaching the predicted results within the logical framework is the absence of capacity to build alliances between SEAM and DIGESA, in particular to receive, to process and to transform environmental data provided by DIGESA into proposals of environmental policies. These factors reaffirm the necessity to strengthen in the future the capacity of “advocacy” of the JICA before the mentioned scene.

## 4- Effectiveness and Efficiency of the Project



**E**fficiency “it refers to the productivity of the implementation process, examining if the investment through the project were efficiently turned into results”. Effectiveness “refers to the dimension in which the expected benefits of the project have been obtained according to the planning, and examines if the benefit was obtained as result of the project and not by external factors”.

It is to remember that the central objectives of the Project are:

- to establish the normative framework of water quality necessary to face in effective form the main problems concerning the agricultural, industrial, urban activity and to the use of the natural resources in the area of the project;
- to generate essential information through research programs of water quality, to strengthen the institutional capacities for survey and analysis, as well as for the definition of norms for the protection of the freshwater and the health of the people and finally of the strengthening of the environmental policies.

### **Sub project: Definition of norms for the protection of the freshwater**

*This sub project looks to support the efforts of the SEAM towards the reach of a ample approach in the national planning, sector policies, able institutions and institutional mechanisms for the sustainable development, incorporating concepts of conservation and environmental protection.*

#### **Effectiveness**

The project has regional and national reach: in the area of Ypacarai Lake and for all freshwater of the country. In particular the use of the data of water quality generated by the project, had an important relevance in the last year of execution of the project, when using it the SEAM, for the preparation of the Resolution 255/06.

This norm establishes the category or the class of freshwater for Paraguay, and is of vital importance for the industry sector, tourism and recreation, fisheries, irrigation as well as for the sector of drinkable water supply in order to preserve the quality of the sources.

The final year of execution has gained momentum. For that reason we conclude that the project has been effective, being reached the objective of the project. Nevertheless considering the relation effect/causality, a greater investment was due to make in the number of surveys or campaigns of water quality as well as in diffusion of results. This would allow a greater ownership of the results and to convert these results in policies like norms and regulations.

As positive factor is relevant to mention that to obtain that momentum, there was a permanent interest on the part of the DIGESA technicians throughout the period of execution of the project and in the SEAM, in particular in the last year of the project. As a negative factor, it is to warn that neither the DIGESA nor the SEAM counted with sufficient funds to guarantee monthly, bimonthly, semester or annual campaigns of water quality. This must be the goal of generation of data that allow the SEAM to update their norms and regulations of environmental quality.

#### **Efficiency:**

They were made, as it were reviewed in previous chapter all the investments as they were defined within the logical framework and disbursement chronogram. Some non anticipated activities were included, which contributed to reach a greater trustworthiness on the results of water quality and on having a non-predicted public participation.

It is due to emphasize that DIGESA after intervention of the Project, *has acquired and improved their capacities in specialized human resources in water chemistry and the improvement of the analytical equipment.* Nevertheless is mentioned the absence of a very relevant activity for the project as is the edition of a Regulation for the Control of Polluting Sources, to facilitate the process of licensing and control.

Considering the investment in quality and amount on the part of the local counterpart, there was a great difficulty in DIGESA and the SEAM in offering resources (mobility, travel allowance, etc.) to fulfill the campaigns of survey of quality of water. In spite of it and thanks to the good will of the technicians of DIGESA and main counterpart, all the activities were made in the propitious moment. It is important to emphasize other factors that affected the effectiveness of the project: *the absence of coordination between SEAM and DIGESA* as well as the *null coordination in the internal level of the SEAM*, in particular due to the absence of managerial capacity.

#### **Sub Project of increase the influence in the health sector**

The Sub Project looks to *determine the influence in the Public Health of the water quality of the Ypacarai Lake used for drinkable water.*

#### **Effectiveness**

Due to the necessity of data for starting the project, and as the only organization that had historical data of water quality of water was the ESSAP, the project created an effective relation and exchange of information. This derived in that, at the end of the 2003, with finding an increase of the density of toxic algi in waters of the Ypacarai lake, infers in the possible presence of micro toxins.

In order to prevent any toxic event, ESSAP has adopted for the water treatment, the use of an activated charcoal system for the treatment plant in San Bernardino. It is possible to conclude that this component had a very important and preventive result when restoring, according to collected data, systems of prevention of contamination in the drinkable water of Ypacarai Lake.

### **Sub Project of Strengthening of the Policy of Environmental Preservation**

The Sub Project has as global objective assist the country in the strengthening of the local and regional capacities in the integral management of the hydrographic basin.

**Efficiency:** Within this objective it was decided the inclusion of the issue of management by river basin; which introduced a new concept for debate; but the effort to implant it was very low.

The SEAM, has a General Directorate of Environmental Management with a unit specialized in environmental education. Due to the absence of coordination SEAM did not participate in the campaigns of diffusion and public participation. For this reason it is considered that the activities were not sufficient to produce expected outcomes, due to the argued reasons: absence of coordination between SEAM and DIGESA as well as the null coordination in the internal level of the SEAM.

### **General considerations in relation to the Efficiency**

The project executed under the modality of using Japanese technology from the region has been extremely efficient technically and financially when it is compared with projects where they are due to send counterparts to and from Japan.

The reasons of this advantage are economic and technological: economic because the high costs of displacement of the missions and per diem, whereas technological because two aspects: a. Soft Technology, and, b. the climatic conditions. a. Soft Technology, that is to say, the knowledge of the regional expert on the scientific and technical particularities of Paraguay, the culture of the Paraguayan people and, b. the climatic conditions (Brazil has a very similar climate subtropical tropical as well as the same species of phytoplankton in its lentic water bodies). That condition the physical-chemistry, bacteriological and biological phenomena that happens in the water bodies.

Definitively there was no way to reduce the costs of the activities related to the project. The assistance to the DIGESA with a new gaseous chromatograph for the analysis of pesticides as well as of a new vehicle would have been ideal, since both have more than 10 years of antiquity. Particularly, a so old analytical equipment does not have the same sensitivity, precision that a new one.

### **General evaluation**

It has been important the incidence of the assistance of the JICA in the sea of necessities of the sector of environmental health of Paraguay? Yes, definitively, but only partially.

Many "direct" interventions would have to be effective, where the experience developed at local level (for example in the case of the basin of the Ypacarai Lake) could serve like a lighthouse in the preparation of norms, policy proposals at national, local and regional level and in the definition of budgets of local development and decentralization. Good results depend on the work of pursuit that the SEAM gives to the identification of the lessons learned and to the form in which the messages and the lessons are transmitted to the key people in the relevant positions of planning.

Does the JICA have positioning himself as a promoter of policies or better practices? The answer is negative. While the JICA looks for synergy and approach through fulfillment of their global agenda, the Program also must look for the balance in its implementation at the national level, to avoid annoyances to the local actors (civil employees of government and others). It is due to avoid that the agenda is visualized like “conducted by the international donors”.

Still more it is due to avoid that the agenda drive to the society and the public sector to unproductive conflicts that decrease the efforts to construct a national scientific society and an efficient, harmonic and compatible National Environmental System with the sustainable development. The ownership, that is absent at the SEAM, is critical against this background. It is due to consider the strengths, weaknesses and the cultural particularities of the Paraguayan society in order to avoid to be seen like who takes the leadership in the actions.

Also due to the financial conjuncture of the State, the governmental partner sees the JICA like supplier of a mere assistance and of provision of funds. It is crucial that alliances be forged with the Government (national and local) and community based organizations in order to develop more valuable and productive associations.



## 5. Impact and Sustainability



*“Direct and indirect, positive and negative impact”, caused by the implementation of the project, including the dimension in which the goals have been obtained”.*

*Sustainability “is the dimension in which the receiving country can be develop beyond the project, and the benefits generated by the project can be maintained under the policies of the receiving country, the technology, systems and state financing”*

### 5.1 Impact

#### 5.1.1 Sub project: Definition of water quality standards

Impact: the obtained results offer great contribution for the implementation of a policy of water resources and the national environmental policy for the country. Doubtlessly that the recommendations of the Closing report of the Project offers a “road map” to follow, and it will allow to consolidate the impacts of the project.

It is due to emphasize as a risk the low wage level of the DIGESA technicians, which affect the sustainability of the institution. For that reason it is considered that with a moderate effort and bonding with the Environmental National Policy, funds from the PGGN could be obtained to cover these necessities.

#### 5.1.2 Sub Project of increase the influence in the health sector

The Sub Project looks to determine the influence in the Public Health of the water quality of the Ypacarai Lake used for drinkable water.

The project had a very significant impact within this component, allowing the prevention of drinkable water contamination. More rigorous care of the controls of the water quality of the zones affected by the presence of toxic algi was implemented. In addition to the health is mentioned that until the present time toxins in water of the water treatment plant of San Bernardino have not been detected, through the preventive implementation of activities, assuring a good water quality in the district of San Bernardino.

### 5.1.3 Reaching the Superior Objective

The objective was fully reached. It is important to take advantage of the outcomes to have a better monitoring system and improvement of water resources.

In relation to the contribution in reaching the strategic targets of the “Program of Government” the Minister of the Environment declared, in the presentation of the results of the project, the 28 of November of 2006 that “an intense use of the results of the project will be done in order of improving the National Environmental policy”.

The data base and the recommendations offered today by the project, allow the Government to have a data baseline of the water quality of the Paraguay River. A remarkable contribution of the project that will have a great impact in the policy of development of the water resources, in the environmental diplomacy of Paraguay, are in particular the increased capacity to evaluate the impacts of the projects Hidrovía, Jindal - Mutún, and gold mining in the Brazilian Pantanal. It is known that infrastructure projects above of the triple border in the Paraguay River, will negatively impact the water quality, affecting potentially the biodiversity and the health of the people.

In relation to the environmental sector an acceptable coherence between the results and the objectives enunciated in the Environmental National Policy is observed. Nevertheless some factors prevent reaching the superior objective, for example the absence of social capital<sup>4</sup>, the financial resources destined from the counterpart which are they little and denotes an absence of interest of the high management of the public administration. Added to these factors is the absence of knowledge from the citizens.

Summary of the positive Impacts:

- Regulation 256/00 of Water Classification
- Environmental Policies improved
- Greater participation of the population
- Increased controls of industrial wastes which contributes to the improvement of the environmental quality
- Improvement of the technologies of analysis and knowledge.

As it were previously mentioned it has been very important the diffusion to more vulnerable groups, the results of the project. This allows a more active participation in the decision-making processes and planning of the use of the water, etc.

The impact at the end of the project in relation to the budget destined to activities of control of the environmental quality has not been the expected one, since neither DIGESA nor the SEAM have increased the corresponding budgets to provide sustainability to the activities initiated through the project. To a great extent it must to the budgetary tops established by the Ministry of Hacienda.

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<sup>4</sup> Human resources with high level of knowledge, ethics and moral

#### **5.1.4 Maintenance of the External Conditions:**

The Secretary of the Environment during the project underwent change of four Ministers which in great form altered an effective continuity, due to the new ideas that each Minister prioritized based on the necessities.

The great challenge of DIGESA was its institutional separation of the SENASA; which brings as consequence the realignment problems. Nevertheless DIGESA were compensated because the project offered all the economic requirements to avoid affecting the continuity of the project.

#### **5.2 Sustainability**

Are these activities sustainable? In other terms, the projects in the environmental sector are going to survive the culmination of their financing. Will continue the political support? Will be extended the activities related to the project in the future?

In the case of the DIGESA, although the beneficiaries feel able “to continue alone”, there is a great budgetary financial weakness. In the other case (at the SEAM), the beneficiary is not seen like the “owner” of the project. This suggests the need to improve the strategy of culmination and replication of the projects, the strategy of exit of the JICA, to destine greater efforts to create ownership and emphasis in the construction of alliances.

Within the program of priorities elaborated by the Technical Secretary of Planning, the environmental component occupies the 8th.place of 15 topics proposed by the Government. This make to suppose that the environmental sector will not be the priority for the government.

Considering the budget destined for year 2007 (the project culminated in November of 2006), there have not been changes in relation to the previous year neither in the DIGESA nor in the SEAM. That is to say, the government had not provided financial resources for giving continuity to the project. In relation to the human resources, the team of technicians from DIGESA is consolidated, whereas the team from the SEAM, is dispersed in several Directorates without coordination nor interrelation.

In the case of projects where the execution through two or more institutions of the Executive authority is required, it is important to anticipate the establishment of formal mechanisms of coordination in the managerial level, in order to ensure an effective and efficient completion the cooperation. It has been demonstrated, with the little events of diffusion and public participation, the avidity and huge necessity to strengthen the citizen platforms and the local levels of environmental management in order to assure the permeability of national policies in regional policies.

In this performance evaluation, an important number of profits have been mentioned. It is important that the JICA mainly focuses on the sustainable development, the poor people and the improvement of the national and local capacities for preparation of public policies. We even are far from affirming that this project has generated a deep change in the character of the interventions in the environmental sector, from the construction of institutional capacities to the strengthening of the environmental policies. Important advances have occurred through the “soft assistance”, but also important backward movements can be given to the image of the JICA because of a deficient and wrong oriented assistance.

The loyalty of the JICA as partner and his capacity of “advocacy” have made available of to the public sector and to the third sector significant “inputs” in the poverty areas, sustainable development, global commitments, planning, etc.



Many of the activities of the logical framework have been reached, specifically in the case of the survey of the water quality of the basin of the Ypacarai Lake and the preparation of standards of water quality. It is desirable nevertheless, that the JICA considers that some factors prevent that these initiatives reach the expected results beyond the end of this Project (Estimated budget, Institutional, political conjuncture, inter-institutional relations). It is important that the JICA continues being perceived like “provider of ideas” (know how) and not only like “supplier of funds”, which is relatively modest, in spite of the potentialities that visualize in the near future.

## 6. Conclusions, Lessons Learned and Recommendations



### 6.1 Conclusions

The JICA has adopted a strategy of participative evaluation, reaching conclusions through the experience and opinion of the beneficiaries and partners. This evaluation emphasizes the reached outcomes over the fulfillment of activities or output delivery of individual projects.

The Project is sustained in two pillars; the strengthening of human capacities and technological resources of SEAM and DIGESA, and the preparation of norms that contribute to the improvement of the national environmental policy and public health. The number of activities of the logical framework seems to be adapted in quantity but the institutional mechanisms to assure a good gerenciamiento and coordination did not exist. The global effect could take "to miss" the targeted objectives and not to use efficiently the financial resources available. During the execution process some activities exceeded the scope marked by the plan of action, others were not executed. Nevertheless it can be affirmed that due to the effects produced by the entailment with diverse environmental policies and programs of health, the objectives were reached.

The consolidation of the relations developed with partners such as DIGESA, SEAM, as well as with the community based organizations, opens a promissory future for the JICA with the mentioned partners of the development. The projects generally are made with the purpose of “demonstrating when executing” the validity of the developed concept or used methodology. In the entire analyzed projects it was found that the replication of sustainable strategies and diffusion of the learned lessons of demonstrative projects, at a level of national planning, were not sufficient for reaching the outcome.

The absence of capacity of the local and central government has been a factor that has debilitated areas of potential collaboration in particular the planning for the environmental management. This has forced to the principal consultant of the JICA to carry to the extreme its resources to cover the gaps of management between DIGESA and SEAM and within the SEAM.

Summarizing the results can be mentioned that in the goal of strengthening the capacities of the human and technological resources of SEAM and DIGESA, the motivation of the DIGESA equipment, it has lead to the accomplishment of more analyses of previously planned. Nevertheless in the SEAM, the human resources are dispersed, without any coordination. Thus is doubtful to reach the sustainability of the objective of improvement of the national environmental policy.

## **6.2 Recommendations**

### Third Sector

The community based organizations must be as an important ally to create conscience and to generate the debate on the management of the natural resources. These organizations can be important allies of replication, control and models of local management. But a very important aspect is to give the corresponding role to such, elevating as a greater protagonist, the Institutions in charge to develop the plans and programs of improvements at the level of local and central governments. That is why it is recommended:

- a. The accomplishment of more participative forums at the community level to install the debate is necessary in future activities of diffusion. In this way they will be really effective in their aim for creating consciousness and for generating answers for the sustainable management of river basins.
- b. This planning of forums and training must be in agreement with the established project zone and the existing population. The environmental education and the public participation are the sectors with fewer chances to accede to funds in Paraguay.
- c. It is also perceived the necessity to offer more soft assistance with the aim to orient the GoPY on the possibilities of opening other windows of financing and of incorporating sectors like tourism, conservation of river basins, environmental recovery of river basins and sensible ecosystems. A new approach of the project looking to construct alliances, but creating leaderships in governmental institutions, will be a key issue for achieving the success, particularly its sustainability.

### Government of Paraguay

The national public laboratories had to be the greatest and more reliable partners of the JICA, and other institutions like the Intergubernamental Commission of the River de la Plata basin, institutions that have an updated data baseline on water quality of the Paraguay River and the Ypacarai Lake. Also the National university (with several works of thesis on environmental health and hydrology of effluents of the Paraguay River), institutions that could contribute with important data during the process of execution of the project.

## **Recommendations:**

It is important, to assure the reach of the outcome and its sustainability in the formulation and attainment of the projects, to assure the budgetary counterpart in resources, equipment and the human resource for the beginning of the projects; as also to structure a managerial work of identifying the roles to be fulfill by each institution in such form that the main consultant be a facilitator of the program and not the visible head of the project

It is recommendable that the human resources trained so much in DIGESA as in particular at the SEAM, remains within the frame of an inter-institutional Committee for giving continuity to the predicted activities within the logical framework. This will be a key factor in the fulfillment of the objectives in the long term.

Another key recommendation is to strengthen the relations between the public sector and the citizens, as well as to facilitate the participation of the community in the preparation of local and regional environmental policies and in the strengthening of local governments. The JICA must put more efforts in constructing, at level of the executors, ownership of projects and at level of the Government to promote the construction of capacities to create initiatives for the adoption or replication of successful lessons.

More activities like workshops, seminars would be due to promote, as well as publications, visits on the site of key persons from the government and from the third sector in order to assure the support.

It is important to promote the active participation of the partners (government, beneficiaries, organized civil society, etc.), in the diffusion of the results of this evaluation. This will help the learning process, improvement of the performance of the program and in the attainment of effective approaches.

## **6.3 Lessons learned:**

**Initial Stage of the Project:** during the preliminary discussions for the preparation of the project, it is fundamental to deeply analyze the mechanisms and the budgetary state, fulfillment of both Organization and Methods protocols, relations between the receiving institutions of the cooperation (Counterpart: C/P), which will constitute one of the required conditions to reach an effective outcome. It is essential that all stakeholders maintain a fluid dialogue and a good communication before the beginning of the Project and in the initial stage, searching a formal commitment of fulfillment of all the conditionality's or the preparation of the basis for the execution of the Project.

### **Planning the Project and its execution:**

It is necessary to carry on the monitoring of the project during several moments. In the execution of the projects of technical cooperation, based on the PCM methodology (Administration of the Cycle of the Project), it will be avoided that the logical frame be inflexible, to avoid to create gaps between necessary activities and the looked for objectives.

It is necessary to avoid the absence of local leadership in the coordination of the Project, to avoid the isolation of some components of the program, in relation to the objectives.

The absence of fulfillment of local counterpart to accompany the activities, as well as not forecasting the budgetary support for the sustainability of the project when finalizes the cooperation, can generate a backward movement.



The absence of improvement of salaries of technicians puts in risk the permanence of them in the institutions, having serious danger losing the acquired knowledge, which would cause a negative impact in the SEAM and DIGESA. In all the analyzed projects it was found that the replication of sustainable strategies and diffusion of the learned lessons of demonstrative projects at a level of national planning are not sufficient to reach the Result.

### **Coordination with the International Cooperation**

**Lessons Learned:** it was found that there are not channels developed with other organisms to share learned lessons of the interventions in the sector. There are donors with vast experience of working with the GdPY, with those is important that the lessons learned and experience gained be shared to improve the quality of the program, to develop greater efficiency and to enhance results.

Valuable developed initiatives have been detected within other agencies of the system (BGR, OPS/OMS, I.A.D.B.). Other donors as the USAID has vast experience of working with the organized civil society, organizations of base and/or municipalities, advantage that must be operated by the JICA to enhance the results determined within the Logical framework in relation to the local and regional capacities of planning and environmental management.



## Acronyms

BGR:	Bundesanstalt für Geowissenschaften und Rohstoffe – Cooperación Alemana
GdPY:	Government of Paraguay
CONAM:	Nacional Environmental Council
DIGESA:	Main directorate of Environmental Health
ESSAP:	Company of Sanitary Services of Paraguay
GEF:	Global Environment Facility
GTZ:	Gesellschaft für Technische Zusammenarbeit - Technical cooperation German
IADB:	Inter American Development Bank
MSPByS:	Ministry of Public Health and Social welfare.
SEAM:	Secretariat of Environment
STP:	Technical Secretariat of Planning
OPS:	Pan-American Health Organization
WHO:	World Health organization of
PGGN:	General budget of Expenses of Nation
USAID:	Agency the International of Development of the Government of the United States

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## Interviews

1. Ing. Luis Molinas Secretaría del Ambiente
2. Ing. María Cristina Torres Secretaría del Ambiente
3. Lic. Aida Olavarrieta Secretaría del Ambiente
4. Lic. Mirtha Kiuncer. Secretaría del Ambiente
5. Ing. Mirtha Almada Secretaria del Ambiente
6. Ing. Nery Araujo Secretaría del Ambiente
7. Dr. Porfilia Ramona Narváez Dirección General de Salud Ambiental
8. Lic. Paulina Fretes Dirección General de Salud Ambiental
9. Lic. Nubia Isabel Etcheverry Dirección General de Salud Ambiental
10. Lic. Edith Josefina Ramírez Dirección General de Salud Ambiental
11. Lic. Raquel González Dirección General de Salud Ambiental
12. Ing. Víctor Giménez Dirección General de Salud Ambiental
13. Ing. Olga Marecos Empresa de Servicios Sanitarios del Paraguay
14. Ing. Hideo Hawai. Consultor principal del proyecto.

### Evaluation Activities

día	Hora	Activities	Consultor Principal	Consultor Asistente
12	Lun.	12:00 a 16:00		
		General and detailed review of the documentation of the project and Matrix of logical framework and baseline of the project (referring to the SEAM and the DIGESA)	X	
13	Mar.	08:00 a 11:00		
		Revisión de las preguntas propuestas		X
14	Mier.	9:00		
		Meeting with person in charge of the JICA to decide proposals modification of the model of form of surveys	X	
16	Vier.	10:00 a 15:00		
		Realización de encuestas en DIGESA: - Srta. Raquel González - Sra. Porfilia Ramona Narváez - Sra. Paulina Fretes - Srta. Núbia Isabel Etcheverry - Sra. Edith Josefina Ramfrez		X
18	Dom.	09:00 a 12:00		
		Identificación de los factores que afectan la sostenibilidad del proyecto Identification of the factors that affect the sustainability of the project	X	X
19	Lun.	08:00 a 10:00		
		Entrevista con Víctor Giménez-DIGESA	X	
21	Mier.	12:00 a 15:00		
		Verification of the Relevance, Effectiveness, Efficiency and Impact	X	X
22	Jue.	08:00 a 11:00		
		Verification of the sustainability of the project	X	X
23	Vier.	10:00 a 12:00		
		Entrevista al Consultor Principal	X	
23	Vier.	10:00 a 12:00		
		Entrevista con Sra. Maria Cristina Torres - SEAM		X
24	Sab.	10:00 a 14:00		
		Evaluation of the Project, planning of interviews	X	X
26	Lun.	08:00 a 10:00		
		Entrevista con Ing. Luis Molinas SEAM	X	
27	Mar.	08:00 a 10:00		
		Entrevista con Mirtha Almada y Nery Araujo SEAM	X	
27	Mar.	08:00 a 10:00		
		Entrevista con Mirtha Kiuncer y Aida Olavarrieta de la SEAM		X
27	Mar.	13:00 a 15:00		
		Entrevista con Sra. Olga Marecos ESSAP.		X
27	Mar.	17:00 a 20:00		
		Evaluation of the interviews and verifications.	X	X
28	Mier.	08:00 a 17:00		
		Formulation and final delivery of draft	X	
29	Jue.	08:00 a 18:00		
		Revisión de recomendaciones y correcciones	X	
30	Vier.	15:00		
		Delivery of the Closing report in English, Spanish and, printed and digital format.	X	

## GACETILLA DE PRENSA

### PRESENTAN INFORME SOBRE CALIDAD DE AGUA, CONTROL Y MEJORAMIENTO CUENCA DEL LAGO YPACARAI Y DEL RIO PARAGUAY. 28-Nov-2006 -

Durante la presentación del proyecto de "Control y Mejoramiento de la Calidad de las Aguas de la cuenca del Lago Ypacarai y el Río Paraguay", elaborado por técnicos de la Agencia de Cooperación del Japón (JICA), la SEAM y la DIGESA del MSPBS, el Ministro del Ambiente Alfredo Molinas señaló que los informes técnicos de la JICA indican la situación actual de los recursos hídricos en estas zonas geográficas, que pretenden en el fondo fomentar la consolidación de una Política Nacional de manejo, gestión y conservación del recurso agua, basados en el desafío planteado de reconocer las potencialidades y la problemática ambiental para impulsar un uso sustentable a nivel local con el gerenciamiento de los consejos de aguas cuencas hidrográficas.

Indicó que la SEAM opera dentro de un sistema ambiental nacional y cuenta con una política Ambiental Nacional (PAN) y dentro de la misma existe una estrategia de aprovechamiento racional de los recursos hídricos en forma integral. En ese sentido la SEAM ofrece los insumos e instrumentos necesarios a la sociedad como normativas y resoluciones técnicas para que los usuarios del agua orienten sus actividades en forma racional sin la necesidad de contaminar y destruir el ambiente, agregó. ***"Hemos sacado normativas como la creación de consejo de aguas por cuencas y resoluciones técnicas que buscan armonizar y ordenar el buen funcionamiento de los Recursos Hídricos atendiendo las potencialidades y limitaciones de los ecosistemas en forma diferenciada"*** señaló.

El país dentro del PAN cuenta con dos grandes desafíos ambientales, que es el resolver la problemática de la Biodiversidad y del Agua, y que para revertir esta situación se necesita la adopción de roles y competencias por parte de otras instituciones en el que hacer ambiental, el cumplimiento irrestricto de las Leyes y generar las bases técnicas para aplicarlos dentro de un marco jurídico, aseveró.

Esta información que fue generada por una cooperación técnica de JICA, en la cual se estudian la situación de los recursos hídricos, tanto en la Cuenca del Lago Ypacarai, en el río Paraguay y sus afluentes, nos brindan una información sobre la calidad de las aguas y sobre la situación sobre las mismas cuencas hídricas (uso de la tierra, funcionamiento de sistema de producción, contaminantes) estos datos forman una línea de base para ser utilizados en la los consejos de cuencas ya creados como los venideros, ***son informaciones técnicas básicas que servirán para la toma de decisiones a nivel local y para el estado conocer en donde intervenir.***

Por último Molinas señaló que los recursos hídricos son las chismosas del uso de la tierra ya que inmediatamente se revelan y manifiestan cuando existe alguna alteración por mal manejo de los recursos naturales por parte del hombre.

## INFORMES TÉCNICOS FOMENTAN UNA POLÍTICA HÍDRICA

27-Nov-2006 - 12:33hs.

La elaboración de varios informes técnicos que indican la situación actual de los recursos hídricos en el Paraguay presentados tanto por la Agencia de Cooperación del Japón (JICA), el Programa de las Naciones Unidas para el desarrollo (PNUD) y otros organismos, pretenden en el fondo fomentar la consolidación de una Política Nacional de manejo, gestión y conservación del recurso agua, basados en el desafío planteado de reconocer las potencialidades y la problemática para impulsar su uso sustentable a nivel local, señaló el Ministro del Ambiente Alfredo Molinas durante una entrevista. La Secretaría del Ambiente (SEAM) esta llevando adelante en el **marco de la Política Ambiental Nacional** una estrategia de aprovechamiento integral y racional de los recursos hídricos a nivel de manejo de cuenca (unidad geográfica), con la puesta en marca de la conformación de 6 consejos de aguas por cuencas como la del Tebicuary, Ypacarai, Río Apa, Rory, Pilcomayo y Ñeembucú, próximamente a conformarse las del Capiibary, Charapa, Pirapó y de Colonias Unidas.

La resolución N° 2042/06 "POR LA CUAL SE APRUEBAN LOS TERMINOS DE REFERENCIA DEL PLAN DE MANEJO DE CUENCAS HIDRICAS Y ORDENAMIENTO AMBIENTAL", es la herramienta básica creada por la SEAM para ser utilizada por los integrantes del consejo de aguas en cada cuenca, quienes deben diseñar su planificación y ordenamiento de los recursos naturales para un uso sostenible, en especial del agua. La SEAM facilita estos instrumentos a la sociedad, señaló Molinas.

En tanto los **informes técnicos de la JICA** y como del PNUD, son importantes insumos, que se deben articular para proveer información base dentro del marco jurídico ambiental para desarrollar acciones de recuperación, mejora, conservación y aprovechamiento sustentable de los recursos naturales en las cuencas hidrográficas.

**Como también, estos en estos consejos se les compromete a las instituciones públicas y privadas para satisfacer las demandas sociales, económicas y sociales que demanda un manejo integral de los recursos hídricos. Esto es fundamental para iniciar la adopción de los roles y competencias en las diversas instituciones que se relacionan con el recurso agua.**

Por otra parte, anunció Molinas que a partir del mes de febrero se confirma un apoyo por parte de la JICA para capacitar a los integrantes de estos consejos.

Por último, la Información técnica y sus resultados serán elevados a organismos y autoridades ambientales fuera del país como Bolivia, Argentina y Brasil para que conjuntamente con esos países se puedan coordinar acciones para resolver los problemas de recursos naturales compartidos.

Mañana martes 28 de noviembre a partir de las 08:00 horas en el Hotel Sheraton de Asunción, salón Río Paraná (Av. Aviadores del Chaco N° 2066- Asunción), se realizará un Seminario, en donde se presentará los resultados Finales del Proyecto de Control y Mejoramiento de la Calidad de las Aguas de la Cuenca de Lago Ypacarai y el Río Paraguay. Contará con la presencia del Ministro del Ambiente Alfredo Molinas, el representante residente de la Agencia de Cooperación Internacional de Japón (JICA) en el Paraguay Hiroshi Saiko, el Director General Interino de

Dirección General de Salud Ambiental (DIGESA-MSPBS) Eduvigis Cuenca y con la ponencia del experto de la JICA  
Ing. Hideo Hawai.

## SE INICIO TOMA DE MUESTRAS DE CALIDAD DE AGUA EN LAGO YPACARAI

*20-Nov-2006 - 16:31hs.*

ANTE TEMPORADA VERANIEGA.

Técnicos de la Dirección General de Salud Ambiental (DIGESA-MSPBS) y fiscalizadores de la Secretaría del Ambiente (SEAM) iniciaron la toma de muestras de aguas del Lago Ypacarai para analizar su calidad a fin de determinar su destino al uso de la recreación durante la presente temporada veraniega. Los resultados laboratoriales, DIGESA lo dará a conocer en 15 días aproximadamente anunciaron. Los lugares analizados fueron las playas Municipales de Aregua, Ypacarai, San Bernardino y playas privadas de San Bernardino.

Los parámetros medidos en la oportunidad fueron coliformes fecales, PH del agua, turbidez, oxígeno disuelto, entre otras particularidades del agua de mucha importancia que permitirán conocer el estado de la calidad de aguas si están aptos para habilitar al baño en el verano para prevenir riesgos a la salud.

En los próximos días proseguirán las tomas de muestra de aguas en los demás balnearios y sitios de recreación en los departamentos de Central, Cordillera y Paraguari especialmente.

Por otra parte, los fiscalizadores ambientales de la SEAM hasta la fecha, notificaron a los municipios de Asunción, Ypacarai, Aregua, San Bernardino, Caacupé, Villa Elisa, Ñemby, Mariano Roque Alonso y Limpio para exigir la cancelación de la patente municipal para aquellos propietarios de playas y balnearios que no reúnen las condiciones ambientales mínimas para funcionar.

Algunos arroyos que desembocan en el lago son:

Yukyry  
Capiata  
Pirayu  
San Lorenzo

*Japan International Cooperation Agency*  
*Evaluation of the Project of Control and Improvement of the Water Quality of the*  
*Ypacarai Lake and the River Paraguay basin*



## SEAM SOLICITA A DIGESA ANÁLISIS DE CALIDAD AGUA

15-Nov-2006 - 14:57hs.

FISCALIZADORES DE LA SEAM SOLICITAN A DIGESA ANÁLISIS DE CALIDAD DE AGUA EN LUGARES DE VERANEO.

La Dirección de Fiscalización de la Secretaría del Ambiente (SEAM) mediante nota, solicitó a la Dirección General de Salud Ambiental (DIGESA) del MSPBS realizar el análisis de calidad de agua para determinar los lugares aptos para la recreación durante la presente temporada veraniega.

Mediante la realización de muestreos técnicos por parte de DIGESA, permitirá medir la concentración de coliformes fecales en las playas, balnearios y aguas naturales que se encuentran en los departamentos de central, cordillera y Paraguari con el fin de informar a los Municipios el estado en que se encuentran para que tomen la decisión de habitar o clausura estos sitios de recreación y prevenir sobre todo a la población sobre los riesgos a la salud.

Por otra parte la Asesoría Jurídica de la SEAM inició la notificación a los municipios del departamento Central, Cordillera y Paraguari, para exigir a los intendentes no habilitar más aquellos lugares de veraneo que no reúnen las condiciones mínimas establecidas en la resolución 159 de la SEAM. Como también se solicita clausurar en carácter preventivo aquellos sitios que incumplen con la normativa.

En el verano pasado, fiscalizadores de la SEAM realizaron más de 165 intervenciones en lugares que no reunían con las condiciones ambientales mínimas para funcionar en diferentes playas, balnearios y sitios de veraneo en el departamento de Central, Paraguari y Cordillera especialmente. Hoy día solo 13 sitios cuentan con licencia ambiental, para habilitar las instalaciones que reúnen los criterios ambientales para operar.

Algunos requisitos mínimos a cumplir por los lugares de veraneo según Resolución 159:

- Ø Poseer licencia ambiental expedida por la SEAM con respecto a la Ley 294 de Evaluación de Impacto Ambiental.
- Ø Figurar en los registros de usuarios del agua en la Dirección de Recursos Hídricos de la SEAM.
- Ø Contar con patente municipal para operar como balneario,
- Ø Poseer análisis de calidad del agua,
- Ø Equipo de personal de salvamento y paramédicos,
- Ø Servicios higiénicos limpios (basureros, contenedores, sanitarios, etc.),
- Ø Caminos internos fáciles de entender y seguros,
- Ø Primeros auxilios, servicios de agua potable, entre otros.





