



# USAID/Brazil Environment Program

## Final Monitoring and Evaluation Report FY02

Prepared by  
Márcia Cota Lyra  
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# M&E Report for FY02 - STRATEGIC OBJECTIVE #1 (SO1)

SO1 - Environmentally and socioeconomically sustainable alternatives for sound land use adopted beyond target areas - 512-001

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## **USAID/Brazil Environmental Program SO1 “Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas”**

### **Summary of Key Results during FY02**

In FY '02, the USAID/Brazil SO1 Program experienced a number of successes and few setbacks in its progress towards SO1 under each of the IRs. In cumulative and real terms, the Program dramatically exceeded targets in training and dissemination under IR 2 and 4, almost doubling its target for FY02. Target was met for the SO level indicator 1, where 45 forest sites were certified by FY02 and, therefore, are adopting aspects of sustainable forest management techniques in addition to target operations. Cumulative targets for SO level indicator 2 was not entirely met by FY02, despite the good performance of the program during this fiscal year in creating 7 new areas (5 in the Amazon and 2 in the Atlantic Forest). The shortfall of 26 out of the targeted 27 conservation units in which government or private owners adopt aspects of sustainable management systems, is mainly due to the past two years (FY00 and FY01) poor performance. In addition, we know that the universe of areas under management impacted by the USAID/Brazil Environmental Program is much larger since grantees are only reporting new areas created and not areas where management has been improved. Target was far exceeded for SO level indicator 3, where over 7,000 families outside the target area have adopted improved sustainable management systems, including the adoption of the use of fire prevention techniques, farm-level agricultural intensification, sustainable use of wildlife, and agroforestry systems.

Targets for IR 1 indicators 1.1 and 1.3 were met. The index ratio of 1 shows that all sites have met at least 80% of their annually established benchmarks towards sustainable management systems and low impact forest management systems developed and validated. The setback was experienced in indicator 1.2 of IR1, where TNC fell short, only meeting 50% of its target. The index ratio of 0.86, shows that all other sites, with the exception of Serra do Divisor, met at least 80 percent of their annually established benchmarks towards conservation unit and buffer zone management plans developed and validated.

A major problem has been identified in indicator 2.1. Following the correct interpretation of this indicator and unit of measure, target for this indicator was only partially met, because CI and WHRC did not accomplish all steps planned in the index for this indicator and for the target institutions. However, WHRC extrapolated the scope of its work by strengthening 50 institutions, instead of only three planned. Out of the three planned for this fiscal year, one did not accomplish all the steps planned and, therefore, did not meet the target. So, 49 out of 50 institutions were strengthened by WHRC, representing a ratio of 0.98 which does not reflect the magnitude of the work accomplished this fiscal year. This indicator certainly does not reflect the progress of the work being done of USAID/Brazil partners in strengthening key institutions.

Finally, targets for the policy indicator 3.1 were incorrectly set for WWF and CI for FY02. The index for this indicator shows that CI's target was only 7 policy interventions rather than 8 as stated in the summary table with targets. The same happened with WWF. They were responsible for 4 policy interventions rather than 5 as stated in the summary table with targets. Targets were exceeded for this indicator. Targets for fy03 should be readjusted to reflect the real planned targets. In summary, a total of 22 cumulative policy interventions were carried out by fy02. In FY02 alone, 18 policy interventions were carried out.

### **Success stories**

The stories of Mr. Domingos and Mr. Beca in Southern Bahia are a good example of the success of the Floresta Viva Program implemented by IESB with support from USAID, private donors, among others. Domingos wanted to sell his land in 1998 when IESB suggested that he planted Atlantic Forest seedlings as an alternative income to the declining manioc crop. Last year, Domingos and his family produced around 6,000 native forestry seedlings in addition to local tropical fruit trees such as *açaí*, *cupuaçu*, banana, coconut, pineapple and

*graviola* forming a small agro-forestry system. The seedlings were sold to two projects: one of reforestation of the areas around the highway and another one for reforestation of areas around rivers. At the same time, he started to produce several types of vegetables to sell to local restaurants and families with an average monthly income of R\$ 100. IESB has also provided support for him to build a small dam that supplies the vegetable garden with water, to build a greenhouse, to renovate his house and, more recently, to install piped water in his house. In one year he earned over R\$ 4,500 (or US\$1,300). This represents a reasonable income in a country where 1/3 of the population (over 54 million people) receives less than R\$100 (or US\$30) a month. On-going USAID support for such programs as *Floresta Viva* show our interest in backing the social, poverty-focused agenda of the new government.

Mr. Beca's story is similar. The vegetable garden, greenhouse and crop diversification in the areas already planted, forming an agroforestry system (SAF), are providing an increase in income for his family from 0.8 to 3 times the minimum wage (the minimum Brazilian wage is R\$ 200). The coconut plantation started to fully produce after organic fertilizer techniques were used. Coconuts products are offered to tourists visiting his area. Beca is exploring his area for ecotourism. He opened trails in the forest located in his property that he calls "Private Reserve". The "Janela da Jindiba" (Jindiba's Window), the name of the trail in his property, is a famous eco-tourism attraction in Itacaré region and has received famous visitors, including the Brazilian top-model Luana Piovani and the Brazilian Prince Pedro Carlos de Orleans e Bragança. Since January 2001, the trail has received many visitors, each paying an R\$ 5 entrance fee, which is an additional income to his family. The increase in his income has helped his family to invest in crops and house improvements. They are now building two houses, but this time they are using bricks in the construction and they will install bathrooms in the houses, something rare among the small farmers in the region.

One success story of the training initiatives is one of a former landless peasant, Valentin Messias, who participated in the first training course on Entrepreneurship and Sustainable Development of IIEB and WWF "Natureza e Sociedade" Program. USAID's seed grant helped to fund the business plan for the sustainable production of natural bath sponges. Valentin has been successful in his endeavor of commercializing the so-called "eco buchas" which are now available on the market and is helping several other peasants to have an alternative income with the production of the "eco buchas".

IIEB has funded Alessandra Caiado, a Brazilian architect, to participate in the Sociological Design Program at the San Francisco Institute of Architecture, from September 2001 to April 2002. When she returned she was invited by the private sector to design and build five "ecologically correct" houses. The emphasis of her work is on clean technologies for construction

PESACRE has been impacted by the USAID/Brazil budget cuts in a positively and negatively way. They were able to survive the cuts by putting all their efforts into raising funds to support additional projects, which has sapped the energy of the organization and its employees, and forced them to deviate from their institutional goals. This has decreased the organization's effectiveness, caused them to decrease their training activities (such as the annual PESA training course, which was not offered this year), and distanced them from the communities where they work -- contributing, for example, to the demise of the women's group in Novo Ideal. On the other hand, they were very successful in leveraging funds from other non-USAID sources. In 1995, they depended entirely on USAID funds for their work and to pay the salaries of all PESACRE's staff of 12 people. USAID financial support was around US\$600,000 at that time. Today, PESACRE is a bigger organization with 28 people and major responsibilities and USAID's funds (approximately US\$150,000 per year) represents only 20% of their annual budget. PESACRE's sustainability represents a success story in USAID/Brazil's program history together with several other organizations that were strengthened by the program and now enjoy a key role in fostering sustainable use and biodiversity conservation in the country.

**A. SO: Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas.**

**Indicator 1:** *Number of forest sites that adopt aspects of sustainable forest management techniques in addition to target operations and the hectareage covered by such operations (i.e. hectares of forest harvested using sustainable forest management practices).*

In FY02, TFF and WWF did a remarkable job in disseminating sustainable forest management practices to areas beyond the scope of this program. Twenty-two new sites, where TFF and WWF had some kind of involvement (direct by providing technical assistance or indirect by disseminating their work), were certified in the past year, totaling a cumulative figure of 45 sites certified by FY02. These areas have management plans in place and are under current implementation. This represents an increase of almost three times the number of FSC certified forest sites compared to only eight in previous year. The number of certified plantation sites is still much higher than the number of native forest. Out of the 913,645ha certified the past year throughout Brazil (from the Amazon to the South), only a little over 100,000 ha is of native forest.

In FY02, target for this indicator was met for number of sites. It is remarkable the increase in certified areas in Brazil in the past few years and the influence that TFF, Imazon and WWF are making in fostering certification throughout the country. According to FSC, forest certification in Brazil surpassed the one million hectare mark this year. Brazil ranks first in LAC in number of hectares with certified forest, although Bolivia has a higher number of certified natural forest operations. The number of hectares of certified natural forests in Brazil is expected to increase considerably from next year on. At the moment, there are over 10 certification projects in natural areas waiting FSC's approval. USAID/Brazil was one of the first donors to support forest certification in Brazil. USAID cannot claim credit for all these new certified areas, that is the reason why USAID/Brazil relies on some of their grantees to gather data for this indicator. The areas where TFF and WWF had any kind of involvement in their certification are areas where the USAID/Brazil originally funded sustainable forest management techniques are being replicated, and, therefore, are considered a result of its supported activities throughout the past years.

**Indicator 2:** *Number of conservation units in which government or private owners adopt aspects of sustainable management systems in addition to target areas.*

In FY02, seven new protected areas were created as a result of WWF and CI's efforts in the Amazon and Atlantic Forest totaling over 6 million hectares, mainly due to the creation of Tumucumaque – the largest tropical park in the world. The numbers show a considerable increase in the number of new protected areas created and/or under management compared to the past year (only 4) and a drastically increase in number of hectares this year compared to only less than half a million hectares from last year. However, counting new protected areas in the Amazon together with new protected areas in the Atlantic Forest is inappropriate and can mislead the results. There is less than 7% of the remaining Atlantic Forest left and, therefore, the protection of much smaller areas compared to the Amazon may represent a larger or equal impact on the conservation of biodiversity. In order to be consistent with data collection and aggregation of past years, this year again the number of new protected areas created and/or under management in both the biomes (Amazon and Atlantic Forest) were added together under this indicator.

The ARPA project continues to support the creation of new protected areas in the Amazon. ARPA is one of the largest and most ambitious conservation programs in the world, estimated to cost US\$395 million over 10 years. This initiative was launched at the World Summit in Johannesburg by the Brazilian Government together with the GEF, the World Bank, and WWF. The program will increase by three times the area under protection in the Brazilian Amazon, thus assuring the conservation of an area twice the size of the state of Texas or 50 million hectares. Although USAID was not directly involved in the initiative, it is a product of

one of the major grantees of the program – WWF – and is counted as matching contribution. As a step forward in the implementation of the ARPA Program, the largest tropical forest park in the world – Montanhas do Tumucumaque- was created (3.8 million hectares). WWF will invest US\$1million in demarcation, management plan, infrastructure and equipment for the park.

WWF has also been involved in the creation and expansion of the following areas: Uamã Biological Reserve (expanded by 380,000ha); Cazumbá RESEX (750,984ha); Jutaí RESEX (275,532ha); and National Forest Jaturama (837,000ha). In addition to the creation of these new areas, WWF has been involved in the elaboration and implementation of management plans of other private and public protected areas throughout Brazil. In FY02, 5 new areas covering over 6 million hectares have been set aside for protection with the assistance of WWF.

In the Atlantic Forest, two new RPPNs - Sapucaia (18.5 ha) and Juerana (27ha) - were created this fiscal year as a result of CI and IESB's efforts in Southern Bahia. In addition, IESB prepared maps with the location and boundaries of four new RPPNs and in partnership with CI and Flora Brasil (an NGO from Porto Seguro), they prepared a document that was sent to the Ministry of Environment proposing the creation of 11 new conservation units in Southern Bahia. Funds to purchase land and establish a RPPN at Serra das Lontras was granted to IESB this fiscal year. In the Pantanal, CI is also conducting a series of research to evaluate new deforestation patterns and consider the potential for the creation of new protected areas in still pristine areas. Preliminary studies indicate that areas in the lower Sepotuba and the Rio do Peixe should be preserved.

In cumulative terms, target for this indicator was only partially met for number of conservation units created or under management. The shortfall of 26 out of 27 targeted is mainly due to the past two years (FY00 and FY01) poor performance. In addition, WWF is not counting all the protected areas where aspects of sustainable management are being adopted and where they are working. They are only counting the new areas created. In addition, two new biological reserves in the state of Acre and Amazonas, Alto Chandless and Campos Madeira, were expected to be created before the end of the fiscal year, but the decrees were only issued one month later (in November 2002). CI and IESB are also promoting the creation of private reserves by printing folders, visiting potential sites, discussing the idea with farmers, promoting workshops. Therefore, it is expected that new RPPNs will be created in the Southern Bahia region in the near future. In terms of hectareage, the target was far exceeded this fiscal year due mainly to the creation of the largest tropical park in the world, Tumucumaque with 3.8 million hectares and other large extractive reserves.

**Indicator 3:** *Number of families outside target area who have adopted improved sustainable management systems.*

GEOPI, the consulting firm hired last year to perform an evaluation of the USAID/Brazil Environmental Program suggested to drop this indicator. The consultant hired this fiscal year decided to collect data to be consistent with past years but recognizing the problems with reliability of data since there is no systematic survey or sampling process to check if the families have changed their normal daily practices and are actually using sustainable management systems. On the other hand, because the nature of the assistance of USAID partners is very hands-on they can track to some extent progress in these families and the indicator, although not perfect, can really measure progress.

In FY02, CI did not support any work impacting new families outside the target area due to the fact that the target area increased, therefore the families supposed to be counted beyond target area this year became part of target area.

In FY02, WHRC and UF expanded their work in new municipalities and with new families by encouraging the use of fire prevention techniques, farm-level agricultural intensification, sustainable use of wildlife, and

agroforestry systems. The number of families reached outside of the target area was much larger this year (over 5 million ha) because of WHRC/IPAM municipal-based approach, and much more effective multiplier effects for family agriculture and community fire management. In addition the extraction of copaiba oil is now becoming used as part of public policy in Acre State and has been extended to seven municipalities. Pesacre has also provided assistance to over 1,800 families. Therefore, targets were far exceeded this year in number of families and in area (hectares).

In addition, during 2002, rural workers unions, rural family schools associations, and other expressive rural organizations throughout the Amazon region improved their institutional skill due to the opportunity to play a coordination role in the implementation of a project aimed at mobilizing and building capacity to prevent and control forest fires. It is one of major results of the Fire Prevention and Mobilization Control Project (PROTEGER II), an activity supported under the Pilot Program to Conserve the Brazilian Rain Forest (PPG-7) with funds from USAID. In addition to unfolding an environmental education process to avoid forest fires, PROTEGER II is also promoting the adoption of production techniques that eliminate the use of fire. It is enabling a wide range of rural entities to effectively contribute to a process of long-term cultural change towards sustainable forest management in the Amazon.

Activities that are related to the SO, but do not fall under any of three specific SO indicators:

- *Tri-border landscape planning*: A series of planning meetings with local and state level officials and civil society representatives in the Brazil (Acre State)/Peru/Bolivia border area are preparing local society to be aware of possible impacts from the paving of the trans-oceanic road to the Pacific which passes through this tri-border region. IPAM organized a two-day workshop for the logging sector with the help of MPA (Madre de Dios) group.

## **B. IR 1: Systems for sound land use identified, promoted and adopted in target areas**

### **Indicator 1.1:** *Sustainable management systems developed and validated*

Sixty families living in the Serra Grande/Itacaré Environmental Protection Area, who were on the verge of abandoning their farms because they could no longer make ends meet, are now contributing to reforestation of this strategic coastal region after receiving monthly stipends from nearby resort hotel owners interested in conserving Atlantic Forest cover. This is the result of the *Floresta Viva* Program being implemented by IESB with support from USAID.

In addition, support was provided to COOPERUNA, the Una Producers Cooperative, for commercialization of 17,000kg of cacao nuts and 2,500kg of pepper, involving 40 small rural producers. A total of 111 rural producers are members of COOPERUNA and IESB conducts regular monitoring visits to evaluate if agricultural practices are compatible with organic production.

Another important activity under this indicator is the *Proambiente* proposal to reform the rural production credit programs in the Amazon to reward environmental stewardship. This proposal has been adopted by the incoming Worker's party government as a key element of its platform for the Amazon. The Ministry of Environment and the Ministry of Agrarian Development strengthened their support for this program of payments for the protection of environmental services in the rural Amazon, including grants totaling US\$4.5 million. IPAM and PESACRE are FETAGRI's (Federation of Agricultural Workers) and FETACRE's (the local branch of the Federation in the state of Acre), respectively, technical partners in the implementation of this project. On-going USAID support for such programs as *Proambiente* and *Floresta Viva* show our interest in backing the social, poverty-focused agenda of the new government.

PESACRE worked with Novo Ideal producers group this past year to add value to their products from agroforestry systems through processing, production management and knowledge of markets and market demand. They have adapted the existing factory that produced mixed flour to produce flour made with bananas that are being sold to the school system in the municipality of Acrelandia. New equipment will also be acquired to process pulps and grains and to package products. They are transforming their productive areas including coffee-growing areas into organic production with the use of legumes to guarantee their entrance in more demanding markets. The Novo Ideal producers are also de-pulping fruits such as cupuaçu and store in refrigerators for later sale in Rio Branco market and in local restaurants. In the Apurinã Indigenous Community, PESACRE is also helping them to diversify their handicraft by using other palm seeds rather than only tucumã. They were also able to acquire machines to produce their work which have optimized their work and increase their productivity and quality of the products. PESACRE helped them to create a web site and have produced a video to disseminate their work.

The construction of the new palm heart processing plant in the Cajari Extractive Reserve was completed in fy02. COOPER-CA, the cooperative of extractivists from Cajari, is only expecting to be granted the official license to resume operations. New equipment and installation are in place. The FSC certification process of the Cajari operations are in progress, some adjustments will have to be made to the management plan to comply with the principles and criteria for the FSC label to be granted.

IPAM was able to influence eleven communities with 204 families to adopt fire management agreements in the Flona Tapajos region. IPAM has also expanded its efforts on family agriculture by promoting more productive annual cropping systems, diversifying with perennial crops, community fire prevention and strengthening farmer organizations along the Cuiaba-Santarem highway.

Targets were met for this indicator. The index ratio of 1 shows that all sites have met at least 80% of their annually established benchmarks towards sustainable management systems developed and validated.

**Indicator 1.2:** *Conservation unit and buffer zone management plans developed and validated.*

The Condema-Una (The Sustainable Development Council for the Una Biological Reserve) together with IESB have been monitoring the land tenure regularization process in and around the Una Biological Reserve. At the moment, 80% of the landowners who have farms inside the reserve have agreed to some level of monetary compensation from IBAMA. The other 20% are still negotiating the terms of the agreement with IBAMA. IESB is also negotiating with IBAMA a resettlement program for small property owners to leave the reserve and receive some sort of compensation.

In FY02, three new species of birds were registered in Jau National Park (*Seiurus novaboracensis*, *Miyopagis flaviventris*, *Nonnula amaurocephala*) and it was confirmed the presence of mottled-face tamarin (*Saguinus unustus*) in the park. The park is undergoing an evaluation of the results attained so far and publication of materials (a book and a video) is underway for dissemination of this long-term experience. FVA has been working in the park for over 10 years and USAID has provided financial assistance since the very beginning which was crucial for the results attained so far. FVA has also initiated the implementation of the management plan for two indigenous reserves in the vicinity of the park.

SOS Amazonia was finally able to broker an agreement with the Cruzeiro do Sul office of INCRA to reserve an unpopulated area of 34,000ha in the vicinity of the Serra do Divisor National Park for families wishing to relocate from the northern sector of the park. The resettlement program of Serra do Divisor, which has been an ideal of the program since the inception of USAID's grant, will finally begin implementation next year, when the first families will leave the park.

The Peruvian and Brazilian side of the Serra do Divisor park and the institutions working in the region, SOS Amazônia and Pronatureza, agreed to work together on a joint project for cross-border conservation, looking particularly at getting governmental agencies to act more effectively against cocaine trans-shipment and illegal logging in the northern sector of the Park. The first fruit of this cooperation could be seen in April 2002, with the announcement by the Brazilian army that it intended to construct a frontier patrol post at Morro Queimada on the river Môa, a vital step to bringing the area under proper state control.

Targets were only partially met for this indicator. TNC only met 50% of its annual benchmark for this year, representing a shortfall. USAID will talk to TNC to make sure the steps that were not accomplished this year, will be done in the next months. The consultant tried to ask clarification from the grantee about the shortfall without much success.

**Indicator 1.3:** *Low impact forest management systems developed and validated*

USAID partner institutions, WWF, IMAZON and USDA, and the state government of Acre, are working with a private land owner and have developed the only forest management operation in Brazil licensed to harvest mahogany during the current moratorium on mahogany harvest. The moratorium was called by the Ministry of Environment in order to control and respond to allegations of widespread illegal exploitation and trade of mahogany in Brazil. This pilot project has been singled out by the Brazilian government as the most effective effort to develop and provide practical guidelines for the management of natural stands of mahogany.

TFF has been successful in fostering the transformation of additional timber industries from practitioners of traditional predatory logging to model industries practicing responsible forest management through their training courses.

Target was met for this indicator. The index ratio of 1 shows that all sites have met at least 80% of their annually established benchmarks towards low impact forest management systems developed and validated.

**C. IR2: Target institutions and local human capacity strengthened**

**Indicator 2.1:** *Institutions strengthened*

The *Observatório do Clima* was created in FY02. The idea for this network of 26 Brazilian NGOs, established to track climate change mitigation projects in Brazil, was born at the 2001 USAID environment meeting in Salinópolis. IPAM was the lead institution in establishing this working group together with other USAID partners, including IESB. This group was influential in GOB release in October 2002 of the long-delayed National Communication, required under the UN Framework Convention on Climate Change, detailing sector-by-sector greenhouse gas emissions, confirming Brazil's ranking in the top ten CO<sub>2</sub> emitters worldwide, mainly from land-use sources. The mission of the Climate Observatory is to monitor the Kyoto Protocol implementation, mainly the Clean Development Mechanism and the Brazilian and other developing countries carbon emission reports. The Climate Observatory will also be responsible for developing the criteria to evaluate the projects to receive the carbon sequestration credits or emission reduction. It will act as an independent entity and will act as technical collaborator to the governmental agencies in the environmental control and monitor of the climate negotiations.

The *Instituto Floresta Tropical* was legally established as an independent Brazilian entity in October 2002, growing out of partnership between Tropical Forest Foundation (TFF) and Fundação Floresta Tropical (FFT). The new entity was established to run the Amazon Forest Management Training Center, which a consensus of GOB, industry, and NGO groups decided to locate in the Tapajós National Forest near Santarém.

WWF suffered a major impact under IR2 due to the USAID/Brazil budget cuts in the past two years. The coordinator of the organizational development program, Nira Fialho, had to be dismissed and the program that she used to coordinate had to be discontinued. The training and assistance provided by WWF to their partner NGOs suffered major setbacks, especially the small NGOs that were in most need of the training, exchange and technical assistance. The monitoring and evaluation work being done was discontinued without having reached the major final objectives. And, finally, the manual on the legislation of the third sector were never published due to lack of funds. This manual would help many NGOs that still do not meet the major requirements to work under legal and official status. However, this indicator was not directly affected because the target institutions under this indicator are very few and only cover a small portion of the whole spectrum of WWF partner NGOs affected by the budget cuts.

Target for this indicator was only partially met, because CI and WHRC did not accomplish all steps planned in the index for this indicator and for the target institutions. However, WHRC extrapolated the scope of its work by strengthening 50 institutions, instead of only three planned. Out of the three planned for this fiscal year, one did not accomplish all the steps planned and, therefore, did not meet the target. So, 49 out of 50 institutions were strengthened by WHRC, representing a ratio of 0.98 which does not reflect the magnitude of the work accomplished this fiscal year. This indicator certainly does not reflect the progress of the work being done of USAID/Brazil partners in strengthening key institutions.

**Indicator 2.2:** *Number of persons trained (those with or without a high school diploma)*

In FY02, CI worked in the Pantanal in the prevention and reduction of uncontrolled fires on biodiversity by extending the fire program to indigenous areas, protected areas and farms in the North-South Corridor. It involves implementation of fire management plans to control the spread of fires, training for firefighters and formation of fire brigades to control and prevent fires in the Serra da Bodoquena National Park, Kadiwéu Indigenous Reserve and surrounding areas. In the past fiscal year, CI provided training to 188 firefighters.

In Southern Bahia, over 100 people were trained in RPPn legislation and management, in *piçava* (a palm tree used to make brooms and several other products) certification, in establishing cocoa clone gardens and in GIS.

Four new companies seeking forest certification in the Amazon sent key personnel to be trained by FFT signaling both the increased interest in certification in Brazil and the sustained high demand for FM-RIL (forest management - reduced-impact logging) training. Companies that were certified and that have already adopted FM-RIL practices with FFT's assistance all requested follow-up training for their personnel. These requests indicate the cost-effectiveness of FM-RIL as well as the change in attitudes of many forest owners.

Further definition of legal steps necessary to establish the Amazon Forest Management Training Center in the Tapajós National Forest will take place during the 2003 rainy season, although at this point it is unlikely that the Center will be ready for operation by May 2003 for the start of the 2003 training season. Contingency plans are to continue training operations at the temporary facility at the Cikel Cauaxi site during 2003. FFT and the Ministry of Environment signed an agreement for cooperation in FM-RIL training in the Amazon and in support of the consolidation of the training center.

TFF trained 106 people in 5 training courses in Cauaxi and 2 courses at other Amazon sites. The number of trainees represented less than half the number of people requesting training. Due to limited capacity and funding, TFF was not able to meet the training demand. Despite the fact that TFF went through a tremendous financial crisis, they were able to deliver all the courses scheduled. Their shortage in funding to cover the expenses of training and personnel in fy02 was due to the withdrawal of an ITTO proposal for bridging funds associated with a last minute change in funding rules by PROMANEJO that notified FFT that the funds committed to cover the costs of the training courses from June to December would no longer be available.

They had to get loans from banks and are still looking for other potential funding sources. This was very unfortunately, especially now that they are finalizing the transition to the newly-created Brazilian organization and setting up the Amazon Forest Management Training Center. USAID financial support this past fiscal year was what made TFF up and running.

*PESACRE* today enjoys the recognition by diverse entities that work in the Amazon. *PESACRE* was chosen to anchor the Training Program for Technicians and Agriculturalists (PCTA) beginning in 2003. This rewards the responsibility and seriousness of work that *PESACRE* has carried out in sustainable development in the Amazon over the past 12 years. *Pesacre* continues to provide training to local communities in raising native bees, extraction of copaiba oil, apiculture practices, in establishing agroforestry systems, among other fields. *PESACRE* was not able to carry out the *PESA* training this year due to USAID budget cuts.

BDFFP offered a couple of courses this past year, including the Undergraduate Forest Fragmentation Course and The Ecology of the Amazon Field Course. In addition, BDFFP continued to provide several fellowships and supported a number of Master theses.

IPAM provided training to loggers to monitor animals. Technicians from three certified timber producers were trained to monitor fauna in their forests. IMAFLORA is incorporating IPAM's recommendations on fauna monitoring and management in its timber certification criteria.

In June 2002, the Forest Service and the University of Brasilia hosted the first of a succession of workshops on the Stereo Photo Series for Quantifying Cerrado Fuels in Central Brazil. A toll for assessing biomass loading and flammability in the Cerrado (savannah) region, the photo series can also be used as a quick and cheap way to evaluate different fuel and vegetation conditions. There were 18 participants from IBAMA, park director from several parks of the Cerrado.

IIEB continues to play a key role in Brazil in sponsoring long-term training in the environmental field, especially in support of master thesis which there is very few funding sources available in the country. It has also played a major role in organizing tailor-made workshops and providing small grants to support initiatives such as the one from Valentim Messias. IIEB has been successful in leveraging other financial sources, including a major participation of the Netherlands Government, thanks to the steady financial support from USAID since the creation of the institution.

The support from USAID to partners for this fiscal year for training considerably exceeded targets.

**Indicator 2.3:** *Number of persons trained who are now trainers or have training/extensionfunctions/roles*

During the USAID/Brazil Environmental meeting in December 2001, USDA approached CI with the interest in financing some of the training courses. CI leveraged US\$3,300 for one training the trainers' course for technicians and firefighters that took place in fy02.

Again, target for this indicator was exceeded. Training has been a focus of this program, as a stepping stone to build the capacity of professionals to foster biodiversity conservation and sustainable resource use. A particular emphasis has been given to train teachers since they are natural multipliers.

#### **D. IR 3: Target policies to support environmentally sound land use adopted and/or implemented**

**Indicator 3.1:** *National and local policies which support biodiversity conservation and natural resources management implemented and/or policy implementation improved*

In August, in partnership with other four local NGOs – Gambá, CEPEDES, Flora Brasil and ISA, IESB prepared and sent to the Environmental Ministry a report denouncing illegal sawmill operations in Southern Bahia and demanding measures to increase the patrolling in the region. After a meeting with the IBAMA's president, in September, in Salvador, the patrolling was finally improved resulting in 17 illegal sawmills closed.

IESB and CI are trying to influence the government in implementing ICMS Ecologico, the ecological value added taxes, in Bahia State. They have encountered government resistance and will hire a technician to make simulations of the redistribution of ICMS in case the ICMS Ecologico is implemented to try to persuade government authorities. On the other hand, WWF was successful in pushing for the ICMS Ecologico in Mato Grosso. FY2002 was the first year of implementation of the Ecological value added tax in the State of Mato Grosso.

IESB was invited to participate in the creation and conduction of the Brazilian Sustainable Tourism Council (CBTS). The CBTS is a multi-sector tourism entity, capable of designing a unique and broad strategy for the certification of sustainable tourism in Brazil and to establish quality standards appropriated to the Brazilian reality, through an independent certification system.

The “Best Ecotourism Practices Program” (in partnership with FUNBIO) activities continued in Una Ecopark and Salto Apepique RPPNs, in the Serra do Conduru State Park and in the APA Itacaré- Serra Grande. The partnership USAID/IESB/CI has sponsored a coordinator to supervise the monitor team sent by FUNBIO (Brazilian Fund for the Biodiversity Protection) to work in the Cocoa Coast Ecotourism Center. Between March and September 2002, the Una Ecopark received 2,390 visitors, representing an increase in 27% in comparison to the same period last year. The school winter vacation in Brazil in 2002 (school winter vacation) was the best year in number of visitors, which increased by 33% in comparison to 2001 and by even more from past years.

*Frontier Governance in Amazonia*, a scientific article published in *Science* bearing this title, praised recent progress by Brazilian federal and state governments in regulating deforestation, logging, fire, and land speculation on the Amazon frontier. As a result, IPAM was invited by Brazil's Planning Ministry to join a consortium studying the overall landscape-level impact of *Avança Brasil* infrastructure projects in the Brazilian Amazon.

After IPAM voiced the need for environmental impact assessments (EIAs) prior to road paving projects, the Brazilian government opened a bidding process for an EIA of the Cuiabá-Santarém highway, and for an integrated assessment of the environmental impacts of *Avança Brasil* (Brazil's infrastructure investment program for the Amazon). The winners of the bidding processes invited IPAM to assist in the evaluations. After a long process of long-debate process, IPAM decided to accept the invitations. The next 6 months will be crucial for the work of IPAM in influencing the course of action of *Avança Brasil*. IPAM's analysis of forest fire risk and deforestation patterns will be the basis for an alternate investment portfolio designed to avoid those investments that would cause the greatest level of environmental damage as part of the *Avança Brasil* Program.

IPAM is exploring the possibility of incorporating an innovative approach of concessions into Brazil's national forest policy. The concession model will be based on the example of MAFLOPS, a logging company, that has succeeded in legalizing logging contracts with six communities of farmers in an area of 30,000 hectares. Each community received legal title, management plans, forest inventories and road networks. It is a win-win situation where nature, logging companies and communities can benefit. The question is whether or not this can work at the national scale. Concession-based forests have performed poorly in other tropical countries. IPAM is negotiating this idea with the Ministry of Environment, the World Bank, AMAZON, and TFF.

The National Protected Areas Legislation (SNUC Bill) was finally approved after several years of negotiation. Several of USAID partners participated in the formulation of the text of the bill and advocated the necessity of its regulation since the National Environmental Council approved the text for the SNUC bill in 2001.

Targets for WWF and CI were incorrect for FY02. The index for this indicator shows that CI's target was only 7 policy interventions rather than 8 as stated in the summary table with targets. The same happened with WWF, they were responsible for 4 policy interventions rather than 5 as stated in the summary table with targets. Targets were exceeded for this indicator, totaling 22 cumulative policy interventions by FY02. In FY02 alone, 18 policy interventions were carried out. Targets for fy03 should be readjusted to reflect the real planned targets.

#### **E. IR4: Sound land use systems disseminated beyond target areas**

##### **Indicator 4.1:** *Number of persons reached and amount of environmental materials disseminated*

Some of the highlights of the activities of USAID partners under this indicators, includes... an article on the strategic importance of the creation of National Forests in the Amazon was published on Science in August, 2002. This article is a synthesis of the argument that both AMAZON and WWF have used to promote this policy throughout federal scope as well as in some states in the Amazon. The FLONAS represent the most promising public policy to maintain the integrity of the Amazon while it makes possible the sustainable use of the forest.

In July 2002 a ceremony marked the launch of CI and IBAMA's fire prevention campaign in the Pantanal. Over 70 people representing government and non-governmental institutions gathered at the event. The promotional materials developed for the campaign included posters, outdoors, newspaper ads, TV spots, direct mail to land owners and a series of 10-minute radio programs regarding proper use of fire, legal aspects, risks for the environment and human health.

CI were also responsible for the production of an 11-minute video explaining the Corridor concept as a creative and modern solution to build a connection of remaining natural areas between the Cerrado and the Pantanal biomes to avoid biodiversity losses. The video emphasizes that the corridor concept does not exclude productive areas. This video was mainly aimed at informing the landowners about the concept and get their support for CI's work. This video was broadcasted nationally by TV Cultura in the program Reporter Eco.

A book summarizing the results of the BDFFP over the last 20 years, was published by Yale University Press last November. The book "Lessons from Amazonia: The Ecology and Conservation of a Fragmented Forest", edited by Richard Bieeragaard, Claude Gascon, Thomas Lovejoy and Rita Mesquita, contains 29 chapters, written by over 20 BDFFP researchers and graduate students, and a foreword by E.O. Wilson. It provides an overview of the BDFFP, studies of forest ecology and genetics, and considers what issues are involved in establishing conservation and management guidelines. The book will shortly be translated into Portuguese to facilitate the dissemination of this information to local students and decision-makers. This past year, the

number of research proposals submitted to BDFFP increased 50% compared to previous years, indicating a growing interest for research on forest fragmentation.

The first video on FM-RIL training was produced and is being disseminated by TFF. The 25-minute video is aimed at sawyers, machine operators, and woods workers including forest technicians. The video will greatly expand the target audience that FFT can reach. A second video on FM-RIL targeting decision-makers will be produced and distributed in the beginning of 2003.

WWF has published an inventory of Environmental Education in the Brazilian Amazon entitled “Reflexos das cores Amazônicas no Mosaico da Educação Ambiental”. It is a compilation of 198 environmental education initiatives in the Amazon. Distribution of the Environmental Education book will take place in the coming months.

Imazon and WWF are editing a video about the impacts of forest management post-pilot project in Paragominas, showing the developments in Forest Management and Certification in the Amazon which occurred in the business and in communities after the dissemination of the model generated by the project.

Targets for this indicator were again exceeded this fiscal year. Dissemination is an area that grantees are putting emphasis on, especially in the past few years since the field activities are in a matured stage.

#### **F. Problems, Challenges, and Recommendations :**

General problems and challenges in the data aggregation and analysis of results:

- 1) Not all grantees respected the deadline in submitting the annual reports and RTTs this fiscal year, delaying the process of data aggregation and analysis. Smithsonian submitted the report a month later and other grantees a few weeks later.
- 2) Not all grantees were responsive in clarifying questions and providing additional information related to their reports. WHRC took very long to answer questions and TNC still owes the consultant additional explanation for indicator 1.2 and 2.1.
- 3) Several grantees still face difficulties in calculating some of the indicators. Many of them asked help to calculate the persons/month for the training indicator. Others have not incorporated the changes made by GEOPI in calculating some of the indicators, including the ones that have ratios.
- 4) The consultant took longer in doing the data aggregation because she had to check the numbers, including many sums that were incorrect. This should not happen again. Grantees should double check all their calculations and sums before submitting the report.
- 5) Many grantees did not have clear targets for some of the indicators for this fiscal year. Targets should be revised every year when the workplan is submitted to USAID for approval. It was hard to analyze some of the results obtained this fiscal year, because the consultant did not know if they were expected or unexpected results due to the lack of targets.
- 6) TNC did not report any results from the work being carried out at the Guaraqueçaba Parks in Peril site. The mission contributed to 50% of the funds and should receive progress reports with results attained at the site. The mission should talk to TNC to clarify this issue.

Recommendations:

- 1) Numbers should be rounded up for the dissemination indicator. It does not make sense to give exact figures since they are a result of approximation and estimation rather than actual figures.

- 2) TNC works on training and policy but do not report on these indicators. In the beginning of the year when the workplan is consolidated they should set targets for these indicators, otherwise many important results will be left unreported.
- 3) Indicator 2.1: *Target institutions strengthened* should be dropped. It does not reflect the magnitude of the work being carried out by grantees. See additional explanation above, under IR2.

Other key issues to be resolved:

- Appraisal of the PPG-7 phase II science project will take place in early 2003 and a call for research proposals is anticipated by June 2003. Should promised USAID funds for PPG-7 not materialize during FY 2003, or be stretched out to FY 2004 and FY 2005, the second call for research proposals under phase II will not be able to be issued in June 2004 as planned. PPG-7 funds should be restored as early as possible in FY2004.
- USAID/Brazil provided financial support to PROTEGER II during the past year under PPG-7. With the support provided by USAID, PROTEGER was able to leverage additional resources from several sources. They raised approximately US\$250,000 from other sub-programs of PPG-7 and over US\$1 million from PROARCO, and local associations of rural workers in the Amazon. Continued USAID funding is important to maintain the continuity of these joint efforts. GTA and the PROTEGER team have made an unsolicited request to USAID to continue and expand PROTEGER activities. A decision on this issue is still pending.
- USAID/Brazil should consider putting aside a small grants fund for unsolicited proposals and/or to cover crisis situation such as the one that TFF went through this fiscal year. TFF financial crisis was due to the withdrawal of an ITTO proposal for bridging funds associated with a last minute change in funding rules by PROMANEJO that notified FFT that the funds committed to cover the costs of the training courses from June to December would no longer be available. They had to seek other potential funding sources and USAID/Brazil funds were key to keep them up and running. If more funds could have been granted to them, they would not have to be in this dire straight situation, especially now that they are finalizing the transition to the newly-created Brazilian organization and establishing the Amazon Forest Management Training Center in the Tapajós National Forest.
- Finally, a major opportunity exists with the newly elected federal government to revisit GOB willingness to participate in some form of debt swap arrangement under the Tropical Forest Conservation Act (TFCA). New opportunities for mainstreaming PPG-7 activities under the new government may also materialize.

## **G. Lessons Learned from the M&E system**

### **History**

Much can be said and learned from the experience of building a monitoring system for the USAID/Brazil Environmental Program. This initiative started in 1995 during the annual meeting where grantees and subgrantees are invited to discuss progress, results and future activities within the USAID Program. The set of indicators, as it is now, was consolidated after two years of intermittent discussions. The system was finally in place after the 1997 annual meeting where all grantees and some subgrantees participated in a four-day meeting to refine and consolidate all 11 indicators that form the USAID/Brazil Environmental Program monitoring system.

## Problems with the system

- Misuse of indicators

By 1999, the system started to fall apart. Grantees started to commit errors when filling out the indicators table, even rudimentary sums were incorrect. Doubts about the calculation of some indicators led to errors. A good example of this is the “training” indicators in which persons/months is the unit of measure. Up until now, in fy02, many grantees are not sure how to calculate persons/months and have been doing this incorrectly for all the past years. Each one started to gather data following their own interpretation of what were the unit of measure and methodology to collect data.

- Incorrectly interpretation of indicators

Other mistakes were done from the very beginning of the program. For instance, the indicator where there is a ratio in which the unit of measure is sites meeting at least 80% of annual established benchmarks divided by number of sites, were measured incorrectly from the very beginning. The ratio should vary from 0 to 1 in which 1 means 100% of targets met and 0 means no targets met. Instead, grantees were just counting the number of sites and not really calculating the ratio. This was only identified when GEOPI, a consulting firm, was hired to perform a thorough evaluation of the USAID/Brazil Environmental Program monitoring system in 2001.

- Poor participation of subgrantees in the consolidation process of the M&E system:

One of the mistakes in the consolidation of the monitoring system was the poor participation of subgrantees. The representatives attending the discussions on the indicators were mainly the head of the programs or NGOs (grantees), many scientists and PhDs, who decided to put together a very complex system of indicators. The system worked well in the first year (1997/98) since the people who attended the discussions were actually the ones collecting the data and doing the analysis. Then, the data gathering and analysis were delegated to other people within the organizations or to subgrantees who were not familiar with the system and encountered many problems in performing the work.

- Turnover in personnel and lack of training and clear guidelines:

The other problem was the turnover of personnel and the lack of systematic training and interaction from USAID with the new people responsible for the data collection and aggregation. The turnover of personnel within USAID was also a problem in the continuity of the implementation of the monitoring system and assistance to grantees/subgrantees in gathering data.

- Complexity

The way the monitoring system is at the moment it became a tedious and burdensome work for grantees and subgrantees, as well as to USAID staff to do the data aggregation. Because the calculation is so complex, mistakes can be easily made even if the person does a meticulous job. An important effort was made towards minimizing these errors with the creation of the excel tables with formulas. This was a major and very important work, but the formulas and tables should have been further developed to become an even more consolidated worksheet. There is still room for errors with the existing system.

- Indicators that did not evolve with the program

Many of the indicators were stagnated in time and did not evolve to capture the evolution and enlargement of the program where new institutions, new conservation units, were incorporated under the program, especially related to the IR1 indicators. Adjustments should have been made since indicators should be subject to evolution as the program is.

- Beyond target areas indicators

The SO level indicators were created to capture the impact of the USAID Program in areas beyond the scope of the program. The problem with these indicators are that it is hard to track the impact of the program and it is beyond the grantees' responsibilities and funding sources to track that data. A good example of this is the SO level indicator 3, where data should have been collected through systematic surveys with families or through a sampling process. It is not clear how grantees are collecting data for this indicator and because they are not required to do so (since it is

beyond their scope of work and they do not have funds set aside for data collection of these indicators), we have simply trusted what they have reported to USAID throughout the years.

### **Suggestions**

- A separate and meticulous guide with the methodology to collect data for the indicators should have been created with real sample cases. This would have avoided misuse and misinterpretation of indicators.
- Problems with the system could have been minimized if USAID had taken steps to simplify the system and provided regular training to the people responsible of collecting the data. This should have been done as soon as problems started to emerge, in 1999. For the next strategy an effort to keep the M&E system very simple is recommended.
- For a monitoring system to be effective it must be adopted by grantees and subgrantees as their own planning and monitoring tool. If it is just a donor driven request, it becomes a useless tool with unreliable data. For the next strategy, an effort to the establishment of simple and fewer indicators should be made. The greater the involvement of grantees and subgrantees, the better. They need to be part of the process to have ownership.
- For the next strategy, a focus on broader quantitative indicators rather than qualitative, the better. Qualitative data will be illustrated by the success stories and highlights of activities carried out.
- Specific comments provided in this report under each IR should be taken into consideration when consolidating the new system under the new strategy. As well as comments provided by GEOPI.

### **Conclusion**

A critical look into the USAID/Brazil Environmental Program M&E system shows that the system has serious problems which need to be avoided when building the new monitoring system within the next program strategy. It is important to say that the process that led to the creation of the current monitoring system was very participative and very important. Not just lessons were learned, but the limitations of the system led USAID to analyze in more depth the impact of the program. In addition, the effort of hiring an independent consulting firm, GEOPI, to undertake an analysis and provide recommendations to improve the system reinforce the commitment of USAID in really measure the impact of its program. Even in much larger programs, such as PPG-7 and GEF, people are still learning how to develop good monitoring system. There is no receipt and programs learn with mistakes and so did USAID. Hopefully based on these lessons learned, USAID/Brazil will build a cohesive monitoring system for its Environmental Program that will really track the results of this very successful program. At last, it is important to say that the efforts made by USAID/Brazil to have a consistent M&E system, puts the agency in a pioneer position that should inspire other agencies and other conservation programs in Brazil.

#### **H. Annex 1 – Grantees Annual Reports**

#### **I. Annex 2 – Grantees Results Tracking Tables**