

STRATEGIC PLAN

FY 1998-2002

USAID/BRAZIL

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Executive Summary

This proposed USAID program strategy for Brazil represents a concentration of efforts addressing two key problem areas for Brazil itself, and with consequences beyond its borders. Brazil's role in Global Climate Change, through its future management of the environment and meeting burgeoning energy needs, is an area of continuing significance to the world community. Similarly, Brazil's social sector problems pose a continuing challenge to the country's future stability and, in the case of AIDS, pose a potential health threat well beyond its borders. Brazil has been designated a Global Climate Change Focus country and an AIDS Priority country by AID.

The U.S.-Brazilian relationship continues to improve and mature. Earlier emphases on areas of difference in international relations and the resulting tensions are now being replaced by a willingness to address problems as partners. In recent years, Brazil and the U.S. have worked collaboratively with the U.S. in seeking to resolve hemispheric challenges. While there is considerable talent and resources in Brazil, USAID assistance is welcomed for its highly technical, flexible, and innovative nature and the respectability it confers on Brazilian efforts.

Brazil's political history is replete with troubles and lost opportunities. Although its political future cannot be predicted with complete confidence, the basic premises of the Cardoso government - - economic stability and growth, transparency and efficiency in public life, and increased attention to social sector needs - - appear to be basic premises which future governments will have observe.

USAID's choice of activities in its strategy serve to emphasize our own foreign policy concerns that also require priority attention by the GOB and Brazilian society. They reflect the agencies designated goal areas and foreign policy concerns as enunciated in the Embassy's Mission Management Plan. Our efforts are designed pragmatically and aim to be replicated or complimented by other donors and Brazilian organizations. The strategy amply demonstrates the leveraging of resources and donor coordination underway in our activities.

We have actively sought to craft our strategy, in close collaboration with our partners and customers, to ensure that it is of high strategic impact and modest in requiring Agency resources. Resource scenarios beyond the basic level reflect our assessment of opportunities to achieve significant successes in areas of importance to Agency objectives and U.S. Foreign Policy.

I. Summary Analysis of Assistance Environment

A. Overview

Brazil is a country that is increasing in importance to the U.S., the hemisphere, and the global community. Brazil is the fifth largest country in the world, with a population of over 160 million, and has the world's tenth largest economy, with growing trade relationships including \$20 billion annual trade with the U.S. Brazil's increasingly active international presence already places it in a leadership role in hemispheric concerns such as Mercosur and as a member of the Rio Peace Guarantor group. In the next century, should the U.N. Security Council be expanded, Brazil is a likely candidate for membership. At the same time, Brazil shares many values, relationships, and some similar problems with the U.S. Both countries are characterized by diverse populations, democratic governments, and a problem-solving orientation. In the wake of the Cold War and following the 1994 Summit of the Americas, the U.S.-Brazil relationship is moving from one characterized by a certain degree of antagonism and suspicion to a more mature relationship of shared hemispheric leadership roles, equality, and partnership in problem-solving in areas such as education, energy and the environment, were highlighted in President Clinton's October, 1997 visit to Brazil.

Brazil's emergence as a dependable partner will be important to broader U.S. foreign policy goals in the hemisphere as well as in tackling global development problems. Brazil has already shown itself to be a valuable partner in issues ranging from conflict resolution on the Peru-Ecuador border, to countering threats to democracy such as the recent coup attempt in Paraguay, to constructive participation in the Summit process to recognizing and dealing with global problems such as climate change.

Brazil still faces substantial challenges. The country has the largest mass of poor people in the hemisphere (58 million), and its vibrant economic growth is threatened by lack of access by large portions of its people. Its democracy is still young and gaining experience. Brazil has a major share of the Amazon Basin, the world's largest tropical rain forest, with forests covering approximately one-half of Brazil's interior, yet deforestation, unsustainable agriculture and forestry practices, and uncontrolled burning are seriously endangering this ecosystem vital to the world. Brazil, with 3% of the world's population, is estimated to contribute 1% of the world's greenhouse gas emissions. However, expected economic growth, increased pressure to open new lands for agriculture, and saturation of hydro power potential suggests that Brazil could easily become a major contributor to global climate change in the next century. Brazil has serious health problems, including wide regional disparities in health indicators, and the second highest number of reported AIDS cases in the world (after the U.S.).

The USAID program supports a relationship in which two democracies work as partners in attacking problems of global significance, as well as of very real and immediate importance to the American and Brazilian people. USAID's program concentrates on key global issues of environment and health which are also priorities for Brazil. The program also reflects America's traditional concern with human dignity and well-being by supporting Brazilian civil society in

dealing with at-risk youth. This strategy period will also witness a completion of USAID's successful family planning program with responsibilities assumed by Brazilian institutions.

The scope of challenges to Brazil is huge and USAID's resources are limited. The USAID program has thus been crafted as a high-impact, strategically focussed, low-resource effort that utilizes Brazil's own significant resources, skilled people, and self-interest in areas of USAID comparative advantage and priority - - environmental and health issues. Program efforts are designed to ensure replication by closely coordinating with and mobilizing other donor and domestic resources.

Brazil's Development Prospects

With over 160 million people, Brazil is the largest country in Latin America and the fifth largest in the world. With more than two-thirds of its population living in urban areas, it has some of the worst urban slums and the continent's most serious social and crime problems. Brazil's economy is larger than Russia's, with a per capita GDP of \$4,200 per year. Yet there are wide income disparities, with only 2.6% of aggregate household income going to the lowest-income 20% of households, while 65% goes to the upper 20%, producing severe and widespread poverty. The northeast of Brazil contains more than 45 million people (more than all of Central America) over half of whom are in the lowest quartile of the income distribution.

With a GDP of over U.S. \$600 billion in 1996, Brazil has a highly diversified economy, with most large industry concentrated in the south and southeast. Brazil embarked on its successful economic stabilization program, the *Plano Real*, in July 1994. Inflation, which had reached an annual level of nearly 5000% at the end of 1993, has since dropped to its lowest level in over 40 years and is expected to be less than 5% in 1997. Brazil has accomplished this through a combination of a strong, probably overvalued, exchange rate; tight monetary policies, including interest rates of 9% per month in late 1997; trade liberalization; and privatization, which in the energy and telecommunications sectors has already resulted in \$22 billion of revenue. The administration of current president Fernando Henrique Cardoso has proposed a series of constitutional reforms to replace a state-dominated economy with a market-oriented one. Congress has approved amendments to open the economy to greater private sector participation, including foreign investors. Reforms to bring order to government fiscal accounts have made less progress, because of their greater political sensitivity, but remain under consideration by the Congress.

Market liberalization and economic stabilization have significantly enhanced Brazil's growth prospects. Brazil's trade has almost doubled since 1990, from U.S.\$50 billion to an estimated U.S.\$100 billion in 1996. The United States represents about 20% of that trade. Foreign direct investment has increased from less than U.S.\$1 billion in 1993 to an estimated U.S.\$7 billion in 1996. The United States is the largest foreign investor in Brazil, accounting for almost U.S.\$20 billion, or 34% of total foreign investment. Ongoing and upcoming privatizations in the telecommunication, energy and mining sectors of Brazil planned for 1998 and 1999 is of major interest to U.S. companies.

The Administration places great importance on these reforms for sustainable long-term growth. The *Plano Real* has had a real, positive impact on the income of poor Brazilians, but Brazil continues to have one of the world's most inequitable distributions of income. The Administration has acknowledged the need to invest more in education and health to redress this inequity and has increased taxes destined for health and proposed innovative educational programs. In late 1997, the GOB issued a package of 51 new measures, aimed at achieving R\$20 billion in fiscal savings. The package includes tax hikes, reductions in fiscal incentives, budget cuts, public sector layoffs of 30,000 employees, and measures to improve trade performance. These measures are an effort to reassure international investors of the GOB's firm commitment to defend the *Plano Real* in the wake of market and foreign exchange pressures beginning in November, 1997.

Brazilian agriculture is highly diversified, and the country is largely self-sufficient in food. Agriculture accounts for 13% of the country's GDP, and employs about one third of the labor force in more than 6 million agricultural enterprises.

Brazil has one of the most advanced industrial sectors in Latin America. Accounting for one-third of GDP, Brazil's diverse industries range from automobiles, steel, and petrochemicals, to computers, aircraft, and consumer durables. However, the country's power, transportation, and communications systems, particularly outside the more developed southern states, suffer from lack of investment and poor maintenance. These areas are major targets of the government's privatization efforts and foreign companies are expected to provide important investments in the sector.

Although undergoing a major overhaul, with privatization of many state development banks and the closure by the government of seven private banks, Brazil's financial services industry provides a wide range of products and is attracting numerous new entrants, including U.S. financial firms. The São Paulo and Rio de Janeiro stock exchanges have been among the fastest growing in the world in the last two years. However, they have not escaped the effects of world fluctuations in stock markets, and in late 1997 the government took severe budget cutting and \$20 billion revenue enhancing measures in the wake of the Hong Kong and Korean stock market declines.

Brazil is the largest developing-country debtor, owing more than \$170 billion to external creditors. Brazil has remained current in payments to the IFIs, but not to other governments including the U.S., or to foreign commercial banks, although through a Paris Club rescheduling in 1992 and an agreement with the commercial banks it has reduced arrears and achieved a re-entry into international securities markets since 1992. However, Brazil fell out of compliance with the terms of its IMF program in early 1992 and did not obtain a new IMF program. Subsequent implementation of the *Plano Real* stabilization program in 1994 has, however, substantially complied with IMF recommendations. Brazil and the U.S. are completing final negotiations pursuant to the 1992 Paris Club agreement as to outstanding USAID debt and arrears and expect to conclude negotiations in late 1997. The agreement should permit payments by

Brazil on the \$1.2 billion in USAID debt to begin in early 1998. Remaining will be some \$1 million in ExIm debt and about \$10 in CCC debt, which, when those negotiations are concluded, will remove a major obstacle (620Q and Brooke) to broader USG cooperation and lending programs with Brazil. Brazil was previously certified on nuclear non-proliferation concerns, which was the other outstanding issue affecting USG programs in Brazil.

Poverty

In Brazil, about 58 million people were living in poverty in the late 1980s, and of these, about 47%, or some 27 million, were living in conditions of extreme poverty. The 1995 Brazilian Report on Human Development, based on 1991 data, established criteria for differentiating poverty from indigence (absolute poverty) and concludes that in Brazil there were 42 million poor (30% of the population) and 16 million indigent (12% of the population). The incidence of poverty is higher in the north and northeast. In 1992, the Southeast Region contributed 56.1% of national GDP; the South, 16.7%; the Northeast, 15.8%; and the Center-West and north, 5.6% and 5.5%, respectively. When compared to demographic distribution the disparity is even more evident. The Northeast, for example, holds 27% of the Brazilian population and contributes only 15.8% to the national GDP. While no comparable data is available for 1996 or 1997, experts believe that income distribution and poverty have worsened.

The incidence of poverty is higher in rural areas. Nevertheless, there has been a rapidly growing "metropolization" of poverty. Concentration of the Brazilian population means in absolute terms that the poor are concentrated in the more developed regions. The metropolitan poor accounted for 26% of the total in 1981 and 29% in 1990. In proportional terms, the metropolitan regions of the Northeast have the highest number of poor (43% as compared to 22% in São Paulo). The data available indicates that 52% of Brazilian workers receive less than \$220 a month.

Political

President Cardoso was elected with the support of a heterogeneous alliance. Federal deputies and senators who belong to the parties comprising the government coalition do not always vote with the government, due to weak party discipline and lack of ideological coherence both among and within coalition parties. As a result, President Cardoso has had difficulty cobbling together sufficient support for many of his legislative priorities, despite the fact that his coalition parties hold an overwhelming majority of congressional seats. His proposals for constitutional amendments to open the Brazilian economy to greater foreign participation and to implement sweeping reforms on social security, government administration, and taxation, which will reduce excessive public sector spending and improve government efficiency, have met with limited success.

Global Climate Change

Brazil's largely tropical biodiversity is a natural asset which should not be squandered. Fire and land clearing destroy this biodiversity and contribute to global climate change. The challenge for Brazil is to develop the potential of its tropical biodiversity for productive use without destroying it in the process, and without diminishing the carbon retention potential of healthy vegetation. Similarly, Brazil is challenged to minimize greenhouse gas emissions as its economy grows and energy demands increase. USAID/Brazil will address both land-based and energy sector emissions in this strategy.

Environment

Forests cover half of Brazil, with the largest rain forest in the world located in the Amazon Basin. Recent migration into the Amazon and earlier government incentives for such activity, which have since been removed, have placed increasing pressure on the Amazon. Although the Brazilian government is implementing an ambitious environmental program for the Amazon with support of the G-7 countries and the World Bank, continued deforestation and large-scale burning of forest areas maintains the international spotlight on the Brazilian Amazon.

The GOB has shown increased transparency and willingness to attack contentious issues of resource depletion and to seek NGO advice and partnership in choosing a course of action. Partly in response to anticipated criticism over statistics released in 1996 that showed Amazon deforestation increasing 34% from 1991 to 1994, the GOB reduced the permissible cleared area of rural properties in the Amazon from 50% to 20% of forested area. At the same time, the GOB declared a two-year moratorium on new licensing of mahogany harvest in the Amazon and installed a review of all timber harvest licenses in the Amazon.

Energy

Few countries have an energy matrix as environmentally sound as Brazil's. However, economic growth and saturation of current clean energy options mean that Brazil will have to continue to develop sound energy strategies that limit greenhouse gas emissions. As Brazil's economic growth continues, expansion of current energy services will be necessary, especially in new generating sources. As the federal government reduces its heavy investments in the energy sector, investments and associated service expansion will depend on the private sector and market response will be impacted by policy and regulation.

The Brazilian government has undertaken an ambitious program to reduce dependence on imported oil through exploration and development of alcohol as an alternative fuel. Imports previously accounted for more than 70% of the country's oil needs, but now account for less than 50%. Brazil is one of the world's leading producers of hydroelectric power, with a potential of 106,500 megawatts. Existing hydroelectric power provides 90% of the nation's electricity. However, completion of all remaining major hydro projects and recent rapid economic growth have seriously strained the electrical generation and distribution system, causing power outages

and blackouts, particularly in the south and southeast. Additional thermal generating capacity will take several more years to develop and, given the magnitude, will depend heavily on private sector and foreign investment.

Thus, in the energy sector, continued economic and political stability have supported implementation of comprehensive federal and state deregulation and privatization programs for the energy sector. The existence of strong state and federal level political commitment and action by the Executive and Congress for sectoral reforms has rendered long term investments in existing energy markets and assets feasible and economically attractive. Privatization, regulatory reform, and industry restructuring are currently in motion and the uncertainties should be reduced allowing this multibillion-dollar energy sector to grow in pace with demand, more efficiently and in a manner friendlier to U.S. private investors.

Social Issues

Despite its impressive growth and transition to democracy, serious social issues persist. Poverty, illiteracy, high rates of maternal mortality, and lack of access to basic social services perpetuate inequities and inequalities within Brazilian society. Furthermore, their continuance threatens to undermine the macroeconomic and democratic gains. USAID has been selective in the social areas identified for assistance, i.e. family planning, AIDS prevention and at-risk youth all have the commonality of expanding the rights of the underprivileged and undeserved populations to health and education programs that further social equity. These areas of assistance also draw on the traditional strengths of USAID in the areas of population, health and education.

Reproductive Health

Contraceptive prevalence in Brazil continues to increase and fertility levels continue to decline with total fertility estimated at 2.5 children per woman and modern contraceptive prevalence exceeds 70%. The GOB's considerable effort on strengthening decentralization, ensuring adequate contraceptive supplies, and expanding access to a broader range of contraceptive methods has had important impacts on the sustainability of reproductive health services. However, wide regional disparities still exist and access to a broad range of contraceptive methods remain problematic. For example, while fertility rates in the more industrialized and richer south are 2.2 children per woman, in the poorer northeast there are 3.1 children per woman.

AIDS

Brazil ranks second among countries reporting AIDS cases (the acquired immune deficiency syndrome), with 116,389 reported cases of AIDS as of August 1997 and more than 500,000 Brazilians estimated to be infected with the human immunodeficiency virus (HIV). The majority of new cases result from heterosexual transmission of HIV. Researchers in Brazil have described the importance of the pauperization of the epidemic affecting low-income women, a population that traditionally has suffered from other infectious diseases, malnutrition, precarious sanitary conditions, and poor quality, basic health care services, in general. For example, AIDS is now

the leading cause of death for women of reproductive age in Sao Paulo. These changes lead to the conclusion that the HIV/AIDS epidemic in Brazil is concentrating increasingly among the poorest, most marginalized, and vulnerable populations.

At-Risk Youth

Street children and other youth at risk continue to constitute one of Brazil's most serious problems, especially in large urban areas. The Cardoso Administration has promoted considerable change in the country's economic picture. However, it has not yet succeeded in addressing the problems of at-risk youth and their families. The federal government's Solidarity Community program targets niches of extreme misery all over the country; such action, though likely to decrease migration into large urban centers, does not reach the mass of at-risk children and youth living in slum areas around capital cities.

Education

In recent years, Brazil has made considerable progress in the education sector. Enrollment rates have improved, illiteracy rates have been dramatically reduced, and the number of untrained teachers has declined. These improvements are in large part due to enlightened education policy and dynamic leadership. However, there is considerable variability among states and municipalities in the quality of education provided, and critical problems persist. High repetition rates continue to pose a major obstacle to school completion. Although primary school completion rates doubled between 1980 and 1994, only 24% of children finish all eight grades. The major cause of repetition is low quality schooling, with the lowest generally found in the Northeast. Teachers may have only a primary school education and teach with rote methods, lacking appropriate texts and instructional materials. The management of school systems is fragmented by dual state and municipal school systems. Parent participation in their children's education is limited. There is a clear need for establishment of a minimum set of standards for physical facilities, equipment, teaching materials, and qualified teachers and principals.

Justice

Because of language and culture, Brazil has largely been cut off from the reforming trends in justice in Latin America. Yet, it is a country where there are serious allegations of corruption and inefficiency against the courts and law enforcement agencies by the Brazilian media, NGOs, and others. The current government's modernizing trends, privatization efforts, deregulation, reform of the state, and concern for human rights issues, all depend on a healthy, modern, functioning legal and law enforcement system.

The current USAID/Brazil program resulted from two fact-finding missions by the DOJ (OPDAT and ICITAP) to assess GOB concerns and interests in the justice sector in Brazil. Subsequently, the DOJ proposed to develop the task force as a concept and tool for fighting crime issues as a practical improvement, which could also provoke additional reform efforts. These Mission activities in the Justice sector will be completed this year with prior year funds already obligated.

No additional funds are proposed as the Bureau has indicated that this is not an approved area for USAID/Brazil.

However, justice improvement is one of the objectives of our Embassy "Mission Program Plan" and area of concern to most of the agencies at Post. The Country Team, therefore, continues to be very interested in this area. The Ambassador has followed and supported the USAID activities closely and has indicated that he will be writing a separate letter on the need for continued presence in this area for AA/LAC Schneider and A/S Davidow.

Since USAID will no longer be funding such activities, State and AID will need to take a decision on the Country Team position including exploring with ARA and INL provision of funds which they have available to continue to support these efforts and other reforming activities. USAID/Brazil should continue to perform a coordinating and monitoring role within its country team responsibilities to assure that the objectives of the Mission Management Plan are met.

B. Customer Participation

Each objective described in Part II of this Strategic Plan has benefitted from the participation of stakeholders, implementing partners, and, to varying degrees, ultimate beneficiaries.

In the **environment** area, the strategy builds on past successes and lessons learned from the previous program, based on day-by-day, hand-in-hand discussions with our partners. The strategy reflects the comments and recommendations from USAID's partners provided at a one-day meeting that was convened to solicit partner input. In addition, the USAID/Brazil environmental team holds a meeting with its collaborators annually. The purposes of the meeting are to promote integration between USAID environmental initiatives in Brazil and the Brazilian governmental agenda; to promote integration among the grantees; and to discuss the status of the projects, the results to be achieved, and indicators of program performance.

USAID/Brazil convened a number of meetings during 1995 with NGO representatives to modify and improve the SO and IR indicators. The major objective of this year's conference, held in January 1997, was to refine the indicators and complete the performance monitoring plan. The indicators presented in this strategic plan reflect the input of 40 USAID partners, customers, and high-level state and federal government environmental officials. This dialogue with grantees and partners was essential to enhancing the quality of the measures identified and increased the partners' sense of ownership in the measurement system.

The results framework and strategic plan for the **energy** sector were developed by USAID/Brazil and G/ENV with the full consultation of USAID's partners in Brazil and the U.S. These partners include other donors, a range of Brazilian government organizations, State Energy Regulatory Boards and energy secretariats, and US and Brazilian NGOs.

In preparing the **HIV/AIDS** strategy, USAID/Brazil followed reengineering guidelines and created an AIDS Extended Team that participated in the strategic planning process. USAID/Brazil and AID/W staff, two well-known Brazilian AIDS prevention NGOs (ABIA and ASF), the Ministry of Health, and the World Bank participated in a two-week exercise in August 1997 to define the new USAID/Brazil AIDS strategy for the next five years. The new SO, intermediate results, and results framework are the product of this extremely rich, participatory process to define priorities and goals to curb the HIV/AIDS epidemic in Brazil.

In the case of **family planning**, USAID/Brazil has solicited customer and partner input as an integral part of its operational process, including throughout the strategic planning phase. USAID/Brazil has held annual meetings with stakeholders and implementing partners since 1994. These meetings have fostered an increasingly close working relationship between USAID, the Secretariats of Health of Bahia and Ceara, local NGOs, USAID's Cooperating Agencies (CA), and other donors. These meetings have also been an opportunity to review progress and set directions for the future. In addition, through the use of formal surveys, particularly the 1996 Demographic and Health Survey and Situation Analyses conducted in 1993/94 and 1997, the Mission has developed a broad database of customers' reproductive health status, opinions, perspectives and requirements. This information

has significantly influenced the implementation approaches for improving the quality of family planning services that are presented in this Strategic Plan. Closer collaboration with the Ministry of Health and with commercial sector partners is also reflected in the strategy, particularly with regard to approaches for expanding access to a broad range of contraceptive options and fostering sustainable programs.

The Mission's decision to organize the **at-risk youth** strategy around the issues of sexual exploitation and abuse of girls and adolescents and vocational training was prompted by input received from USAID's customers in the Northeast, who posed the compelling need for more resources and initiatives in these two areas. Customer input was solicited during the program's mid-term evaluation (November 96) and through on-going contact with partner institutions. Also, customers have been voicing their need for training in management, sustainability, and networking areas, which are the key elements of USAID's proposed at-risk youth strategy.

II. Proposed Strategic Plan

A. Introduction

USAID/Brazil presents a strategic plan for FYs 1998-2002 which includes the following strategic and special objectives:

1. Agency Goal Area 5: Environment

Strategic Objective 1: Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas.

Strategic Objective 2: Reduced rate of growth in greenhouse gas emissions from energy sources.

2. Agency Goal Area 4: Health/Population

Strategic Objective 3: Increased sustainable and effective programs to prevent sexual transmission of HIV among target groups.

Strategic Objective 4: Increased access to contraceptive methods and integrated family planning services to improve women's reproductive health.

Special Objective 1: Improved quality of life for at-risk youth in target areas.

USAID also plans to conduct education activities in support of the LAC Bureau regional strategic objective in education.

B. SO 1 - Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas.

A. Linkage to Agency Goals and Objectives

The USAID/Brazil strategic objective, "**environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas**" is directly linked to the Agency Environment Strategic Framework (Agency Goal 5) and supports primarily two of the five Agency Objectives in Environment. A separate Mission strategic objective SO 2, supports Agency Environment Objective 5.4, "Use of environmentally sound energy services increased." The Agency Goal, Objectives, and Program Approaches addressed by SO 1 are as follows:

USAID Goal 5: The world's environment protected for long-term sustainability.

USAID Objectives:

5.1 Threat of global climate change reduced.

Program Approaches:

5.1.1 Greenhouse gas emissions decreased.

5.1.2 Rates of deforestation slowed.

5.2 Biological diversity conserved.

Program Approaches:

5.2.1 Management of biologically significant areas improved.

5.2.2 Sustainable use of biological resources promoted.

USAID/Brazil's forest conservation and sustainable land use strategic objective is among the Agency's most important for addressing two global environmental priorities: global climate change and biodiversity loss. In recognition of this importance, President Clinton announced, during his visit to Brazil in October 1997, USAID's new \$10 million contribution to the science and technology component of the G-7 Pilot Program for Conservation of the Brazilian Rain Forest, an activity that complements USAID/Brazil's other bilateral activities by contributing to science-based solutions for sound forest use.

Brazil has been identified as a "key" country in both USAID's Developing Country Climate Change Action Plan and in the Agency's Biodiversity Strategy. Brazil is a significant producer of greenhouse gas emissions, primarily from deforestation and habitat conversion in the Amazon and Cerrado ecosystems, while these same tropical ecosystems serve as potentially important carbon sinks (terrestrial stores of carbon that impede release of CO² to the atmosphere). Brazil is also host to a significant percentage of the biodiversity of the planet. Brazil ranks as one of the world's "megadiversity" countries, containing more species of primates, amphibians, freshwater fish, and flowering plants than any other country in the world. Brazil is also home to four of the most biologically important ecosystems in the Latin America and Caribbean Region: 1) the highly threatened Atlantic Coastal Rain Forest; 2) the Cerrado scrub savanna and the Pantanal wetlands; 3) the Western Amazon; and, 4) the Caatinga semi-arid thorn forest.

USAID/Brazil's environment strategy is well positioned (current environmental actions began in 1990 under the Agency GCC Program) to contribute to the Agency's new \$1 billion Climate Change Action Plan, while retaining a major geographic focus on biodiversity conservation. All actions will be developed within the framework of the U.S./Brazil Common Agenda for the Environment. USAID/Brazil's carbon sequestration and biodiversity conservation strategies complement each other, but also require discrete strategies. Strategies designed to retain carbon storage capacity in natural ecosystems must also attend to the geographically distinct centers of endemism (regions with unique native plants and animals) that harbor Brazil's biodiversity. Targeting these problems requires distinct criteria, but both objectives respond to the same general approach: development of sound land use systems; local-level capacity building; and the dissemination of participatory planning and management practices.

USAID/Brazil also supports the adoption of sustainable management of natural resources as part of its sound land use strategy. Although this objective is shown as a separate box in the Agency Environment Strategic Framework, USAID/Brazil has considered it under the Global Climate Change Objective. Elements of this strategy clearly support Agency Objective 5.5, "Sustainable management of natural resources increased." Specifically, the USAID/Brazil strategy will continue to support Program Approaches 5.5.1, "Management of forest resources improved," and 5.5.3, "Public and community level of awareness of natural resource sustainability issues and remedies enhanced." USAID/Brazil does not anticipate developing a stand-alone portfolio in traditional natural resource management. Engagement in water resource, coastal zone, and agricultural development issues is beyond USAID/Brazil financial and staffing capacity.

Although USAID/Brazil has had limited involvement with EPA in a training capacity in the area of environmental impact, and has been involved in a liaison capacity with a task force engaged in privatization of water services, USAID/Brazil is not at a comparative advantage to engage in USAID Objective 5.3, "Sustainable urbanization including pollution management promoted." However, pollution prevention and environmental technology are probable thrusts of the proposed regional environmental hub that the State Department is planning for Brazil. Moreover, loans for water cleanup predominate the multi-billion dollar environment portfolios of the MDBs in Brazil.

B. Host Country Goals

Brazil, as signatory of the Framework Convention on Climate Change (FCCC) and the Convention on Biodiversity, is in the process of defining priorities for action in these areas. Consultations are being conducted with participation and active leadership of civil society representatives. Although federal spending for the environment still lags behind basic health, education, and infrastructure needs, the environment is very much in the media spotlight and is gaining in public awareness. For the Brazilian populace, a healthy environment means first and foremost, access to clean air and clean water. Cities such as Curitiba demonstrate that the best way to assure clean air and water is to elect government officials committed to effective management of urban transport and sanitation services.

The Brazilian Ministry of Environment, Water Resources and the Legal Amazon has outlined decisive steps towards sustainable development in the Amazon in the documents, "Integrated national

policy for the Legal Amazon," and "Agenda 21 for Amazonia." Brazil is a full financial partner in the G-7 Pilot Program to Conserve the Brazilian Rain Forest.

On October 23, 1995, the U.S. and Brazil entered into a Common Agenda for the Environment. Yearly consultations define areas of common interest and concerns, while USAID-sponsored activities in conservation and sound land and energy use add substance to U.S. bilateral environmental actions in Brazil.

C. Strategic Objective

1. Statement of Strategic Objective

The USAID/Brazil strategic objective is "environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas." Four intermediate results support the achievement of the strategic objective:

IR 1.1 Systems for sound land use identified, promoted, and adopted in target areas;

IR 1.2 Target institutions and local human capacity strengthened;

IR 1.3 Target policies to support environmentally sound land use adopted and/or implemented; and

IR 1.4 Sound land use systems disseminated beyond target areas.

2. Problem Analysis

Brazil is a significant contributor to greenhouse gas emissions because of deforestation and burning in the Amazon basin and extensive habitat conversion for agricultural development in the savanna zone. Recent scientific evidence indicates that significant amounts of carbon are stored in the underground root systems of these tropical forest and savanna ecosystems. Conversion of these ecosystems to cropland or pastureland significantly alters the natural ecosystem functions that favor carbon sequestration and in the case of evergreen forests, provide natural protection against burning. Shallow-rooted pastures and annual crops are poor carbon stores and provide no protection against burning during tropical dry seasons. Thus actions to conserve natural forest and savanna ecosystems serve the dual purpose of reducing greenhouse gas emissions in the act of land clearing, while maintaining natural carbon stores in healthy, growing vegetation. The Brazilian Amazon forest and Cerrado zone together cover over 7 million square kilometers, a sizeable area of major importance to any global strategy to retain carbon storage capacity.

In the Atlantic Forest region of Brazil and, to a lesser extent, in parts of the Amazon, severe deforestation and forest fragmentation threaten the viability of tropical forest biodiversity and carbon storage capacity. A reasonable percentage of the land area that is still largely intact in the critical ecosystems in Brazil should continue to be set aside for outright protection, without direct human use. Brazil still needs to create additional protected areas in all of its major ecosystems. Both

private and public mechanisms will be explored to achieve the result of increased area under conservation. But in areas where human impact is great, reducing deforestation and burning that lead to habitat fragmentation require the adoption of improved land use management practices that emulate the ecological functions of natural systems.

Deforestation in the Brazilian Amazon continues to draw worldwide attention. Fire and smoke, aggravated by current extreme dry conditions of the exceptional 1997 El Niño event, once again point out the risk to the forest as well as human health associated with burning in the Amazon. NOAA heat-sensing satellite images indicate a major increase in fires during the 1997 dry season, hinting at a possible worrisome upswing in Amazon deforestation. Land clearing for small-scale subsistence agriculture, large-scale pasture formation, and selective logging (rather than clear-cutting) continue to be the underlying causes of deforestation in the Amazon region, and to a certain extent in the Atlantic Forest region.

Although direct fiscal incentives no longer drive deforestation in Brazil, poverty and the poor dissemination of the few good examples of sustainable forest management continue to result in wasteful resource use patterns in frontier areas. Promising land use initiatives such as intensification of agricultural production, reduced impact natural forest management, and co-management of conservation units by government agencies and NGOs, supported by USAID/Brazil since 1990, serve both as models to improve the livelihoods of local resource users and as a "reality check" for policy makers.

Effective environmental safeguards require the will of society to establish acceptable standards and put them into effect through creative use of market forces and the rule of law. Environmental enforcement in the Amazon region is aggravated by extreme inaccessibility. Increasingly, civil society in Brazil, largely through environmental NGOs, translates this will into action through partnership with government agencies and other NGOs.

Brazil recently set out to implement an ambitious program of transport infrastructure improvement in the sparsely populated center-west and northern regions, in the heart of the Amazon forest and Cerrado domains. "Brasil em Ação" calls for links between highway and waterway transport, largely as export corridors for grains produced on converted savanna lands. In addition to the areas directly affected by highway construction and river channeling, the availability of cheaper transport to European and Pacific markets is likely to extend the grain belt of Brazil northward across the Cerrado into formerly forested areas in the Amazon. Economic growth in Brazil will dictate these changes and new unforeseen environmental challenges to sound land use will emerge. A strong vigilant civil society and enlightened political leadership are the best assurance that economic forces driving new land conversion will not overtake environmental concerns. USAID/Brazil will continue to track these major infrastructure projects and their environmental impact.

3. Results Framework Description

Given Brazil's geographic size (the Amazon basin alone is nearly the size of the continental United States), and the magnitude of the threats to its natural ecosystems, USAID does not have the

resources by itself to significantly alter the loss of natural areas in Brazil. However, USAID/Brazil has had, and can continue to have, a significant and catalytic role in protecting Brazil's ecosystems. The USAID/Brazil environment SO is focused on changing land use practices because that is the level where impact can be greatest.

The USAID/Brazil approach is to design and test socio-economically viable models of sustainable land use, models which can replace the harmful practices which rapidly degrade natural areas. These practices are thoroughly documented and are actively demonstrated to other NGOs, industry associations, Brazilian and multilateral development lending banks, cooperatives, universities, Brazilian government enforcement agencies, and multilateral development programs for subsequent replication.

The current strategy builds on past successes and lessons learned from the previous program based on field-tested experiences and successful policy advocacy growing out of field activities. The geographic focus continues to be on the Brazilian Amazon, while the Atlantic Forest, the Cerrado, the Pantanal, and possibly the Caatinga will be targets for ecoregional conservation planning and focused partnerships in conservation and sustainable land use. Poverty alleviation and participative community-level action characterize much of the USAID/Brazil environment strategy. Several field activities are aimed at linking conservation with human needs, exploring the relationship between environmental issues and social well-being. Participatory action can be an effective mechanism to achieve long-term conservation and rural development.

Since the timing of the USAID/Brazil Strategic Plan is not synchronized with the commitments under the existing environment program, the current strategy is more a modification and fine-tuning of the previous strategy than a brand-new approach. A more extensive strategic planning process will begin in 1998, tuned to capture lessons from the existing program and new trends in the environment arena such as the outcome of the Kyoto Conference of the Parties to the Framework Convention on Climate Change, and the Brazilian government biodiversity planning strategy. The final environment strategy will be in place when existing program commitments come to a close in 1999.

The strategy presented in this strategic plan will pursue a more focused dissemination effort directed mainly but not strictly at areas close to the program's geographic target areas, and also directed at target private sector and public institutions. The majority of the field activities supporting the objective are in a very advanced phase and can now be replicated in non-target areas. The new strategy proposes to carefully target its audience and provide not only high quality information and communications material, but in some cases technical assistance as well. The long-term success of USAID/Brazil's environment program will be judged by how effectively these models are incorporated throughout critical Brazilian ecosystems.

a. Causal Relationships

The foundation for accomplishing USAID's Strategic Objective, "Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas," is a synthesis of four intermediate results. Initially, systems for sustainable management, especially those that

provide economic alternatives to deforestation, are identified and promoted in target areas. Information needed to develop these sound land use systems is not always available and, therefore, it is expected that USAID/Brazil will continue to support scientific research on the structure and function of tropical ecosystems and the effects of human use and impact on these ecosystems.

If the proposed land use systems are, in fact, viable, they will be adopted locally. Concurrently, key individuals and institutions are strengthened, especially within Brazilian environmental and research NGOs which can manage and implement sustainable management systems and which can serve as a local constituency for improved environmental management. These two intermediate results are stated as follows:

IR 1.1 Systems for sound land use identified, promoted, and adopted in target areas; and

IR 1.2 Target institutions and local human capacity strengthened.

Once successful models for alternative practices to deforestation are identified, the program targets policies at the local, state, and national levels which either hinder or favor widespread adoption of these models through dissemination efforts (conferences, videos, publications, papers targeted on decision-makers). Simultaneously, where policy hindrances do not exist (or at least are not preemptive), the program actively disseminates the models beyond their target areas. These two "higher level" intermediate results are stated as follows:

IR 1.3 Target policies to support environmentally sound land use adopted and/or implemented; and

IR 1.4 Sound land use systems disseminated beyond target areas.

b. Critical Assumptions

The success of USAID/Brazil's environment program is dependent on several critical assumptions. These include:

- 1) Continued GOB support for NGO participation in addressing environmental problems.
- 2) Adoption of USAID model actions by the PPG-7 within a reasonable timeframe.
- 3) Review and adoption of policies necessary to guarantee effective conservation management and insure sustainable development, at the local, state, and federal level.
- 4) Continued assistance from the regional support office in executing grant actions to multiple partners. When appropriate, direct grant action to advanced Brazilian NGO partners will be considered when these grant actions are in the best interest of achieving results.

4. Commitment and Capacity of Other Development Partners

NGO/government/private sector partnerships are an effective means to achieve the USAID/Brazil strategic objective in environment and will continue to be the principal focus of USAID/Brazil environmental actions. Local NGOs have a comparative advantage because of their proximity to local reality and their focus on problem-solving action, while protection of the environment for all citizens is still a proper role of government.

USAID/Brazil's major U.S. partners include the World Wildlife Fund (WWF), The Nature Conservancy (TNC), Conservation International (CI), and the Woods Hole Research Center. The USDA/Forest Service, the University of Florida, Smithsonian Institution, and the Tropical Forest Foundation also play important roles in USAID/Brazil's environment program. USAID's Brazilian partner institutions include: WWF/Brasil, IBAMA, EMBRAPA, INPA, the Goeldi Museum, the University of Acre, and local NGOs including IMAZON (Institute of Man and the Amazonian Environment), PESACRE (Group for Research and Extension in Agroforestry Systems), SOS Amazônia, IPAM (Amazonian Institute for Environmental Research), SPVS (Society for Wildlife Research and Environmental Education), FVA (Vitória Amazônica Foundation) and IESB (Institute for Socio-Environmental Studies of Southern Bahia).

Much of the work in policy modification and dissemination is being done in partnership with participant donors to the multilateral G-7 Pilot Program to Conserve the Brazilian Rain Forest, managed by the World Bank. The G-7 Pilot Program is a \$290 million effort to protect the Brazilian Amazon and, to a lesser extent, the Atlantic Coastal Rain Forest.

5. Illustrative Approaches:

IR 1.1: Systems for sound land use identified, promoted, and adopted in target areas.

In order to achieve this IR, USAID will support activities aimed at identification, promotion and adoption of sound land use systems in several categories: protected area management, fire science, natural forest management, and agroforestry alternatives on altered lands.

a) Protected Area Management: There is a strong need in Brazil to set aside certain specific areas for limited use in national forests and extractive reserves; as part of the cultural heritage in indigenous reserves; or for the conservation of unique ecosystems and biodiversity in national and state parks, biological reserves, and wildlife sanctuaries.

In its protected area management program, USAID may finance activities which support:

1) the identification of priority areas (gap analysis and other research); 2) the development and implementation of management plans for conservation units; 3) the identification of economic incentives for maintaining buffer zones, such as tax incentives, ecotourism, commercialization of traditional forest products; 4) the establishment and good management of private reserves; and 5) the strengthening of the ability of local communities and institutions to identify and adopt systems for

sustainable management.

b) Fire Science and Management: Fire is part of the reality in tropical ecosystems. Small farmers and ranchers use fire to clear land to plant staple food crops and to renew pastures. However recent studies show that uncontrolled fire can be particularly destructive, destroying farm property and crops, while ground fires in selectively logged forests reduce the biodiversity and production potential of these forests.

In the area of fire science and management, USAID may finance activities which:

1) increase understanding of the incidence and effects of fire; 2) identify and test community-based solutions to fire control; and 3) strengthen the ability of public sector institutions to enforce fire management laws and regulations.

c) Sustainable Forest Management: The Brazilian Amazon contains more than 80 percent of the forests of Brazil, and almost one-third of all tropical forests in the world. The estimated volume of commercial timber in the Brazilian Amazon, 60 billion cubic meters, is valued at over 4 trillion dollars. With the depletion of timber stocks in Southeast Asia, the Amazon is expected to become the world's major supplier of tropical timber in the coming decades. Any strategy for rational development of the Amazon must take into account timber production.

In the area of sustainable forest management, USAID may finance activities which support:

1) better understanding of reduced impact forestry management techniques; 2) the ability of communities and the timber industry to sustainably manage and harvest timber; 3) the identification of economic incentives for the maintenance of a forest in its natural state, such as non-timber forest products and development of markets for these products; and 4) the development and implementation of programs that produce renewable energy from biomass.

d) Agroforestry Alternatives on Altered Lands: A portion of the Brazilian Amazon has already been converted from forest to degraded pastureland or nutrient-depleted cropland. Research financed by USAID/Brazil has shown that these lands are not lost to production, but are quite resilient and can be made productive with minimal external inputs and a better understanding of the function of the original forested ecosystem. Managed secondary forest fallows and intensified production contribute to reduction in clearing of primary forests.

In the area of agroforestry alternatives on altered lands, USAID may finance activities which support:

1) a better understanding of degraded soils and feasible options for their recuperation and use; 2) stronger local capacity to identify, implement, and manage diversified agroforestry options; and 3) better commercialization of agroforestry products.

IR 1.2: Target institutions and local human capacity strengthened.

USAID/Brazil's approach to dealing with environmental problems involves the training of key

individuals working on the front line of top environmental issues, and support for local problem diagnosis, participatory research on alternatives, and for specific actions aimed at bringing about change. USAID/Brazil will seek to nurture environmental leaders, with a special emphasis on women, capable of understanding scientific knowledge, applying it locally, communicating it to the public, and using it in policy advocacy.

This results-oriented training will strengthen the capacity of these individuals to carry out the activities called for in their work, including resource management, project design and implementation, enforcement of environmental laws, dissemination of technical and/or general environmental information to target audiences, the building of information networks, and advocacy of policy change.

The MERGE (Managing Ecosystems and Resources with Gender Emphasis) Program will continue to provide training, technical assistance and collaborative networking to strengthen local capacity to monitor, evaluate and document the participatory process of working with communities in field projects with gender focus. The main goal is to institutionalize gender in USAID/Brazil's environment program and activities and build commitment for the consideration of gender as a key development issue.

IR 1.3: Target policies to support environmentally sound land use adopted and/or implemented.

The World Bank-managed G-7 Pilot Program to Conserve the Brazilian Rain Forest (PPG-7) includes an approximately \$50 million environmental policy component. This large investment clearly establishes the PPG-7 as the leading donor effort in the environmental policy arena. USAID, through its local partners, has already been successful in influencing the design of several components of the PPG-7 Program such as the \$18 million forest management and \$9 million fire and degraded lands components and has played an important role in the redesign and modification of environmental policies.

For example, the World Wildlife Fund (WWF) has contributed to the redesign of the GOB's National Protected Area Management System, while both WWF and Conservation International (CI) have assisted in adapting state-level policies that direct revenues of value-added taxes to municipalities that encourage land conservation. USAID/Brazil will continue to support such efforts, identifying and financing policy-related activities which potentially complement the World Bank investment.

USAID/Brazil will finance activities which strengthen the capability of partners to design and deliver effective strategies for developing and disseminating appropriate educational print, audio and/or video materials. Target groups for dissemination may include policy-makers, lending institutions, the media, academic institutions, the scientific community, NGOs and their networks, school children and educators, local leaders and their communities, unions, information networks, lobby groups, and the general public.

Key policies addressed will likely include: a) promoting public and private systems for management

of protected areas; b) promoting lending guidelines that favor sustainable land management; and c) improving environmental enforcement and compliance.

IR 1.4: Sound land use systems disseminated beyond target areas.

As successful models for alternative practices to deforestation are developed and become viable, USAID/Brazil will support dissemination of these models beyond their target areas for wider incorporation into the greater Amazon, and increasingly, into the Atlantic Coastal Rain Forest and the Cerrado/Pantanal.

To disseminate systems beyond target areas, USAID/Brazil will finance activities which support the identification of successful sustainable land use models developed to date, as well as industry and community adoption of these models. These kinds of activities may include extension, environmental education, forest product certification, training, and project visits. A specific audience of key communities, industries, other donors, the PPG-7, and Government officials will be targeted for systems dissemination. In the past, USAID's program focused mainly on pilot demonstrations, with eventual dissemination efforts, whereas new activities will be designed specifically for dissemination to non-target areas. Additional resources will be needed both for dissemination and for monitoring progress.

6. Sustainability

USAID Brazil's environment program emphasizes the development of land use systems which are both economically and environmentally sustainable. Activities providing alternatives to deforestation must be economically rewarding to assure their adoption in the long term. The program strengthens Brazilian NGOs so that they have the technical and administrative capacity to continue their effectiveness once USAID support ends, and so that they can influence local policies. The program also focuses efforts on the private sector to adopt and replicate those activities whose success depends on private sector implementation.

USAID/Brazil is a full participant in the \$290 million G-7 Pilot Program to Conserve the Brazilian Rain Forest. In addition to the new \$10 million contribution to promote and strengthen capacity to produce science-based solutions for conservation and sustainable land use in the Amazon, lessons learned from USAID sponsored activities in the Amazon and Atlantic Forest regions have been instrumental in the design of the following PPG-7 program components: 1) the \$18 million natural forest management project; 2) the \$10 million fire and deforestation control project; and 3) the \$22 million biodiversity corridors conservation project. It is expected that phase II of the Pilot Program will focus investments on actions judged to be successful and sustainable. The Pilot Program has the financial resources and capacity to leverage such actions across the public and private sector.

7. Judging Success

USAID/Brazil has refined its environmental indicators to address problems in collecting data at the SO level. Additional work will need to be completed to establish baseline data. In addition, because of the breadth of USAID/Brazil's program and the complexity of the data collection needs, many of the lower level indicators will be measured in terms the achievement of annually defined benchmarks. These benchmarks will be composites of site-specific, objectively verifiable measures of performance. Partners have been consulted to verify their capacity to collect data for the SO level indicators as part of the new focused dissemination effort. This shift in data collection responsibility will require additional time to determine baseline data, probably by early-1999. The intermediate results level indicators don't have targets after 1999 since the indicators may change after the strategy is fine-tuned along the next year and a half.

8. Environment Indicators [in annex]

C. SO 2 - Reduce rate of growth in greenhouse gas emissions from energy sources

A. Linkage to Agency Goals and Objectives

The USAID/Brazil clean energy strategic objective “*reduced rate of growth in greenhouse gas emissions from energy sources,*” directly supports the Agency Environment Strategic Framework (Agency Goal 5). The Agency Goal, objectives and program approaches addressed by SO 2 are as follows:

USAID Goal 5: The world’s environment protected for long-term sustainability.

USAID Objectives:

5.1 Threat of global climate change reduced

Program Approach:

5.1.1 Greenhouse gas emissions decreased.

5.4 Use of Environmentally sound energy services increased

Program Approaches:

5.4.1 Provision of energy services by the private sector increased.

5.4.2 Higher levels of energy efficiency achieved.

5.4.3 Use of renewable energy increased.

5.4.4 Use of clean technologies increased.

In addition, the USAID/Brazil Clean Energy SO supports three US Government foreign policy initiatives: (i) the US/Brazil Common Agenda for the Environment, which articulates bilateral collaboration with respect to energy and environmental related issues; (ii) the Summit of the Americas Initiative, that promotes hemispheric collaboration on energy; and (iii) the Framework Convention on Climate Change, which seeks to establish a global framework for collaboration on climate change.

The USAID/Brazil Clean Energy SO addresses the issue of potential growth in greenhouse gas (GHG) emissions as Brazil’s economy expands and outgrows its current clean energy base. In addition to the initiatives already mentioned, the “*US - Brazil Implementing Arrangement for Cooperation in the Area of Energy Technology,*” signed during President Clinton’s October 1997 visit to Brazil, specifically addresses the areas of renewable energy and energy efficiency.

USAID/Brazil’s decision to identify a strategic objective in the area of energy stems from the fact that Brazil is the largest emitter of GHG in Latin America. In 1991, Brazil was the fifth largest net GHG emitter worldwide. Industrial carbon dioxide emissions increased 20 percent from 1990 to 1995. Given the continuing growth in Brazil’s economy, it is likely that industrial carbon dioxide emissions will continue to increase.

Brazil has been identified as a "key" country in USAID’s Developing Country Climate Change Action Plan not only because of its contribution to net global GHG emissions but also due to Brazil’s natural endowments that favor favorable actions to control emissions. Specifically, Brazil: 1) is the

- largest Latin American economy with a significant potential for increasing current GHG;
- 2) has abundant resources for sustainable energy production and use, particularly for biomass fuels, solar energy, and small scale hydropower potential;
 - 3) offers cost attractive energy efficiency opportunities, locally supported;
 - 4) is a regional model for clean energy development, and
 - 5) has shown a clear commitment to significant restructuring and privatization of its energy industry, inclusive of clean energy options.

B. Host Country Goals

Brazil aims to assure availability of electric energy to all citizens, while converting from a largely state controlled to a market-driven energy model regulated to take into account certain regional disparities that continue to limit full access to electric energy. Brazil also intends to provide access to electric energy with due consideration of local and global environmental concerns.

C. Strategic Objective

1. Statement of Strategic Objective

The USAID/ Brazil clean energy Strategic Objective is "*reduced rate of growth in greenhouse gas emissions from energy source.*" Three intermediate results support the achievement of this strategic objective:

- IR 2.1: Increased use of on-grid and off-grid renewable energy sources.
- IR 2.2: Increased efficiency in energy production, supply, and consumption.
- IR 2.3: Implementation of policy, regulatory and procedural agendas supportive of increased energy efficiency and use of renewable energy.

2. Problem Analysis

Brazil's continued economic expansion at the rate of approximately 4% per year requires additional energy resources projected to grow by 65% from 1996 to 2006. The last large potential hydropower sources close to developed and dense load regions, i.e. the south and southeastern regions of Brazil, have been exploited. This means that the needed additional energy must come from energy efficiency, renewable energy resources, natural gas power plants, or the untapped hydro sources in the Amazon River Basin, the latter requiring extensive trans-regional transmission lines. Sound development of these undeveloped energy sources can mitigate environmental impacts such as additional GHG emissions, loss of carbon sinks and biodiversity.

As Brazil's economic growth pushes for increased energy needs, it is also certain that natural gas will play an increasing, although limited, role in Brazil's energy matrix, as the Bolivia-Brazil natural gas pipeline is developed. Power generation based on natural gas exhibits reduced GHG emissions when compared to other fossil fuels (e.g. coal and oil). When compared to hydrocarbon fuel use for power generation, the increased use of natural gas in Brazil not only can generate the bulk power

needed to meet medium term needs, but also produces reduced emissions when compared to Brazil's low quality coal (high sulfur content and low energy concentration).

Forest product industries and other agribusiness industries which use, or can use, agribusiness wastes as fuels (e.g., bagasse-fired power) currently do not do so, or do so inefficiently. Generation of electric power in this fashion can be accomplished with substantially lower net GHG emissions than fossil fuels, and also increase the economic viability of agribusiness industries by using what was previously a waste product.

In a multi-billion dollar industry such as energy, underlying economic aspects must be taken into consideration. The fact that wholesale energy prices are presently below long-run marginal costs has a twofold impact on this strategy: (i) large energy consumers have reduced incentives to invest in energy efficiency; and (ii) energy producers are hindered from investing in renewable energy technologies which may have a higher initial capital cost when compared to other sources. Privatization of the fixed generation assets and the competitive forces put in play by restructuring will gradually force increases in bulk energy prices towards their full economic recovery cost, a need recognized by the GOB. This underlying trend of costs and prices for energy will not only improve incentives and consumer willingness to use energy more efficiently but also raise the competitiveness of renewable energy technologies.

In summary, Brazil is on the verge of reshaping its existing energy industry and future sources. USAID intervention will provide assistance to Brazil to assure that future energy demand is not met with inadequate fossil fuels or environmentally damaging hydropower reservoirs. Also, because current energy supply options can have adverse climate change impacts, it is necessary to increase Brazil's ability to detect and mitigate these impacts in order to provide the country with a suitable range of economic options from which to choose a sustainable energy path. Policy, regulation and financing mechanisms need to be put into place to guide the implementation of such environmentally sustainable paths. Thus, the areas where the USAID/Brazil chooses to target its resources are:

Renewable Energy: To increase the use of on-grid and off-grid renewable energy sources, through support for the development of sustainable markets.

Energy Efficiency: To encourage and support increased efficiency in energy production, supply, and consumption.

Power Sector Regulation: To encourage and support the implementation of policy, regulatory, and procedural agendas supportive of the development of sustainable markets for energy efficiency and renewable energy.

Financing: Increased amounts of, and access to, financing for energy efficiency and renewable energy initiatives.

With some exceptions, problems and leveraged opportunities for renewable energy applications in Brazil involve three different geographic settings i.e. (i) grid connected projects (biomass fueled and windmills generators above 10 MW) in the south and southeast regions; (ii) off-grid renewable energy projects (wind and small solar generation projects) in the northeast; and (iii) off-grid renewable energy projects in the Legal Amazon (using sawmill residues in Mato Grosso and Pará).

In the last two categories, one can easily identify side benefits such as economic value added to rural production, increased income generation and access to water.

The traditional small scale and decentralized diesel generation in Brazil's rural markets (Amazon and off-grid areas) is likely to increase if current federal government policies that support diesel generation are not reviewed under the current power sector restructuring. In these key rural areas, 200,000 people are currently supplied by electricity based on high emission, inefficient and unreliable small diesel powered generator sets. Twenty million people in 150,000 villages are off-grid and need improvement of energy services. These services may continue to produce high emissions if mechanisms to deliver clean technologies are not developed.

In rural areas, where grid extension to conventional power sources is not economically feasible and small renewable energy applications (such as photovoltaic panels) are the least-cost option, the constraint is market delivery mechanisms and sustainability. Market delivery mechanisms are understood to mean retailers and financing to market, deliver and install applications, and devices, and sustained availability of reliable local maintenance.

In short, there is a demand for decentralized renewable energy (solar energy in the northeast of Brazil is a clear example) but no functional markets currently exist. This SO will assist in market development, benefiting both Brazilian energy consumers and, potentially, US industry. It is a general consensus among Brazilian institutions and multilateral development organizations that a large demand for decentralized solar energy equipment exists but that market development is still necessary in order to reach a level where large scale distribution and long term sustainability is possible.

While renewable energy offers an alternative to diesel fueled generation sets or access to energy services in rural areas, increased efficiency in the production of electricity makes more power available per unit of resource, and increased efficiency in consumption reduces the demand for electricity, postponing construction of new facilities. Therefore, efficient production and use of energy can reduce the growth rate of GHG emissions.

With inflation under control and electricity prices increasing, the opportunities for energy efficiency measures are considerable, both in energy supply systems and in end-use applications. By reducing effective demand for energy through cost-effective savings, it is possible to significantly reduce the need for additional fossil-fuel generating capacity.

As stated above, wholesale supply tariffs are presently below long-run marginal costs, reducing incentives for larger consumers to invest in energy conservation. The two-year period prior to mid-1999 coincides with gradual increases in generation tariffs towards full economic cost recovery. This will improve incentives and increase the willingness of consumers to invest in energy efficiency. These changes are due to restructuring and introduction of competition in the Brazilian power industry.

The wide-ranging structural and regulatory changes now underway in the power sector in Brazil will

determine what role, if any, environment friendly options, such as efficiency measures and increased use of renewable energy, will play in Brazil's energy future.

Developing a sound policy and regulatory capacity within Brazil is conducive to increased use of environmentally sound energy sources. The rationale is to support reduction or avoidance of GHG emissions per unit of useful output (e.g., kWh of electricity per unit of product) through measures such as required and/or recommended regulatory procedures supportive of energy efficiency both for consumers and producers. One example is the current policy proposal for an "energy efficiency levy" on total energy sales, paid by consumers and invested by utilities in energy efficiency projects, to be monitored by the regulator with the assistance of PROCEL (National Program for Electric Energy Conservation).

Another objective is to strive toward expanded use of renewable energy technologies under the assumption that regulation can provide a level playing field for renewable energy when compared to higher emission technologies, by taking environmental costs into account in pricing, while still providing fair competition.

3. Results Framework Description

The USAID/Brazil energy strategic objective "*Reduced rate of growth in GHG emissions from energy sources*" attempts to catalyze and support initiatives that maximize leverage of limited resources and aim for replicability and sustainability. Market oriented approaches that are economically sound are an essential part of this integrated nexus.

The current strategy builds on results obtained during the two-year period when the USAID/Brazil energy program was expressed as a Special Objective. The program's geographic target areas continue to be the Northeast and Amazon regions for renewable energy, with a nationwide approach for energy efficiency.

The current SO is supported by three IR's focused on renewable energy, energy efficiency and policy, with indicators relating to renewable energy used, energy saved, and support for sustainable market formation.

The previous energy special objective explored a wide range of issues and options in a country environment where overall options for energy policy were being assessed. As a consequence of power sector restructuring and stable economic conditions in Brazil, the country environment is now changing to one where some redesign decisions are maturing while others are being implemented. This energy strategy builds on that experience and sets a more focused framework for action.

Causal Relationships

In order to achieve the SO of reducing the rate of growth in GHG emissions, the program will aim to increase the use of renewable energy sources, increase efficiency in energy production, supply, and consumption, and support implementation of policy. Policy changes are expected to lead to increase in use of renewable energy and energy efficiency because these measure are not always

avored by the market. Use of renewable energy and increased energy efficiency will lead to decreased emissions from the energy sector.

IR 2.1 Increased use of on-grid and off-grid renewable energy sources.

IR 2.1.1 Sustainable markets for on-grid and off-grid renewable energy sources developed.

IR 2.1.2 Increased amounts of, and access to, financing for renewable energy.

Given the growth of Brazil's economy, more than 6,000 megawatts of additional generation capacity will be required by the year 2000. This increased energy demand does not necessarily fully account for the use of either on-grid and off-grid renewable energy sources. Considering Brazil's size and substantial energy needs, a significant increase in the use of renewable energy sources will only be possible through the development of a sustainable market. The word market is used here in the sense that there must be a sustainable volume and quality of transactions, backstopped by accessible finance, buyers and sellers. Brazil may have the demand and appropriate conditions for renewable energy sources but lacks a fully developed market. USAID activities will be aimed at developing markets and financing for renewable energy as stated in IR 2.1.1 and IR 2.1.2.

IR 2.2: Increased efficiency in energy production, supply, and consumption.

IR 2.2.1 Establishment of (tech./env./econ.) viable utility/energy service companies (U/ESCOs).

IR 2.2.2 Implementation of energy efficiency programs in targeted sectors (e.g., transmission and distribution losses, cogeneration, industrial and residential energy efficiency).

IR 2.2.3 Increased amounts of, and access to, financing for energy efficiency projects.

Feasibility and sustainability of energy efficiency initiatives depend on the active participation of end users in one form or another. Experience elsewhere, notably in the US, is that fostering the development of U/ESCOS (Utilities / Energy Services Companies) as intermediaries is a crucial factor. Such companies have a better perception of the opportunities than do many consumers and are willing to share the risks and the benefits with them. Assisted by AID, Brazil and its energy efficiency institutions will promote the further development of U/ESCOS and their viability in technical, economical, business and financing aspects. Support to cogeneration coupled with industrial energy efficiency not only increases efficiency in production and consumption but also can count with strong GOB's commitment. USAID intends to mature its previous support to PROCEL, ANEEL (National Regulatory Agency), the Brazilian National ESCO Association, and lending institutions in order to target a support framework both on technical and business bottlenecks.

IR 2.3: Implementation of policy, regulatory and procedural agendas supportive of increased energy efficiency and use of renewable energy. (e.g., laws, decrees, procedures required and/or recommended by the regulator, energy efficiency levy, tax exceptions on renewable energy equipment, energy efficiency standards & labeling etc.)

Early in 1997, as part of power industry restructuring, the Brazilian Congress established an important institutional policy measure, i.e. an independent federal regulatory agency (ANEEL). ANEEL's full operation is due in December 1999, at the latest. The critical challenge addressed in this Strategic Objective is to help steer the policies and market regulation in ways that reduce net GHG emissions while meeting economic and social development objectives. This will be achieved through the promotion of market-based mechanisms for greater energy efficiency and renewable energy in the context of policy and regulation.

Critical Assumptions

The approach taken in this SO is premised on continuing commitment to and implementation of power sector reform and privatization measures at the federal and state levels. Continued federal and state government commitment to private investment is also assumed during this significant period of energy growth and change in energy policy in Brazil. Under this framework the following critical assumptions are given:

- 1) Brazil's economy will grow causing increased demand for electricity as projected;
- 2) Power sector reform and privatization in the power industry will increase competition among generation sources. That in turn will cause electricity prices to reach economic recovery costs rendering energy efficiency and cogeneration investments more competitive when compared to conventional power sources. For the same reason, biomass cogeneration will be more attractive;
- 3) Initially, industrial policy will lower import tariffs on renewable energy equipment and augment equipment supply. As a consequence, in-country manufacturing will be attractive. Technology improvements (solar panels and gasifiers) and enhanced market perspectives will reinforce the decreasing trend on equipment price;
- 4) Based on the fact that decentralized renewable energy systems are the least cost option in off-grid rural areas, municipal/state officials, as well as rural cooperatives, will continue to support the establishment of specific financing mechanisms to expand rural energy services. As the economy and rural incomes grow, willingness/capacity to pay for energy services in rural areas will also increase.

4. Commitment and Capacity of Other Development Partners

Several partners will be critical in this SO, especially the role of the World Bank and the IDB (Inter-American Development Bank), UNDP (United Nations Development Program) as well as US and Brazilian NGOs. After USAID supported fact finding missions in 1997, the IDB is currently proposing an Action Plan on Sustainable Markets for Sustainable Energy (SMSE) to MME/PRODEEM (Ministry of Mines and Energy/National Energy Development Program for States and Municipalities).

Among other consistent goals, IDB/SMSE and MME/ PRODEEM aims to foster, through small and medium enterprises, a sustainable market for financing, installation, operation and maintenance of renewable energy devices in selected areas. In addition to these development partners, the SO results framework counts on a continuing commitment from the World Bank and MME which are

developing a potential "Integrated Commercial-Social Power" loan for the northeast of Brazil (States of Ceará, Minas Gerais and Bahia).

Both PROCEL and COMPET perform integrative or general service functions in energy efficiency in the power and fuel sectors respectively and have indicated eagerness in continuing to be partners with USAID SO 2.

Accordingly, the SO 2 results framework and this strategic plan was developed by USAID/Brazil and G/ENV with the full consultation of USAID's partners in Brazil and the US, including: MME, MCT (Ministry of Science and Technology), PRODEEM, PROCEL, CEPEL (National Power Research Laboratory), COMPET (National Program for Oil Conservation), ANEEL, BNDES (National Development and Social Bank), World Bank, IDB, UNDP, Winrock, ECRE (Export Council for Renewable Energy), DOE (US Department of Energy) as well as Brazilian States energy regulatory commissions and energy secretariats.

5. Illustrative Approaches

The current strategy builds on results obtained during the two-year period when the USAID/Brazil energy program was expressed as a Special Objective. The intent is to build on these activities and render appropriate conditions for increased use of renewable energy sources and increased efficiency in energy production (supply and consumption). USAID will support specific pre-loan demonstration projects in World Bank target states with the collaboration of the SMSE/PRODEEM initiative.

Certain actions will focus on power sector regulation and financing activities which will encourage and support development of sustainable markets for renewable energy and energy efficiency. Additionally, USAID will continue to cost share a "train-the-trainer" exercise to provide a variety of Brazilian institutions with information on renewable energy technologies, project design and financing, and as an aid to build capacity to access finance on a market sustainable basis.

Access to finance for clean energy projects is often a significant barrier. Projects tend to be small and therefore carry relatively high transaction costs, which serves as a disincentive for large lending institutions and export credit agencies. USAID/Brazil, in association with its development partners, will further identify local technical, legal, regulatory and financing constraints for increased use of renewable energy and energy efficiency. By promoting workshops, project surveys, international seminars, executive exchanges and demonstration projects, activities under this SO will be aimed to have a clear impact on lowering the overall transaction costs through the build up and dissemination of appropriate information on renewable energy and energy efficiency opportunities.

USAID intends to support restructuring and management improvement of PRODEEM which in turn will allow the program to establish extensive partnerships with municipalities, NGOs, utilities and other federal and state governments agencies. USAID's support will be tailored to build on PRODEEM's previous experience in holistically addressing community needs (i.e., effectively combining rural energy needs with community based agriculture, health and education), thus identifying a stakeholder need which squarely straddles both the Agency's climate change and health

goals. USAID's support to PRODEEM will be coordinated with UNDP and SMSE/IDB.

Strategically, USAID's approach toward increasing energy efficiency in Brazil will focus on four areas: (i) demand and supply side energy efficiency; (ii) institution building; (iii) capacity building in both the public and private sectors; and (iv) increased amounts of, and access to, financing for energy efficiency projects.

Under the current privatization process in Brazil, federal regulators with the assistance of PROCEL, are responsible for overseeing utility energy efficiency programs both on demand and supply sides. Utilities are mandated to reserve at least 1% of their gross revenue for energy efficient programs. USAID intends to expand its assistance to PROCEL in design of these programs. In order to fit programs to particular regional needs and the GOB mandate to decentralize regulation, USAID will also target to work with selected regional energy efficiency centers.

These activities will involve training, workshops, support to local programs and human capacity building in a fashion capable of optimizing investment allocation among different energy efficiency projects. Program components such as energy efficiency results monitoring and auditing and contracting with industries will increase the viability of ESCOS.

In the policy and regulatory arena, USAID intends to build on the regulatory partnership between Brazil and US Public Commissions to target a high level agenda directed to advocacy for support of energy efficiency and renewable energy. (ex. seminars, executive exchanges, round tables and open forums on policies, regulations, and procedures). USAID will also support policies on standards and labels for energy efficiency.

6. Sustainability

Under this SO, sustainability in use of renewable energy and energy efficiency will be achieved if institutional, financial and regulatory barriers are reduced allowing market mechanisms to be formed such as competitive channels for commercial distribution of renewable energy products and operation and maintenance services.

The changes now sweeping the Brazilian energy sector offer an important opportunity to shape the institutional, financial and policy environment in ways that will permanently support expanded private investment in both activities.

In off-grid renewable energy applications, it is clear that market sustainability requires a certain volume of transactions, which assumes accessible finance, buyers and sellers. It also requires alternative and competitive networks/channels capable of distributing renewable energy goods along with customer confidence for maintenance.

7. Judging Success

USAID/Brazil has refined its energy indicators to address problems raised at the May 1997 energy

coordination meeting on data collection at the SO and IR levels. Ongoing work with our partners will need to be completed to establish baseline data, to develop methodologies for collecting IR and sub-IR indicator data, and then converting that data into the SO indicator of tons of CO₂ averted. Additional time and funding will be required to further develop these capabilities in our partners to make the collection and analysis of this data seamless.

Because of the complexity of USAID/Brazil's program, many of the IR and sub-IR indicators will be measured in terms of the achievement of indirect results which are required to achieve the biophysical result of tons of CO₂ averted. The results framework is designed as a pyramid. That is, results at the sub-IR level are required to achieve higher level results, which in turn are required to achieve the Strategic Objective. Results at the different levels are both quantitative and qualitative, as dictated by real-world conditions required to achieve the SO.

8. Indicators

As indicated below, the key indicators underlying the Results Framework were selected to indicate whether activities are effective in establishing long range and sustainable trends that contribute to increase efficiency of energy use in Brazil and contribute to stabilization of GHG concentrations in the atmosphere at a level that will not result in unacceptable global climate changes.

Strategic Objective No. 2: Reduced rate of growth in greenhouse gas emissions from energy sources.

Indicator: Tons of CO₂ averted.

IR 2.1: Increased use of on-grid and off-grid renewable energy sources.

Indicator: Number of megawatts of renewable energy capacity installed.

Indicator: Number of people using renewable energy systems.

IR 2.1.1 Sustainable markets for on-grid and off-grid renewable energy sources developed.

Indicator: Number of (tech/env/econ/social) viable and competitive channels for commercial distribution of renewable energy products and O&M services.

Indicator: Number of channels established and operating (e.g., cooperatives, NGOs, utilities, technology centers, etc.).

Indicator: Percent of systems installed still operating after X years.

IR 2.1.2 Increased amounts of, and access to, financing for renewable energy.

Indicator: Amount of funding and/or financing from public and private sources made available for renewable energy projects.

Indicator: Number of, and dollar value of investments committed to, renewable energy projects.

IR 2.2: Increased efficiency in energy production, supply, and consumption.

Indicator: Electric power saved, attributable to energy efficiency programs.

IR 2.2.1 Establishment of (tech/env/econ/social) viable utility/energy service companies (U/ESCOs).

Indicator: Number of viable U/ESCOs established and operating.

IR 2.2.2 Implementation of energy efficiency programs in targeted sectors (e.g., transmission and distribution losses, cogeneration, industrial and residential energy efficiency.).

Indicator: Number of energy efficiency programs

Indicator: Electric power saved

IR 2.2.3 Increased amounts of, and access to, financing for energy efficiency projects.

Indicator: Amount of funding and/or financing from public and private sources made available for energy efficiency projects.

Indicator: Number of, and dollar value of investments committed to, specific energy efficiency projects.

IR 2.3: Implementation of policy, regulatory and procedural agendas supportive of increased energy efficiency and use of renewable energy. (e.g., laws, decrees, procedures required and/or recommended by the regulator, energy efficiency levy, tax exceptions on renewable energy equipment, energy efficiency standards & labeling etc.)

Indicator: Benchmarks for success will be established annually with local partners. USAID works with public and private Brazilian institutions in the development of policies, regulations, and procedures that are both appropriate to Brazil, and consistent with USAID's Agency goals. As USAID/Brazil identifies areas of collaboration with Brazilian institutions, benchmarks for success in these areas will also be identified and incorporated into action plans.

D. SO 3 - Increased sustainable and effective programs to prevent sexual transmission of HIV among major target groups.

The Mission proposes a five-year HIV/AIDS prevention strategy for the period 1998-2002 (with activities ending by September 30, 2003) based on the opportunity to leverage World Bank financing during the same timeframe and impact the Brazil National HIV/AIDS Program. Limited by the 1996 Agency restructuring decision that USAID/Brazil would continue only environment programs, the Mission sought approval to continue the HIV/AIDS prevention and at-risk youth programs. Approval was received to continue these programs "at the very least until the end of FY 2000."

Consequently, the Mission will be presenting two strategy options: one that the Mission supports because it will enable USAID for the first time to influence the Brazil National HIV/AIDS Program, and a second option that phases the program out by the year 2000 per the Agency restructuring decision and in the event that an extension is not granted.

The Mission strongly believes that the five-year program outlined in this strategy, and presented in the September 2, 1997 Action Memorandum to the Administrator, should be supported for the reasons outlined below.

Brazil ranks second in the world among countries reporting AIDS cases, with over 115,000 cases reported through August 1997. Between 560,000 and 850,000 Brazilians are estimated to be HIV-infected. While throughout South America, the number of HIV infections and AIDS cases is rising steadily, Brazil alone accounts for 75% of South America's AIDS cases and 52% of cases in the LAC region as whole. The HIV epidemic in Brazil continues to spread to urban centers, with rising prevalence in rural areas. With borders on most of the countries in South America, Brazil's location at the center of the continent places it as a potential focus to spread the disease.

USAID's proposed five-year strategy is closely linked with and complementary to the programs of the World Bank, MOH, and other smaller donors. The proposed program emphasizes the provision of technical assistance, which is one of USAID's comparative advantages, but relies on World Bank financing to fund training programs for the public and private sector and to implement HIV/AIDS prevention interventions.

The funding time frame of 1998-2002 coincides by design with the time frame of the World Bank program, scheduled to begin in July 1998. This is critically important as the USAID program relies on the World Bank program to finance and replicate the best practices which are identified and developed via the USAID program. If there is no USAID program, USAID's ability to influence and leverage the World Bank investment is lost, particularly beginning in late FY99 when it is up and running. As it stands, the design foresees the first year of the program (FY98) to be the identification of best practices. Without USAID's presence, there is no mechanism to ensure that these are disseminated and replicated with the Bank/MOH funding.

USAID's leverage at the outset with the Ministry of Health and World Bank is minimized if USAID

will not be a full partner during the duration of the program. It diminishes the possibilities for policy change that are offered by this opportunity for parallel financing with the World Bank. USAID is a very different partner if it is actively involved in the sector for only the first two years versus for the full five years of the program.

Finally, it is only in the past year that USAID has developed a collaborative and cooperative relationship with the National HIV/AIDS Program and strengthened cooperation with the World Bank. Because of legal restrictions, USAID's previous program worked only with the non-governmental sector and impacted local government programs, but operated outside the boundaries of the national program. However, over the last two years, USAID developed a strong collaborative relationship with the Ministry's AIDS Division and now has the potential for national-level impact because of the improved relationship with the national program, the clear applicability of USAID's program interventions, and the parallel financing opportunity offered by the planned 1998-2002 World Bank loan.

Option 1: Strategic Objective 3: Increased sustainable and effective programs to prevent sexual transmission of HIV among major target groups

A. Linkage to Agency Goals and Objectives

The proposed USAID/Brazil strategy for AIDS programming, "Increased sustainable and effective programs to prevent sexual transmission of HIV among major target groups" is consistent with Agency Goal 4, "World population stabilized and human health protected" and the revised Agency Strategic Objective for AIDS (SO 4.4), "HIV transmission and the impact of the HIV/AIDS pandemic in developing countries reduced." The proposed strategy specifically relates to four of the six Agency Program Approaches under SO 4.4: increased knowledge and use of interventions that focus on changing risk behaviors (4.4.1); expanded quality, availability, and demand for condoms and services for prevention and management of sexually transmitted infection (4.4.2); improved policy environment (4.4.3); and strengthened local capacity to prevent infection (4.4.4).

B. Host Country Goals/Setting

Brazil's AIDS prevention programming is dominated by the national program, which has been supported by a \$160 million World Bank loan over the last four years, plus \$90 million in counterpart funding. A second four year World Bank loan is in preparation for the period July 1998-June 2002, for a total of \$300 million, \$165 million in World Bank funds and \$135 million in federal and state funding (proposed).

USAID's comparative advantage in this situation is not to fund implementation of programs, but to provide access to technical assistance which can be applied in the large national/state/municipal programs. The areas of particular need where USAID has excellent resources to offer include program evaluation, operations research, management improvement, and social marketing.

Over the last couple of years, the USAID relationship with the federal Ministry of Health has become

much more collegial, with increasingly close and frequent collaboration and consultation. The STD/AIDS National Coordinator at the Ministry of Health is requesting technical assistance in the replication of the programs nationwide. The World Bank has also sought USAID's collaboration in the development of its new loan and has incorporated USAID input into the program design. Particular areas of interest include models for monitoring and evaluation, as well as improved program management by local and state institutions. These ideas have been incorporated into this strategy.

GOB program documentation prepared for the second World Bank loan to assist with controlling HIV/STD lists three goals for its program:

- 1) Reduce the incidence of HIV/AIDS among vulnerable populations and those at high risk of infection, with priority on women, low income populations, adolescents, indigenous populations, and drug users.
- 2) Improve the quality of services offered to persons living with HIV/AIDS,
- 3) Strengthen the public and private institutions dedicated to STD/HIV-AIDS prevention activities.

USAID/Brazil's strategy will contribute to the first and third objectives of the GOB program.

C. AIDS Strategic Objective

1. Statement of Strategic Objective

The proposed strategic objective is "*Increased sustainable and effective programs to prevent sexual transmission of HIV among major target groups.*" Our intent is to increasingly focus attention on the major target groups of women, adolescents, and low income populations, while continuing attention to the major target group of high risk populations including men who have sex with men, commercial sex workers, and men away from home.

To contribute to achieving this Strategic Objective, three intermediate results have been identified:

I.R. 1: Most effective program interventions identified and disseminated.

I.R. 2: Management capacity of selected HIV/STI/family planning institutions (to provide STI and HIV services) increased.

I.R. 3: Sustainable condom marketing.

2. Problem Analysis

Approximately 52% of reported cases of AIDS in Latin America and the Caribbean¹ are in Brazil. This amounts to 116,389 reported cases, making Brazil second only to the U.S. in reported cases in the Americas. Given the delay between infection and the appearance of disease symptoms, it is estimated that there are currently between 560,000 and 850,000 persons infected with HIV in Brazil.

Transmission of HIV in Brazil is predominantly sexual; transmission through blood transfusions, intravenous drug use and vertical (mother to child) transmission accounted for only 26% of all infections during 1996. Sexual transmission of HIV in Brazil is increasingly heterosexual; the ratio between men and women has decreased from 28:1 in 1985 to 3:1 in 1996. Such transmission is also increasingly among young people and those with the least education, which is considered a proxy measure for income. In 1995, 69% of those infected were illiterate or had not finished primary school. Therefore, the national program has decided to increase its emphasis on women, adolescents, and low income groups; USAID proposes the same shift in emphasis for this second strategy period. We do, however, intend to continue to include the high risk groups (men who have sex with men, commercial sex workers, and men away from home) in our programs, as they continue to be at substantial risk for infection, and represent a significant source of infection to the general population.

3. Critical Assumptions and Causal Relationships

Critical assumptions include:

- a) World Bank AIDS II loan approved and disbursing;
- b) GOB counterpart for AIDS II WB loan available;
- c) MOH continues to collaborate with USAID; and
- d) GOB restrictions on condom importation and marketing do not further restrict sales.

The causal relationships between the intermediate results and the strategic objective can be described as follows. The first Intermediate Result will enable program managers to have clear, current information on which program interventions are the most effective, which will assist health and other programs (like the education system, regarding adolescents) to select the best program practices as they design and implement prevention programs. With this information, programs can be expected to increase both efficiency and sustainability.

During the implementation of the current USAID strategy for AIDS, management weakness was identified as a significant impediment to effective and sustainable programming for AIDS prevention, both in the public and NGO sectors. Intermediate Result 2 (management capacity of selected HIV/STI/family planning institutions increased) will emphasize improving the ability of institutions

¹ Excluding the English speaking Caribbean

implementing, or planning to implement, HIV prevention activities to manage their work in an effective and efficient manner. These activities will be focused at the national level or in the four states where USAID PHN programs have been working (São Paulo, Rio de Janeiro, Bahia, Ceará).

The third Intermediate Result (sustainable condom social marketing) will contribute to the sustainability and effectiveness of Brazilian efforts in preventing sexual transmission of HIV by making affordable condoms more accessible to lower-middle class consumers. (Free condoms for the lowest income groups will be provided to public health facilities by the MOH, using World Bank loan funds.)

4. Other Development Partners

USAID/Brazil will work closely with the Ministry of Health and other international donors to achieve the results under this SO. The World Bank is presently negotiating a second loan with the Brazilian government for HIV/AIDS prevention and control. This loan, valued at approximately \$165 million over four years, is scheduled for implementation beginning in July, 1998. USAID/Brazil will provide technical assistance to the Ministry of Health during the program design period to ensure that the "best practices" developed under present government and donor programs are incorporated into this program design, thus leveraging the resources which have already been invested in pilot programs. This will effectively "jump-start" activities included in Intermediate Result 1 of this strategy.

Other participants in this process will be the UNAIDS theme group who will also provide assistance to the government to design the new program. HIV/AIDS activities supported by the six co-sponsors (UNDP, WHO/PAHO, UNICEF, UNFPA, UNESCO, and WB) will be planned to support and supplement the government program. The European Union and JICA have supported several pilot HIV/AIDS/STI prevention programs in Brazil. These will also be incorporated into the "best practices" program review. The EC plans to continue its program during 1998-2000 at about \$4 million for the period.

5. Illustrative Approaches

Intermediate Result 1 (most effective program interventions identified and disseminated) will include three primary activities. First, an assessment of existing HIV prevention program interventions in Brazil will be made. Between USAID past programming and the WB/MOH activities, there is substantial experience. USAID alone has implemented more than 70 prevention interventions since 1992. We envision a team approach, including, at a minimum, MOH, USAID, and World Bank members, probably joined by selected State Health Secretariat or municipal health managers. This will require agreement on criteria for effectiveness (including consideration of costs and sustainability), and collection of the experience to date. This assessment will identify the most effective interventions for each major target population.

There are likely to be some interventions for which the evidence is incomplete, or target groups for which there is inadequate prior experience to identify with certainty the best approaches. For these situations, some operations research will be conducted, preferably in ongoing programs, where the

results of such research are more likely to be sustainable. The results of such research will be assessed with the same effectiveness criteria, and if proved to be effective, added to the program of dissemination described above.

The program interventions which are identified as the most effective during the initial assessment will be disseminated to institutions which are implementing, or will implement HIV prevention activities. Possible means to do so might include national, regional, state, or municipal workshops on programming for specific target groups; TA to institutions which are designing additional programs or experiencing implementation problems; and/or a training center where program personnel can receive training and see successful programs first-hand. Dissemination activities will likely use considerably more resources than the research described above.

In order to implement Intermediate Result 2, USAID intends to use the model for increasing management skills that has been very successfully implemented by USAID's family planning partner organizations with technical assistance; USAID will replicate this model with HIV prevention institutions. It teaches self-assessment of problems and identification of solutions, offers limited assistance with development and implementation of solutions (if needed), and teaches monitoring of progress for modification of solutions to be most effective. USAID/Brazil also has substantial experience with training of NGOs, and those modules can be used to further develop this model of training.

Activities to be undertaken to achieve Intermediate Result 3 will include continued initiatives to reduce or eliminate technical and policy barriers to condom or raw material importation and marketing. Current barriers include high tariffs and taxes and complex testing standards for imported condoms. In addition, the existing condom social marketing program will be strengthened, including adding female condoms to the product line, and expanding distribution.

6. Sustainability/Exit Strategy

USAID/Brazil will use several strategies to achieve sustainability in the programs under this SO and to ensure a smooth phase-out of USAID assistance. USAID will ensure that all partners are aware that the program will be phased out, and this reality will drive the allocation of progressively-reduced resources to sustainable and meaningful investments in addressing HIV/AIDS in Brazil during the five-year period.

The private sector condom social marketing program will achieve complete financial sustainability through the economies of scale provided by market expansion (i.e., increasing the sales volume). Presently, DKT covers 78% of its costs through the annual sale of 30 million male condoms. During the five years of this SO, DKT estimates that it will increase its sales of the male condoms by 10% per year. DKT will also add the female condom to its product line and expects to achieve 100% financial sustainability based on the sale of both products by 2003.

The program's exit strategy is based on developing and leaving behind HIV/AIDS prevention models that can be phased over to the Ministry of Health/World Bank or local government funding. In

general, preventive public health programs, such as HIV prevention activities, can only be sustained through the use of public funds. USAID/Brazil will achieve the institutional and financial sustainability of its current portfolio of pilot prevention interventions by increasing the management capacity of the service organizations (both public and private) which presently provide these services. In addition, many of USAID's previous NGO partners have made arrangements to continue services by entering into agreements with public sector institutions for reimbursement of services. An example of such an arrangement is the 126 municipalities in Bahia which have contracted with BEMFAM for supervision of their community health agents who provide HIV/STI and family planning advice. USAID/ Brasilia will work closely with the Ministry of Health to incorporate the "best practices" from its pilot activities (and the pilots supported by other donors) into the National HIV/AIDS prevention Strategy, thus facilitating their use on a national scale.

USAID will be selective in choosing its Brazilian NGO counterparts. Only those organizations with true prospects for continuing their missions through diversified funding after termination of USAID support will be supported. A good example of this is the local NGO, ASF, which implemented the AIDSCAP program in Brazil for the past five years. ASF, which formerly relied almost exclusively on USAID financing, continues its work, albeit streamlined, with funding from other donors, such as ODA, JICA, and the Ford Foundation, and proceeds from a T-shirt campaign.

7. Judging Achievement

a. Performance Indicators, Targets, and Monitoring Progress

The achievement of this strategic objective will be judged by measuring the following performance indicators and targets at both the SO and IR levels:

SO Level: Increased sustainable and effective programs to prevent sexual transmission of HIV among major target groups

Indicator 0.1: Number of the four target states with an annual increase in expenditures for HIV prevention equal to/greater than 5%.

	SP	RJ	BA	CE
Baseline:				
Target 0.1:	1998: 1			
	1999: 2			
	2000: 2			
	2001: 3			
	2002: 4			
	2003: 4			

Indicator 0.2: Number of effective interventions adopted by USAID-funded and non USAID-funded programs

Baseline:	
Target 0.2:	1998: 3
	1999: 6
	2000: 10
	2001: 10
	2002: 10
	2003: 5

Indicator 0.3: Percent of financial sustainability achieved by condom social marketing programs (DKT do Brasil and BEMFAM)

	DKT	BEMFAM*
Baseline:	1997: 78%	
Target 0.3:	1998: 82%	74%
	1999: 86%	97%
	2000: 90%	72%
	2001: 95%	76%
	2002: 100%	83%
	2003: 100%	100%

*BEMFAM's sustainability declines in 2000, before recovering over the following three years, because of a planned large investment in media advertising.

Indicator 0.4: HIV incidence among military draft registrants in four target states

SP RJ BA CE

Baseline:

Target 0.4: 1998:
1999:
2000:
2001:
2002:
2003:

Source: MOH/Armed Forces

Intermediate Result 1: Most effective program interventions identified and disseminated

Indicator 1.1: Effective interventions among existing Brazilian HIV prevention efforts identified using agreed-upon criteria for effectiveness

Baseline: Task not started

Target 1.1: Task completed by end of year 1

Indicator 1.2: Operations research conducted to test interventions in critical program areas with inadequate program experience

Baseline:

Targets 1.2: 2000: XX OR studies completed
2003: XX OR studies completed

Note: The appropriate number of studies will be determined based on the assessment above.

Indicator 1.3: Number of identified effective interventions which are disseminated

Baseline:

Target 1.3: 1998: 5
1999: 10
2000: 12
2001: 15

Indicator 1.4: Number of institutions to which identified effective interventions are disseminated (also % of national population covered by these institutions)

Baseline:

Target 1.4: 1998: 10
 1999: 20
 2000: 30
 2001: 40
 2002: 50
 2003: 77

Intermediate Result 2: Management capacity of selected HIV/STI/FP institutions increased

Indicator 2.1: Percentage of selected institutions with technical capacity to manage programs (3 on 3-point scale)

Baseline:

Target 2.1: 1998: 0%
 1999: 0%
 2000: 20%
 2001: 40%
 2002: 75%
 2003: 90%

Intermediate Result 3: Sustainable condom social marketing

Indicator 3.1: Percentage change in sales of male/female condoms

		DKT		BEMFAM
		Male	Female*	Male
Baseline:	1997:	30 million sold		3.6 million sold
Target 3.1:	1998:	12%	360,000 sold	31%
	1999:	10%	100%	10%
	2000:	10%	40%	10%
	2001:	10%	20%	10%
	2002:	10%	10%	11%
	2003:	10%	10%	18%

* 1998 is the baseline for DKT sales of the female condom

Option 2: Special Objective: Expanded HIV/AIDS programs to prevent sexual transmission of HIV

1. Statement of Special Objective

With only two years of funding to support its AIDS prevention strategy, the Mission will be unable to achieve significant results related to the World Bank program, as desired by the Administrator. Rather, the Mission will be able to make limited contributions to AIDS prevention efforts in Brazil; and as a consequence presents this Option as a Special Objective rather than a Strategic Objective.

The proposed Special Objective (SpO 2) is: "*Expanded HIV/AIDS programs to prevent sexual transmission of HIV.*" The Special Objective will have two intermediate results:

I.R. 1: Sustainable condom marketing.

I.R. 2: Expanded integrated HIV/AIDS and reproductive health interventions in two Northeast states.

In addition, the Mission will pursue opportunities to provide technical assistance to the MOH in evaluation and to disseminate successful models developed under the previous AIDSCAP/Brazil program to the MOH for possible replication.

2. Problem Analysis

The program will address the transmission of HIV which, in Brazil, is predominantly sexual and increasingly affects women. (See Option 1 for a full problem analysis.)

3. Critical Assumptions and Causal Relationships

The critical assumptions underlying the Special Objective are:

- a) GOB restrictions on condom importation and marketing do not further restrict sales; and
- b) Interventions in the Northeast are sustained by local government and NGOs.

Activities under the sustainable condom social marketing program will be aimed at ensuring that the program is self-sustaining and can expand its market share. Particular attention will be given to expanding and consolidating the program in the Northeast to achieve sustainability, which will limit the program's broader national level impact. A sustainable condom social marketing program will contribute to the objective of expanding HIV/AIDS programs by ensuring the existence of an uninterrupted source of supply of condoms, which is a critical element in the ability of HIV/AIDS programs to reach a larger population.

The integrated reproductive health and AIDS interventions in the Northeast will build on USAID's

reproductive health investment, utilize its partners, and provide prevention services to women and other persons at risk for sexual transmission of HIV in Bahia and Ceará. Furthering the integration of HIV/AIDS services with other reproductive health services will contribute to expanding HIV/AIDS programs by enabling these programs to take advantage of existing infrastructures for reproductive health services.

4. Other Development Partners

USAID will work closely with the MOH and other donors to lobby for changes in condom policy barriers, and to identify opportunities for USAID to provide technical assistance in the areas of evaluation and program design. USAID will continue as a member of the UNAIDS theme group. The Mission's partnership with DKT will be expanded to include support for the introduction of the female condom. Relationships with various NGOs in the states of Rio de Janeiro and Sao Paulo will continue and new NGO partners will be added in Bahia and Ceara. Close collaboration is expected with the European Union and JICA programs in the state of Ceará.

5. Illustrative Approaches

The existing condom social marketing program developed under the AIDSCAP program will be strengthened so that it becomes financially sustainable and expands its markets to the degree possible within the limited timeframe. In addition, the female condom will be introduced into the program, including an initial supply of donated product. USAID will also support studies of feasibility, acceptability, and service delivery requirements and dissemination of study findings.

The state programs of Bahia and Ceará will be assisted to implement an integrated reproductive health-HIV/AIDS prevention program in the public sector. NGOs with the capacity to reach target groups such as women, and adolescents with education, outreach, training, and STD services will be partners in implementing this program. Integration of reproductive health and HIV/AIDS prevention programs in these two states is facilitated by the strong relationships with public, private, and NGO entities that USAID has fostered through its support for family planning. However, under the SpO option, USAID will not be able to support the development of model interventions for HIV/AIDS prevention among women, low-income groups, or adolescents, nor will USAID support replication of models developed by others.

6. Sustainability

The condom marketing program, which covers 78% of its costs through the annual sale of 30 million male condoms, will have obtaining sustainability as its goal. The integrated program in the Northeast will have criteria for reaching sustainability, such as co-financing requirements, built into the grant-giving process. USAID will leverage support from State-level programs and the national MOH/World Bank program as feasible.

7. Judging Achievement

SpO Level: Expanded HIV/AIDS programs to prevent sexual transmission of HIV

Indicator 0.1: Number of beneficiaries reached by USAID supported HIV/AIDS program interventions

Baseline: 1997: 300,000
 Target 0.1: 1998: 375,000
 1999: 470,000
 2000: 587,000

Indicator 0.2: Percent of financial sustainability achieved by condom social marketing program

	DKT	BEMFAM*
Baseline:	1997: 78%	
Target 0.2:	1998: 81%	74%
	1999: 84%	97%
	2000: 88%	72%

*BEMFAM's sustainability declines in 2000 because of a planned large investment in media advertising.

Intermediate Result 1: Sustainable condom social marketing

Indicator 1.1: Percent change in sales of male/female condoms

		DKT	BEMFAM
		Male	Female*
		Male	Male
Baseline:	1997:	30 million sold	3.6 million sold
Target 1.1:	1998:	12%	360,000 sold
	1999:	10%	100%
	2000:	10%	40%
			10%

* 1998 is the baseline for DKT sales of the female condom

Intermediate Result 2: Expanded integrated HIV/AIDS and reproductive health interventions in two Northeast States

Indicator 2.1: Number of interventions supported with USAID funding

Baseline:
 Target 2.1: 1998: 15
 1999: 30
 2000: 60

Indicator 2.2: Number of best practices from AIDSCAP program implemented in the two Northeast states

Baseline:
 Target 2.2: 1998: 15
 1999: 20
 2000: 10

III. Resource Requirements

A. Resource Requirements

Activities under either option will be implemented through field support to G/PHN projects. The program resources required for implementation of the HIV/AIDS Strategic Objective (Option 1) are \$8.5 million over five years. Of this level, \$125,000 of bilateral funds are requested each year to fund the local-hire project assistant. The remainder--\$1.875 million annually in FY98-FY2000, \$1.375 million in FY01 and \$875,000 million in FY02--is requested from field support funds (medium scenario). The program resources required for implementation of the Special Objective (Option 2) are a total of \$4.0 million over two years--\$125,000 annually for the project assistant and \$1.875 million annually from field support funds (low scenario).

Implementation of either option requires 1.5 FTE each year--0.5 USDH FTE and 1.0 program-funded FSN/TCN. Technical assistance from USAID/W (beyond backstopping by project CTOs) will be needed for preparation of the annual R4 documents.

B. Discussion of Programming Options

Under a high funding scenario for Option 1, field support funding over the five years would be increased by \$1.0 million to a total of \$9.5 million. The additional funding (\$500,000 each in FY00 and FY01) would be used to improve the management capacity of more institutions providing HIV/STI/FP services and to ensure that the financial sustainability of condom social marketing programs is firmly established.

The low funding scenario assumes program activities end in 2000 (Option 2).

E.SO 4 - Increased access to contraceptive methods and integrated family planning services to improve women's reproductive health

FRAMEWORK

E. SO 4 - Increased access to contraceptive methods and integrated family planning services to improve women's reproductive health

A. Linkage of Strategy to Agency Goals

USAID/Brazil's strategic objective in reproductive health/family planning in Brazil of "Increased access to contraceptive methods and integrated family planning services in order to improve women's reproductive health" contributes to the Agency Strategic Objectives of "Unintended and mistimed pregnancies reduced" (SO4.1) and "Deaths, nutrition insecurity, and adverse health consequences to women as a result of pregnancy and childbirth reduced" (SO4.3) and, through these SOs, to Agency Goal #4, "World population stabilized and human health protected." The strategy was developed in 1992 and guides the implementation of family planning activities through the end of the decade. FY99 is the final year of funding and all activities will be closed out by September 30, 2000.

B. Host Country Goals

The 1988 Brazilian Constitution ratified the Single Health System (SUS), which shifted responsibility for the provision of health care from the central government to the municipal level. The Constitution also guaranteed equal and universal access to health services. This open-ended resolution, together with on-going budgetary crises and weak commitment to family planning, made it very difficult for states and municipalities to fulfill their new responsibilities. The 1992 USAID/Brazil strategy responded to SUS by shifting from working with a variety of geographically-dispersed NGOs to concentrating on improving the capacity of the health care systems in two Northeast states--Bahia and Ceara--to provide high-quality, affordable family planning services.

The policy environment at the national and state levels for the provision of family planning has improved since the development of USAID's strategy in 1992. Political support for family planning has increased, barriers to the importation of condoms have been reduced, and, most recently, sterilization has been legalized. Progress is evident at the service delivery level also. The proportion of municipalities in the two target states providing family planning increased substantially between 1993 and 1996, from 20% to 26% in Ceara and from 12% to 27% in Bahia. USAID's program directly contributed to these improvements. The challenge now is to ensure that previous progress is not lost, and that efforts are consolidated in such a way as to be cost effective, integrative and to have long-term and sustainable impact.

C. Strategic Objective

1. Statement of Strategic Objective

The USAID/Brazil strategic objective is *"Increased access to contraceptive methods and integrated family planning services in order to improve women's reproductive health."* Two intermediate results support the achievement of the strategic objective:

IR1. Improved quality of family planning services.

IR2. Improved sustainability of family planning delivery systems.

2. Problem Analysis

The 1996 Demographic and Health Survey (DHS) shows that contraceptive prevalence in Brazil continues to increase and fertility levels continue to decline. Nationally, 70% of women report using a modern method of family planning and the total fertility rate stands at 2.5 children per woman--figures comparable to those of developed countries. However, these statistics mask regional differences, underlying patterns of contraceptive use, and service delivery difficulties. Over the remaining years of the program, USAID's strategy seeks to address the following problems in particular:

a) While the knowledge of modern contraceptive methods is high (66% of women in both Bahia and Ceara are aware of five modern methods), the actual use of the range of methods is still somewhat limited, and still dominated by sterilization and use of the pill.

b) Particularly in Ceara, the contraceptive supply system is tenuous, and commitment by the public health sector to purchase commodities has not yet been realized.

c) From the user perspective, the quality of services is unsatisfactory in many clinic settings. Service facilities are still under-staffed, and a lack of commodities, basic equipment, and management and IEC expertise continues to hamper adequate service provision.

d) Adequate rural coverage by family planning programs is still lacking. Rural women have greater need for and less access to services than their urban counterparts. DHS data show that 14.6% and 13.5% of rural women in Bahia and Ceara, respectively, had an unwanted birth in the last five years compared to 7.5% and 8.3% of urban women in the two states.

3. Critical Assumptions and Causal Relationships

The critical assumptions underlying the strategy include:

a) Federal and state government policies will remain open and supportive of increased access to high-quality family planning services.

b) State-level policymakers are committed to improving RH/FP services.

c) Private sector entities will continue to provide contraceptive methods at an affordable price to the public sector.

d) Women are relying on oral contraceptives and sterilization because of a lack of affordable alternative methods.

The causal relationship between the intermediate results and the strategic objective are described below. The ultimate beneficiaries are women of reproductive age in the two Northeast states of Bahia and Ceara who will have access to a greater range of contraceptive options and more comprehensive reproductive health services. Intermediate beneficiaries include the state health systems whose capacity to provide services will be improved and whose services will be better utilized. USAID's collaboration with the private sector to expand availability of underused methods is expected to lead to increased public-private collaboration and to benefit current and future contraceptive users not just in the target states of Bahia and Ceara, but users throughout the country by expanding the options available for fertility control nationwide.

Intermediate Result 1 contributes to the strategic objective by focusing on improving the quality of family planning services. Access to contraceptive methods will be increased when client-focused services are made more widely available and when key elements of quality (e.g., a choice of methods, trained providers, adequate supplies, etc.) are in place. Furthermore, integrating quality family planning services into the mix of reproductive health services already being provided is expected to lead to overall improvements in women's health by enabling women to access a more comprehensive range of reproductive health services. Activities under this IR also complement activities under SO3 (HIV/AIDS), which seek to link HIV/AIDS and family planning activities more closely.

Intermediate Result 2 is focused on improving the sustainability of family planning delivery systems. Continued access to contraception over the long-term is dependent on the ability of the State, NGO, and private sector systems to provide services. This result has become increasingly important as the phase-out date of 2000 nears. The emphasis under this result is on creating and/or strengthening the management, logistics, training, and IEC systems at the state level; improving the financial sustainability of BEMFAM, the largest Brazilian family planning NGO; and expanding the available method mix by working with the private sector to introduce new and underused methods, such as the IUD and Depo-Provera, at affordable prices.

4. Other Development Partners

The World Bank, UNDP, UNICEF, and UNFPA all have programs that complement USAID's activities. USAID/Brazil will continue to coordinate its efforts with these international donors, especially with respect to the integration of family planning and STD/AIDS prevention programs. USAID's comparative advantage lies in the technical expertise of the Mission PHN staff and the Cooperating Agencies (CAs) that implement the program. Because of this expertise, other donors are often willing to cost-share with USAID. The other donors are particularly helpful to USAID in policy discussions with the GOB, where USAID is sometimes at a disadvantage because of the lack of a US-Brazil bilateral relationship in the population area. Nonetheless, USAID has made great strides in developing an open and collaborative relationship with the GOB. For example, USAID-GOB dialogue has contributed to greater commitment by the GOB to family planning, standardization of norms in the testing of condoms, lifting of non-tariff barriers, and the addition of Depo Provera to the list of contraceptives that may be purchased with public funds.

In addition to the GOB and other international donors, USAID's other development partners include BEMFAM and Pathfinder in the NGO sector, as well as Pharmacy & Upjohn and CEPEO (a contraceptive procurement organization established under the PROFIT project and recently privatized) in the private sector. By making a small donation of product and offering the expertise of USAID CAs in the areas of communications and training, USAID successfully leveraged significant Pharmacy & Upjohn resources for the introduction of Depo-Provera at an affordable price to the public sector and low-income consumers. All of these organizations are expected to remain involved in the provision of family planning services and/or the sale of contraceptive commodities after the phase-out of USAID population assistance. The current policy environment and economic situation in Brazil, together with the presence of a number of strong partners, facilitate achievement of the USAID/Brazil strategic objective.

5. Illustrative Approaches

The ProQuali initiative is an innovative and replicable model of service consolidation at all levels, which has been endorsed by the State Secretaries of Health. The program, started by a consortium of three CAs in 1997, has undertaken an extensive evaluation of service demands and requirements and has developed a number of strategies to strengthen the role of the non-physician in the provision of family planning services, to increase client input into services, and to improve the client focus of service provision. The ProQuali program will also develop an accreditation system for certification of health centers based on standards of care developed by the State Secretariats of Health. The transfer of skills and knowledge in training, production/dissemination of IEC materials, managerial and organizational capacities, and evaluation techniques will allow both states to certify and accredit qualifying service centers. Five pilot sites have been identified as the focus of the ProQuali initiative. Replication in other sites is the responsibility of the Secretariats of Health. USAID will also encourage the GOB to promote the Pro-Quali model beyond the borders of the two Northeast states.

Letters of Agreement between USAID/Brazil and both states formalizing the roles of both parties during the phase-out period were signed in September 1997, and witnessed by Hillary Clinton. The focus of activities to build sustainable capacity in the areas of management, logistics, training, and IEC will be on consolidating progress to date and progressively transferring responsibility for these program elements to the State Secretariats of Health. In Bahia, for example, the highly effective information system that supports contraceptive logistics will be integrated with existing state managed systems. Similar efforts will be made in Ceara. Provision of post-abortion and post-partum services will also be expanded and consolidated in both states. Integration of the Viva Mulher program with the broader state RH program in Ceara will contribute to the sustainability and effectiveness of family planning efforts there.

The governments in both states have recognized the importance of family planning in reaching their ambitious infant and maternal mortality reduction goals, and family planning budgets have increased the past few years. USAID/Brazil is no longer procuring commodities for programs from the Population Account. However, the Mission is encouraging state entities to purchase adequate quantities of a wide range of affordable, high-quality methods needed for their programs and

continuing to support the social marketing of condoms by DKT through its STD/AIDS program. USAID will also support the introduction of the female condom through DKT into STD/AIDS programs. In addition, the CEPEO (now self-supporting) continues to develop a niche market in the sale of IUDs. It is expected that IUD sales to the Ministry of Health will continue to grow and use will increase as a result of revised Brazilian norms that now allow nurses to insert IUDs.

USAID/Brazil will continue its efforts to add Depo Provera to the available method mix. After considerable urging by USAID/Brazil, this three-month injectable was officially registered as a contraceptive method by the Ministry of Health in late 1996. Pharmacia & Upjohn and The Futures Group subsequently signed a memorandum of understanding for a collaborative effort to introduce Depo Provera into the Brazilian public and private sector markets. The product was "launched" in October 1997. Various technical seminars are planned to familiarize health personnel with the method, including the first national seminar in November 1997, which will be co-sponsored by The Population Council and UNFPA. The ProQuali partners and other USAID CAs have been asked to discuss and jointly develop plans for distribution, training, and dissemination activities relevant to Depo Provera, and collaboration with State level health bodies in this area will continue.

6. Sustainability

Under SUS, managerial and financial responsibilities for reproductive health activities have been transferred to state and municipal health bodies. State level planning capacity, particularly in the areas of policy, strategy design, and logistics systems, is of prime importance in ensuring that budgets are adequately allocated and commodities actually purchased and delivered to family planning service sites.

Therefore, USAID/Brazil continues to encourage and help enable state and municipal entities to assume full responsibility for the provision of reproductive health services, including family planning. Policy dialogue, systems support, improvement of state and local technical and managerial capacities, and integration of family planning with other RH services, including HIV/AIDS prevention services, are all geared towards institutionalizing a sustainable capacity to provide services. The likelihood of sustainability is further enhanced by increased public/private collaboration and the participation of the private sector in commercial sales of contraceptives. In addition, closer coordination with other donors and NGOs is facilitating a smooth transition away from USAID support.

7. Judging Achievements

a) Performance Indicators, Targets and Monitoring Progress

SO Level: Increased access to contraceptive methods and integrated family planning services in order to improve women's reproductive health.

Indicator 0.1: Percentage of births in reference period declared to be unwanted.

	Ceara:	Bahia:
Baseline:	1996: 24%	1996: 27%
Target 0.1:	1998: 20%	1998: 20%
Data source:	1996: DHS; 1998/99: "mini-DHS" at state level	

Indicator 0.2: Percentage of women with knowledge of five modern methods (orals, IUD, injectable, condom, female sterilization).

	Ceara:	Bahia:
Baseline:	1996: 66%	1996: 67%
Target 0.2:	1998: 70%	1998: 75%
Data source:	1996: DHS; 1998/99: "mini-DHS" at state level	

Indicator 0.3. Couple Years of Protection (CYP) provided by the public sector.

	Ceara:	Bahia:
Baseline:	1996: 64,165	1996: 173,034
Target 0.3:	1997: 65,700	1997: 177,000
	1998: 67,300	1998: 181,300
	1999: 68,900	1999: 185,600
	2000: 70,600	2000: 190,200
Data source:	service statistics from State Secretariats of Health and BEMFAM	

Indicator 0.4: Percentage of public health facilities sites with all appropriate methods on hand.

	Ceara:	Bahia:
Baseline:	1993: 9%	1994: 21%
Target 0.4:	1997: 15%	1997: 35%

Note: 1997 target for Bahia is provisional.

Data source: situation analysis

Intermediate Result 1: Improved quality of family planning services.

Indicator 1.1: Number of service sites providing family planning.

	Ceara:	Bahia:
Baseline:	1996: 484	1996: 178
Target 1.1:	1997: 484	1997: 196
	1998: 484	1998: 216
	1999: 484	1999: 292
	2000: 484	2000: 322

(Note: Ceara state wishes to consolidate rather than expand services)

Data source: State Secretariats of Health

Indicator 1.2: Percentage of service sites with all of the following: trained provider, adequate equipment, contraceptive commodities, and consumable supplies.

	Ceara:	Bahia:
Baseline:	1993: 6%	1994: 2%
Target: 1.2:	1997: 12%	1997: 8%

Note: 1997 target for Bahia is provisional.

Data source: situation analysis

Indicator 1.3: Composite score for client perspective on improvement in quality of care provided by service site.

Target 1.3:	1997: baseline available 3/98
	1998: TBD
	1999: TBD
	2000: TBD

Data source: 1997: situation analysis; subsequent years: ProQuali data

Intermediate Result 2. Improved Sustainability of family planning delivery systems

Indicator 2.1: % of BEMFAM expenses (including commodities) covered by locally generated resources.

Baseline:	1996: 54%
Target 2.1:	1997: 56%
	1998: 63%
	1999: 67%
	2000: 71%

Data source: BEMFAM

Indicator 2.2: Units of Depo-Provera sold to the public sector and through pharmacies.

	Public sector:	Pharmacies:
Baseline:	1998: 30,000	1998: 192,000
Target 2.2:	1999: 45,000	1999: 282,000
	2000: 60,000	2000: 396,000

Data source: SOMARC and Upjohn & Pharmacy

Indicator 2.3 Technical capacity to effectively perform key program functions in:

a) management, b) training, c) logistics, d) IEC

	Both States: for a), b), & c):	for d):
Baseline:	1996: 2	1996: 2
Target 2.3:	1997: 2	1997: 2
	1998: 2	1998: 3
	1999: 3	1999: 3
	2000: 3	2000: 3

(Key: 1 = limited, 2 = capable with assistance, 3 = capable without assistance)

Data source: CA monitoring systems

Annual monitoring will rely on data collected from the ProQuali sites, the state Secretariats of Health, BEMFAM, and other CAs. In addition to providing data for R4 reporting, an underlying goal of these evaluation activities is to assist the state and municipal health entities, as well as the NGOs working in FP/RH, to adopt and employ better evaluation techniques in order to improve strategic planning at the organization, municipal, and state levels.

b) Final Evaluation

Multi-level evaluation will be used to assess impact. The 1993/1994 situation analyses conducted in Bahia and Ceara and the 1996 DHS serve as the baselines against which progress will be judged. A second round of situation analyses, based on facilities in the same clusters as in the first situation analysis, is underway in the two states. The Round Two results are expected to document continued improvements in service delivery. Assuming that the results do document some change since the first round, a "mini-DHS" will be implemented in FY98/99 to assess changes in behavior at the population level since the previous DHS. The DHS sampling frame will be linked to the facility survey clusters used in the situation analysis so that changes in population-level indicators can be associated with changes in the service environment. Such a multi-level analysis permits conclusions to be drawn regarding the links between USAID inputs (funding, training, and technical assistance), outputs (e.g., trained providers, higher quality of care), outcomes (improved service delivery) and impact (changes in behavior at the population level, such as reliance on a more diverse method mix, increased contraceptive use, and lower fertility).

Information on the financial sustainability of BEMFAM, as well as IUD and Depo-Provera sales, will

be used to complement the analysis described above in order to provide a more comprehensive picture of the contributions of recent USAID/Brazil assistance. A desk study based on previous program assessments and evaluations, together with the recent data and information, may also be undertaken in order to document the results of USAID's population assistance to Brazil over the past 20+ years.

III. Resource Requirements

A. Estimated Resource Requirements

Activities under this strategic objective will be implemented through field support to G/PHN projects. The program funding required is \$3.0 million in FY98 funds and \$2.0 million in FY99. Of these levels, \$100,000 of bilateral funds are requested each year to fund the local-hire project assistant and the remainder (\$2.9 million and \$1.9 million respectively) is requested from field support funds.

Implementation of the strategic objective requires 1.5 FTE each year--0.5 USDH FTE and 1.0 program-funded FSN/TCN. Technical assistance from USAID/W (in addition to backstopping by project CTOs) will be needed for preparation of the FY98 and FY99 R4 documents.

F. SpO1 - Improved quality of life for at-risk youth in target areas

Based on the opportunity to maximize USAID's investment, expand program impact, and guarantee the sustainability of the organizations and programs assisted to date, the Mission proposes to fund an at-risk youth strategy for the period 1998-2002, with activities ending by September 30, 2003. However, the Brazil R4 Management Contract guidance is to present a plan for close-out of the Mission's at-risk youth program at the end of FY2000. Consequently, the Mission will be presenting two strategy options: one that the Mission supports because it will enable USAID to address the concerns about sustainability expressed in the Management Contract, and a second option that phases the program out by the year 2000 per the 1996 R4 decision. The Mission strongly believes that the five-year program described as Option 1 in this strategy should be supported for the reasons outlined below.

The USAID program has demonstrated the capacity to develop programs that make a difference, and to leverage and direct the resources of other donors and organizations to expand these initiatives. USAID also has the comparative advantage of a direct presence in the Northeast and in the three focal cities, which facilitates a hands on approach with NGOs in joint development of innovative program proposals. For example, the program supported an initiative with a popular musician in Salvador to develop a music school for the youth in his native favela. Given its appeal, the USAID-developed proposal attracted \$800,000 in local foundation funding while USAID's contribution was \$200,000. An initiative with the Brazilian NGO Coletiva Mulher Vida in Recife, which trains at-risk girls in the assemblage and repair of computers, was developed and supported by USAID and co-funded with other donors. A \$25,000 contribution by USAID to Centro Luis Freire in Recife to establish a databank of services for at-risk youth was replicated throughout the State of Pernambuco with \$200,000 in financing from the European Union. These are just some examples of the impact that USAID's innovative, hands-on program can make.

The program has experienced a learning curve over the past three years that now points clearly to tangible initiatives and approaches that work. The original program design had each of the three Northeastern cities (Fortaleza, Recife, and Salvador) focussed on a specific area as quasi-experimental labs for addressing the following problems: vocational training, children's rights, and adolescent prostitution. The area of family preservation was also identified as an important area to be developed. Initially the program was managed from a single office in Recife. In terms of pilot testing what works and doesn't work, a number of lessons have been learned which have been and need to be applied. For example, the early years of the program experienced problems in identifying viable interventions and in management oversight. This was addressed by placement of city coordinators in each locale. These coordinators have proven vital in facilitating networking and in increasing the depth and scope of institutional development in which the program can be engaged. Areas which were once thought promising have not worked out. For example, the family preservation concept was a good idea but impossible to operationalize.

Adolescent prostitution has emerged as the most important problem to be addressed. Furthermore, it can be successfully addressed through educational interventions. In Fortaleza, USAID has developed a program that makes the guaranteed placement of children in school a reality through

State payment of private tuition when public places aren't available. Other programs have developed vocational education interventions that provide viable employment options for youth, but also serve as cooperatives that generate income to sustain the implementing NGO. Computer assemblage and maintenance, manufacturing of incubators, and commercial music ventures are known successes.

In sum, the extended program will prioritize the problem of adolescent prostitution through proven education interventions that USAID has developed. In the process, networks between public and private organizations at the state and local level will be developed and the sustainability of NGO's systematically addressed.

A. Linkage of Strategy to Agency Goals and Objectives

USAID/Brazil's special objective of "improved quality of life for at-risk youth in target areas" principally supports Agency Goal #4, "World population stabilized and human health protected," but also contributes to Goal #2, "Democracy and good governance strengthened" and Goal #3, "Human capacity built through education and training." With respect to Goal #4, activities under the SpO contribute to Agency Strategic Objectives 4.1, "unintended and mistimed pregnancies reduced" and 4.4, "HIV transmission and the impact of HIV/AIDS pandemic in developing countries reduced." In addition, the SpO contributes to Agency SO 2.3, "the development of politically active civil society promoted" and Agency SO 3.1, "access to quality basic education, especially for girls and women, expanded."

B. Host-Country Goals

In July 1990, the Brazilian government passed the Children's and Adolescents' Act, which guaranteed the human rights of children (aged 0-12) and adolescents (aged 12-18). The act provides for protection under the law and access to a range of services critical to the mental, physical, moral, spiritual, and social development of young people. Areas of focus include the promotion of children's rights, family preservation, education and vocational training, and addressing the problem of child and adolescent prostitution.

A hierarchy of councils--at the national, state, municipal, and community level--was created to implement the Act. Both government and civil society are represented among the Council membership. At the national and state levels, the council members are appointed and serve without salary. At the lower levels, however, members are democratically elected and receive a full-time salary from municipal funds.

The responsibility of the councils varies by level, but none has responsibility for direct implementation of activities. The national council serves as a coordinating entity for the others, formulates policy, and oversees implementation. State councils control the allocation of resources, coordinate the election of council members at the municipal and community levels, and are responsible for dissemination of the Act and handling violations. Where they exist, the municipal and community councils have the closest relationship with implementing organizations. These councils participate in local networks of implementing organizations, help coordinate activities, and

establish guidelines. In many instances, however, the lower level councils do not exist because municipal resources are not adequate to attract qualified council members. Furthermore, the Act does not provide funding for implementation of activities.

USAID/Brazil's at-risk youth strategy is designed to help translate the language of the Children's and Adolescents' Act from rhetoric to reality.

C. At-Risk Youth Special Objective: Option 1, FY98-02

1. Statement of Special Objective

The USAID/Brazil Special Objective is "*improved quality of life for at-risk youth in target areas.*" Three intermediate results contribute to achievement of the SpO:

I.R. 1: Number of services available to at-risk youth increased.

I.R. 2: NGO and government capacity to provide services to at-risk youth expanded.

I.R. 3: Innovative approaches developed and implemented.

2. Problem Analysis

The plight of at-risk youth has become a major concern of the Brazilian Government as well as international organizations including UNICEF, the InterAmerican Development Bank (IDB) and USAID. The Inter-American Development Bank recently reported that over 45 million Brazilians--nearly one third of the population--live below the poverty line.

While social indicators show an improvement in the living conditions of Brazilian citizens in general, very acute problems remain in Northeastern Brazil, where USAID at-risk youth activities are focused. Two-thirds of Brazil's malnourished children live in this region. The Northeast also has the fastest growing school age populations and the weakest social and health infrastructure. Street children and at-risk youth generally lack access to the education and health systems and the country as a whole lacks safety networks capable of supporting the implementation of the Children's and Adolescents' Act.

Migration into large urban areas, including the large cities of the Northeast, and the concentration of an increasingly impoverished population in the outskirts of capital cities contribute to families forcing their children into begging and performing small informal jobs on the streets of central areas. One recent survey of 2400 adolescents in Recife reported that more than 50% were forced to work to contribute to family income, though the significance of these monetary contributions is nominal. Many of these children come from families with incomes of only half the minimum wage of \$110 per month.

The pressures of poverty and scarcity of basic services lead to further breakdowns in family

structures, which contribute to the growing problems of sexual exploitation of and violence against girls. Increasing numbers of girls are engaged in domestic prostitution and the "sexual tourism" trade.

3. Critical Assumptions and Causal Relationships

Two critical assumptions influence USAID's ability to achieve its special objective:

- a) The health and education sectors remain priorities for the allocation of government resources; and
- b) state and local government support for at-risk youth activities remains strong even if there is a change in elected officials.

The intermediate results and special objective are causally linked as follows. The first Intermediate Result (number of services available to at-risk youth increased) will be measured by the number of direct and indirect beneficiaries reached by the project. More youth will be reached, and their lives improved, as activities are expanded, the skills of the participating NGO staffs and volunteers are improved, and new services are introduced.

Under this option, the second Intermediate Result (expanded NGO and GOB capacity to provide services to at-risk youth) will have a particular focus on networking, and sustainability, in addition to continuing previous efforts to build institutional capacity. These activities will contribute to the SpO by helping to ensure that effective, sustainable implementing agencies exist and supportive policies are in place when USAID assistance ends, thereby assuring continued capacity to provide services.

I.R. 3 (innovative approaches developed and implemented) seeks to expand the range of services available to at-risk youth by demonstrating the feasibility of different approaches, which can then be adopted and expanded by other donors. These approaches contribute to improved quality of life by promoting a more holistic approach to the needs of at-risk youth.

4. Other Development Partners

In addition to the GOB and USAID, other international organizations and some domestic Brazilian foundations provide assistance to at-risk youth. The International Labor Organization is training Council members in interpreting and implementing the Children's and Adolescents' Act. To date, ILO activities have focused in the South, where the Councils are better established. UNICEF is working principally at the national and state level. By contrast, USAID is not supporting the Councils, but rather is working directly with implementing organizations to see that the services guaranteed by the Act can, in fact, be provided to the target population groups. USAID has been successful in leveraging ILO, UNICEF, and UNIFEM funds to support training in management skills and project design. Local implementing organizations also receive some support from Brazilian philanthropic organizations, such as Fundacao Odebrecht.

5. Illustrative Approaches

USAID's activities are focused in three large capital cities in Northeast Brazil--Fortaleza, Recife, and Salvador--and in the Federal District of Brasilia. Based on the experience gained in the early years of the at-risk youth program (FY95-96), USAID has decided to focus on addressing the related problems of a) the unpreparedness of youth to earn a living and b) child and adolescent prostitution. Thus, USAID-supported activities are principally oriented towards promoting access to education and vocational training. Although USAID will not directly support interventions to address family preservation and promotion of children's rights, these themes will cut across all initiatives, together with a health component to prevent early pregnancy and decrease the levels of HIV/AIDS/STI infection among youth at risk.

In Fortaleza, for example, USAID is promoting access to education by ensuring that at-risk and low-income youth have their tuition at a private school covered by public funds when space in a public school is not available. In the Federal District, USAID is supporting a pilot project to increase school-based activities for at-risk youth.

In the Federal District and in the Northeast, USAID provides small amounts of "seed money" for vocational training in innovative areas such as computer repair, manufacture of medical equipment, theater and music. Once USAID has demonstrated the feasibility of these programs, other donors have been willing to replicate and expand them.

Under the longer implementation period of this option, USAID will also support establishment of a Northeast network of implementing organizations. A notable success of the at-risk youth activities to date has been bringing together institutions with different orientations by strengthening the concept of specialization. Specialized NGOs gather into large state-level coalitions to provide a wide range of services to at-risk youth. USAID has been providing technical assistance and training to coalition member organizations in areas such as conflict resolution, fund raising, and project administration. This success will be replicated at the regional level.

Although USAID-supported activities are geographically focused on the Northeast and Brasilia, the national impact of USAID's assistance will be enhanced through support for publications, seminars, exchange of technicians between institutions all over the country, observational tours, and use of computer networks and other information channels to disseminate results and achievements. Other donors are also expected to continue to adopt and replicate USAID's innovative approaches and pilot activities.

6. Sustainability

The magnitude of social problems in Brazil, and particularly those affecting the quality of life of low-income children and youth, makes it clear that there will be a continued need for concerted efforts by the GOB, civil society and international organizations. Most institutions working with at-risk children and youth come from an environment of voluntarism and basic assistance, aimed especially at meeting emergency needs of disadvantaged populations. This orientation has led to heavy dependence on international grants and donations. The concept of sustainability was only recently introduced to these organizations. USAID's support in this area has been marked by assistance to NGOs in developing and accessing other sources of income.

Achieving sustainability is a slow process, however, and will be further developed under this Option. USAID's effort will include expanding production activities already in place among some implementing organizations, improving communications and liaison with local community and business sources of support, increased emphasis on fund-raising and generation of local income, and more sophisticated means of gaining support from the political leadership.

D. At-Risk Youth Special Objective: Option 2, FY98-00

Although the Special Objective and Intermediate Results remain unchanged, the shorter timeframe of Option 2 severely constrains USAID's ability to help its partners to implement additional innovative activities and to achieve sustainability. Existing funding and expected FY98 and FY99 resources are already fully committed to the successful portfolio established in the first three years of program implementation, leaving limited scope for adding new activities. The institutional capacity of implementing organizations will be strengthened by assistance in planning activities; training and technical assistance in project design, implementation, and evaluation; and improved financial management through improved data management.

Emphasis will be given to strengthening ongoing subgrants that provide employment and income-generation opportunities to at-risk youth and particularly to girls at risk of, or already involved with, prostitution. These efforts will also address family preservation and promotion of children's rights as cross-cutting issues.

Monitoring and evaluation will become a main focus in order to make results readily available for dissemination, although on a smaller scale as compared to Option 1. Limited experience will be available at the end of the period on the impact of USAID's support for school-based activities as these were only begun in late FY97.

Under this option, the issue of sustainability will be addressed primarily through close collaboration with other donors in this area, such as UNICEF, the EU, and ILO. USAID will attempt to leverage greater involvement by those partners in USAID-supported activities, in order to ensure that subgrantees can count on other sources of funds when USAID assistance is phased out. The shorter timeframe of Option 2 will limit USAID's ability to help implementing organizations increase their reliance on locally-generated income as a sustainable alternative to donor funding.

With respect to networking, USAID will continue to provide relevant training to state-level coalitions, as well as support public awareness campaigns, hotlines, databases and referral and follow-on services for at-risk youth, but the Northeast regional network will not be established. The benefits of prior investment in networking are already evident, but will only be consolidated in the longer term. Withdrawal of USAID support in 2000 could lead to a collapse of some of the coalitions with tangible negative impacts on the lives of beneficiaries.

7. Judging Achievement

a. Performance Indicators, Targets, and Monitoring Progress

The achievement of this strategic objective will be judged by measuring the following performance indicators and targets. Targets have been established based on performance through FY96. 1997 data will serve as the baseline for the strategy period and will be reported in the Mission's upcoming R4. Indicators 2.3 and 2.4 will only be tracked and reported if Option 1 is approved.

SpO Level: Improved quality of life for at-risk youth in target areas

Indicator 0.1 : Percentage of children and youth completing the school year

Baseline: 1997:

Target 0.1: 1998: 60%

1999: 65%

2000: 65%

2001: 70%

2002: 75%

2003: 80% (same target as Ministry of Education)

Indicator 0.2: Percentage of youth trained by the activity and able to engage in income generating activities.

Baseline: 1997:

Target 0.2: 1998: 60%

1999: 65%

2000: 70%

2001: 70%

2002: 75%

2003: 80%

Intermediate Result 1: Increased number of services available to at-risk youth

Indicator 1.1 Direct and indirect project beneficiaries

Baseline: 1997:
Target 1.1: 1998: 38,000
1999: 45,000
2000: 50,000
2001: 60,000
2002: 70,000
2003: 80,000

Intermediate Result 2: Expanded NGO and government capacity to provide services to at-risk youth

Indicator 2.1 Institutions strengthened

Baseline: 1997:
Target 2.1 1998: 60
1999: 65
2000: 65
2001: 65
2002: 65
2003: 65

Indicator 2.2 Public sector involvement in provision of adequate services to target population (measured by % of project interventions receiving public sector support)

Baseline: 1997:
Target 2.2 1998: 60%
1999: 65%
2000: 70%
2001: 75%
2002: 80%
2003: 85%

Indicator 2.3: Regional network operational

Baseline: 1997: no regional network exists
Target 2.3: 2000: Network established
2001: Network coordinating NGO activities
2002: Network active in promoting policy change

Note: This indicator only applies under Option 1.

Indicator 2.4: % of resources from local income

Baseline: 1997:
Target 2.4: 1998: 25
1999: 35
2000: 45
2001: 55
2002: 60
2003: 65

Note: This indicator only applies under Option 1.

Intermediate Result 3.1: Innovative approaches developed and implemented

Indicator 3.1: Institutions implementing innovative interventions in target areas

Baseline: 1997:
Target 3.1: 1998: 12
1999: 15
2000: 15

Note: This indicator only applies under Option 2.

III. Resource Requirements

A. Resource Requirements

Activities under each option will be implemented with funds from the Congressionally-mandated Displaced Children's and Orphans Fund. A total of \$3.255 million, including program activities and contract costs for the FSN/PSC officer who manages the activity, is required to fund Option 1--\$500,000 in FY98, \$755,000 in FY99, \$850,000 would be required in FY00, \$650,000 in FY01, and \$500,000 in FY02 (medium scenario). The total funding required for Option 2 is \$1.255 million--\$500,000 in FY98 and \$755,000 in FY99 (low scenario).

Implementation of the strategic objective requires 1.0 program-funded FSN/TCN FTE each year. Technical assistance from USAID/W (in addition to backstopping by project CTOs) will be needed for preparation of the FY98 and FY99 R4 documents.

B. Discussion of Programming Options

Under a high funding scenario, funding for the five-year strategy would be increased by \$350,000 for a total of \$3.605 million. The additional funds--\$100,000 in FY00, \$150,000 in FY01, and \$100,000 in FY02--will allow for the intensification of activities to improve sustainability.

The low funding scenario assumes program activities end in 2000 (Option 2).

G. Education Activities

As part of a new regional initiative to support education reform in Brazil, USAID will support a discrete number of focused education activities. These activities will support the LAC Bureau's regional strategic objective in education, "Improved human resource policies adopted in selected LAC countries." Management and funding will be provided by the LAC regional program, working in coordination with USAID/Brazil.

Brazil has made tangible progress in the education sector over the last five to seven years. Illiteracy rates have dropped dramatically, the number of untrained teachers has declined, and primary school completion rates have increased. Improving education has become a top social policy priority for the Brazilian government. However, a number of significant challenges remain. There is great variability among states and municipalities in levels of education financing and quality, with the lowest quality generally found in the Northeast. The classroom learning environment is frequently characterized by a lack of appropriate texts and instructional materials, passive teaching methods, and high repetition rates. Many teachers and principals are poorly qualified and trained. An April 1997 World Bank/UNICEF strategy for assistance to Brazil's education sector recommended emphasis on minimum standards for physical facilities and equipment, teaching materials, and qualified teachers and principals. It also recommended strengthening education management and building school-community partnerships. The World Bank, Inter-American Development Bank and private foundations are extensively involved in promoting school reform in Brazil.

In July 1997, USAID participated in inter-agency meetings held in Brasilia to address proposals for addressing constraints in Brazil's education sector. A new regional initiative, the U.S.-Brazil Partnership for Education, was subsequently confirmed in a Memorandum of Understanding between the two countries during President Clinton's visit in October. Under the Partnership, the two nations will conduct a series of joint meetings to address five topics over the next two years, including educational technology; educational standards and assessment; professional development of teachers and school managers; educational exchanges; and business, family and community involvement in education. These meetings will encourage and facilitate closer relationships among each nation's respective federal, state and local education agencies. It will also encourage mutually beneficial exchanges between policymakers, educational administrators and other specialists in other countries in the region. While the U.S. Department of Education and USIS at Post have primary responsibility for implementing the MOU, USAID will provide support for these activities through the LAC Regional program for educational reform, the Partnership for Education Revitalization in the Americas (Partnership), and other USAID-funded mechanisms.

III. Resource Requirements

A. Introduction

Over the five-year period of this strategic plan, the USAID program will change dramatically. Regardless of which scenario is chosen, "low," "medium," or "high," the program will have a larger emphasis on global climate change (GCC). At the "low" level, by the end of FY-00, the program will be an entirely GCC-focused program. At the medium and high levels, there will be a gradual phase-down and orderly turnover of health objectives to Brazilian organizations, with completion of funding in FY-02 and activities in FY-03. These changes will also have a staffing implication which is discussed below.

The "low" funding level represents the minimum requirement to meet our current commitments to the GOB and our Brazilian and U.S. NGOs, except in the area of AIDS. Our recent work with the GOB on design of the new World Bank loan has produced a request that USAID take the lead in evaluation of its successful project activities for replication under the loan and also carry out pilot intervention testing for implementation during the five years of the new loan. The leadership from USAID which the GOB and the World Bank are seeking cannot be met at the "low" funding level. This will be a lost opportunity which will have a real impact on AIDS in Brazil, since USAID's flexible, NGO-oriented approach cannot be provided by the GOB or the World Bank.

Additionally, the "low" level precludes most USAID involvement in the activities foreseen under the energy, environment, and education agreements signed during the presidential visit. The visibility and momentum that the President and Mrs. Clinton provided for USAID global issues in health, climate change, and education, will be lost, and there will be little or no USAID involvement in these areas at the "low" level.

Finally, the "low" level terminates our highly successful street children program, which is developing partnerships between public and NGO organizations for innovative responses to this serious human rights problem in Brazil. Our grantee, Partners of the Americas, has helped USAID develop a positive, constructive relationship with Brazilian organizations on this issue, and has developed a highly innovative, cost-effective program. Two additional years of modest funding are required to consolidate and successfully turn this program over to Brazilian organizations.

The "medium" and "high" levels will allow USAID to be responsive to the Global issues which were the focus of President and Mrs. Clinton's highly successful visit to Brazil in October, the President's recently announced \$1 billion Climate Change initiative (Brazil is one of ten focus countries world-wide), the U.S./Brazil Common Agenda Agreement, the Agency's global agenda, and three of the seven bilateral agreements signed during the presidential visit. The "medium" and "high" levels give the USG through USAID the ability to engage Brazil collaboratively on vital foreign policy issues.

B. Program Resources

The Resource Requirements are provided at three levels: low, medium, and high.

SO 1 - Environment

The low request level for SO 1 represents a spending level which would fulfill current USAID commitments with its partners in the Amazon and to a limited extent in the Atlantic Forest, with no possibility of expansion to achieve additional results in sites in the Atlantic Forest or Pantanal. At the medium level of funding of SO 1, additional target sites and partnerships would be possible in the Atlantic Forest region and in the Pantanal, but no significant activities could be initiated in the Cerrado region. Also at the medium level, additional targeted dissemination and monitoring activities would be funded, and would be expanded upon at a high funding level.

At the high level of funding it would be possible to establish new innovative environmental partnerships in key sites in the Atlantic Forest, Pantanal, and Cerrado regions.

SO 2 - Energy

The low level resource requirements are comparable to the funding levels for the previous USAID/Brazil special objective in energy, which was initiated in a period when restructuring of the power sector restructuring was only under scrutiny by the GOB. This limited resource level will not allow the USAID/Brazil energy program to fully capture the opportunities now available under wide-ranging structural and regulatory changes currently being implemented in Brazil's power industry. The previous and significant activities under the energy program demonstrate the leveraged impact possibilities that a medium funding level could have in this unique restructuring environment.

At the "high" funding level, compatible with the largest power market in Latin America, USAID would be able to cover energy efficiency activities in a more extensive fashion and better coordinate its action with GOB and MDB recommendations to decentralize both energy efficiency programs and regulation. A higher level would permit strengthening of current successful activities such as ESCO promotion and support and would allow funding of new proposals such as more aggressive support for industrial efficiency and cogeneration. It would also be possible to support market formation for renewable energy using a more comprehensive approach that would coordinate top-down policy/restructuring activities with bottom-up market development, through cooperatives, NGOs and commercial banks in selected municipalities. Demonstration of successful results in market development beyond the current target areas would also facilitate a geographic extension of the World Bank "Integrated Commercial-Social Power" loan.

SO 3 - HIV/AIDS

Section II. D. presents two options for future HIV/AIDS activities. Activities under either option will be implemented through field support to G/PHN projects. The program resources required for implementation of the HIV/AIDS Strategic Objective (Option 1) are \$8.5 million over five years, as shown as the "medium" scenario in the Program Budget table. Of this level, \$125,000 of bilateral funds are requested each year to fund the local-hire project assistant. The remainder--\$1.875 million annually in FY98-FY2000, \$1.375 million in FY01 and \$875,000 in FY02--is requested from field support funds. The program resources required for implementation of the Special Objective (Option 2), shown as the "low" scenario in the budget table, are a total of \$4.0 million over two years. This includes \$125,000 annually for the project assistant and \$1.875 million annually from field support funds. The low funding scenario assumes that program activities end in 2000.

Under a high funding scenario for Option 1, field support funding over the five years would be increased by \$1.0 million to a total of \$9.5 million. The additional funding (\$500,000 each in FY00 and FY01) would be used to improve the management capacity of more institutions providing HIV/STI/FP services and to ensure that the financial sustainability of condom social marketing programs is firmly established.

SO 4 - Family Planning

Requested funding is the same for all three scenarios. Activities under this strategic objective will be implemented through field support to G/PHN projects. The program funding required is \$3.0 million in FY98 funds and \$2.0 million in FY99. Of these levels, \$100,000 of bilateral funds are requested each year to fund the local-hire project assistant and the remainder (\$2.9 million and \$1.9 million respectively) is requested from field support funds.

SpO 1 - At-Risk Youth

Two options for future At-Risk Youth activities are presented in Section II. F. Activities under each option will be implemented with funds from the Congressionally-mandated Displaced Children's and Orphans Fund. A total of \$3.255 million, including program activities and contract costs for the FSN/PSC officer who manages the activity, is required to fund Option 1, as shown in the "medium" scenario in the Program Budget table --\$500,000 in FY98, \$755,000 in FY99. Funding of \$850,000 would be required in FY00, \$650,000 in FY01, and \$500,000 in FY02. The total funding required for Option 2 is \$1.255 million--\$500,000 in FY98 and \$755,000 in FY99, as shown in the "low scenario." The low funding scenario assumes that program activities end in 2000.

Under a high funding scenario, funding for the five-year strategy would be increased by \$350,000 for a total of \$3.605 million. The additional funds--\$100,000 in FY00, \$150,000 in FY01, and \$100,000 in FY02--will allow for the intensification of activities to improve sustainability.

C. Program Budget Tables

Table I

D. Required Staff and OE Requirements

The three levels of funding have the following staffing implications:

Low Completion of all health activities in FY-00 would also eliminate all three program funded health FSN positions. It would also shift the burden of financing one program secretary and the program officer function entirely to the environment account. These two positions are currently jointly funded by health and environment.

At the "low" level, one new program-funded position would be required for monitoring of the new PPG-7 contribution and to assist with increased activities in energy. Thus, at the low level, there would be a net reduction of two program funded FSNs by FY-00.

No reduction in the USDH staff is contemplated under the "low" scenario. The normal checks and balances which the Agency should be interested in maintaining, management requirements, interaction with the Country Team, site travel, and normal leave require at least two USDHs. Even with two USDHs, there will be short periods when there is no USDH presence in Brasilia. The second USDH position is spared as a GDO and would begin increasingly to focus on environment and energy under the "low" scenario.

Medium Completion of all reproductive health activities in FY-00 would allow for reduction of one program-funded population FSN position.

At the "medium" level, two new program-funded positions would be required. One position, an additional environmental advisor, would assist in the monitoring of the new PPG-7 contribution and increased level of environmental activities. This position would be engaged partly for the purpose of facilitating the expanded geographic scope of the program, but more importantly, to engage more closely with the World Bank in monitoring and Brazilian coordinators in implementing components of the G-7 Pilot Program to Conserve the Brazilian Rain Forests, as well as coordinating with other donor agencies such as the IDB. The second, an energy advisor position, would assist with an increasingly complex set of activities in energy. Thus, at the "medium" level, there would be a net increase of one program funded FSN.

There would be no change in the USDH status at the "medium" level.

High Completion of all reproductive health activities in FY-00 would again allow for reduction of one program-funded health FSN position.

The "high" level has the same requirements as the "medium" level: two new program-funded positions. One position would assist in the monitoring of the new PPG-7 contribution and increased level of environmental activities. The second would assist with an increasingly complex set of activities in energy. Thus, at the "high" level, there would also be a net increase of one program funded FSN.

There would be no change in the USDH status at the "high" level.

D. Required Staff and OE Resources

TABLE I

IV. Annexes Environment Indicator tables

Result: SO 1 - Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas						
Indicator: SO1-a - Number of logging operations that adopt aspects of sustainable logging models in addition to target operations and the hectareage covered by such operations (i.e. hectares of forest harvested using sustainable logging methods)						
Unit of Measure: number of logging operations/hectares						
Source: Survey of logging operations						
Number of Logging Operations						
Year	1997	1998	1999	2000	2001	2002
Planned	Baseline					
Actual						
Number of Hectares						
Year	1997	1998	1999	2000	2001	2002
Planned						
Actual						
<p>Comments: Preliminary work needs to be done before USAID can develop adequate baseline and target figures for this indicator. USAID is working with its partners to develop a methodology for data collection for this indicator and the other SO-level indicators. Current plans call for partners to work with the World Bank (particularly in collaboration with the G7 Pilot program) and Brazilian timber industry association to identify a target population of logging operations that could benefit from the adoption of sustainable logging practices. The program's broader dissemination activities would then be supplemented with targeted efforts (e.g. workshops, site visits) aimed at informing representatives of these logging operations of the results of USAID's pilot efforts in sustainable logging. These logging operations would subsequently be surveyed (probably through a questionnaire or interviews) to determine the level of adoption of those practices to which they had been exposed. To be counted, logging operations would have to adopt at least three of the following aspects of sustainable logging: 1) a management plan approved by IBAMA; 2) completion of a forest inventory and mapping of harvest sites; 3) adoption of a key practice (e.g., extraction routes/skid trails marked to felled trees, application of post-harvest treatments, and 4) training of logging crews and other staff in sustainable logging practices.</p> <p>This indicator and the other two SO-level indicators have been modified following the significant difficulties experienced by USAID/Brazil in collecting information on replication using the indicator's original formulation. Moreover, while broad-based dissemination efforts can lead to the adoption of sustainable logging practices/management practices/management systems, it was felt that complementing that dissemination approach with a more targeted effort would have a larger impact and would provide a subset of potential adopters that could be more easily surveyed to determine the degree of replication of the practices.</p>						

Result: SO 1 - Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas

Indicator: SO1-b - Number and area of protected areas in which government or private owners adopt aspects of sustainable management systems in addition to target areas.

Unit of Measure: number of protected areas/hectares

Source: Survey of protected areas

Number of Protected Areas

Year	1997	1998	1999	2000	2001	2002
Planned	Baseline					
Actual						

Number of Hectares

Year	1997	1998	1999	2000	2001	2002
Planned						
Actual						

Comments: This indicator will be used to report on the adoption of sustainable management practices in those protected areas that do not directly benefit from the USAID program (i.e., potential replicators). Preliminary work needs to be done before USAID can develop adequate baseline and target figures, particularly in terms of potential replicators. USAID will work with its collaborators to identify protected areas that could replicate the sustainable management practices being tested with USAID support. Plans call for supplementing the program's broader dissemination activities with targeted efforts (e.g., workshops and site visits) aimed at informing government officials and representatives of local NGOs operating in protected areas of the results of USAID's pilot efforts. These representatives would subsequently be surveyed to identify the extent to which sustainable management practices have been adopted. Relevant sustainable management practices are identified in the discussion of Indicator 1.1.

The indicator on the number of sites is, in this case, even more important than the number of hectares covered by those sites. The strategy of USAID/Brazil and its partners will be to expand the sustainable management approach to a broad range of protected areas. Effectively managed protected areas in highly threatened regions such as the Atlantic Forest may carry greater weight than protected areas (which may be much larger in size) in the Amazon.

Result: SO 1 Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas

Indicator: SO1-c - Number of families outside target area who have adopted improved sustainable management systems

Unit of Measure: number of families

Source: USAID collaborators

Year	1997	1998	1999	2000	2001	2002
Planned	Baseline					
Actual						

Comments: The focus of this indicator will be on the adoption of sustainable management systems in areas bordering USAID-supported target areas. While USAID's broad dissemination efforts (via radio and television) may actually have a significant indirect impact, it will be beyond USAID's capacity to measure it. USAID is working with its partners to develop a methodology whereby the program will focus on areas bordering USAID-supported target areas. It is tentatively planned that the partners first define a radius around their target site where they feel that they should have an indirect impact on adoption. They will then define a sampling frame and conduct periodic samples to determine the level of adoption. USAID and its partners will not be able to set targets until after they define their region of potential indirect impact.

The improved sustainable management systems include agroforestry (cultivation of native fruit and oil-bearing trees), the intensification of agriculture, and fire management.

Result: - IR 1.1 - Systems for sound land use identified, promoted and adopted in target areas

Indicator: - IR 1.1-a Sustainable management systems developed and validated

Unit of Measure: number of sites meeting at least 80 percent of their annually established benchmarks divided by total number of sites receiving USAID support

Source: USAID collaborators

Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	6/6	6/6	6/6		
Actual	6/6					

Comments: This indicator will be used to report on implementation of systems for agroforestry, intensification of agriculture and fire management. An index of steps constituting "implementation" is established for each site, together with a site-specific timetable for accomplishing each task (see index on following page). This index will be reviewed and, if necessary, revised annually based on implementation experience. Each site is reviewed to determine, based on the index, whether its implementation is "on schedule", i.e., whether it is meeting at least 80 percent of the benchmarks set at the beginning of the year. The performance of the program is reported as a ratio of the number of sites meeting their benchmarks divided by the total number of sites in which USAID-supported collaborators are working.

INDEX FOR INDICATOR 1.1-a: Sustainable Management Systems developed and validated.

Steps:	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
	Del Rei	Capim River	Una	São Miguel	Novo Ideal	Apurinã
1. Participatory collection of information/planning completed	97	96	96	96	96	96
2. Market survey of "alternative products", i.e. those that are not traditionally traded in the market and are from endemic plant species, e.g., fruit trees, such as pupunha, açai, and cupuaçu.	N/A	N/A	97	97	97	97
3. Training carried out at the local level in improved practices	96/97/98/99	96/97/98/99	N/A	96/97/98/99	96/97/98/99	96/97/98/99
4. Site preparation and seedling production done by farmers	96/97	96/97/98/99	96/97/98	96	96	96
5. On farm system experimentation undertaken by farmers	96/97/98	96/97/98	96/97/98/99	96/97/98/99	96/97/98/99	96/97/98/99
6. Selection and implementation of agroforestry, intensification of agriculture, or fire management system by local communities/farmers	97	98	97/98/99	96	96	96
7. Fire prevention procedures/ approaches carried out	96/97/98/99	97/98	N/A	97/98/99	97/98/99	97/98/99
8. Processing of products undertaken by local communities/farmers	N/A	N/A	N/A	96/97	96/97	96/97
9. Introduction of alternative products into local markets	N/A	97/98/99	97	98/99	96/97/98/99	97/98/99
10. Complementary production (i.e. non-timber forest products)	N/A	N/A	98	98/99	96/97/98/99	97/98/99
11. Cost/benefit monitoring survey completed	N/A	96/97/98/99	97	97/98/99	97/98/99	97/98/99
12. Social analysis completed (with an emphasis on gender)	96/97/98	96/97/98	98	97/98/99	97/98/99	97/98/99
Total number of farmers involved	30	21	24	75	115	45

Result - IR 1.1: Systems for sound land use identified, promoted and adopted in target areas						
Indicator: IR 1.1-b Protected area and buffer zone management plan developed and validated.						
Unit of Measure: number of sites meeting at least 80 percent of their annually established benchmarks divided by total number of sites receiving USAID support (and area covered by "on-schedule" sites)						
Source: USAID collaborators						
Ratio of Sites on-schedule to total sites						
Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	7/7	7/7	7/7		
Actual	7/7					
Size (in hectares) of "on-schedule" sites						
Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	5,277,078	5,277,078	5,277,078		
Actual	5,277,078					
<p>Comments: The primary indicator, above, will be used to report on the progress made in developing protected area and buffer zone management plans. An index of steps leading to the initiation of such management plans is defined for each site and a timetable is established for accomplishing each step (see following page). Progress at each site is reviewed to determine, based on the index, whether its implementation is "on schedule", i.e., whether it is meeting at least 80 percent of its benchmarks. The performance of the program is reported as a ratio of the number of sites meeting their benchmarks in terms of developing management plans, divided by the total number of sites in which USAID-supported collaborators are working.</p> <p>USAID will also report the total area of the sites in which progress is being made. The number of protected areas covered by the program may increase in future years.</p>						

INDEX FOR INDICATOR 1.1-b: Protected area and buffer zone management plan developed and validated.

Index of protected area management	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
Steps:	Jaú National Park	Serra do Divisor Park	Cajari Extr. Reserve	Una Biological Reserve	Tapajós N.Forest	Guaraqueçaba Env.Protect. Area	Chico Mendes Extr.Res
1. Participation of community/stakeholders in diagnosis/initial survey	96	96/97	96	97	96	98	96/97/98/99
2. Participation of community/stakeholders in steps for elaboration of management plan	97	97	96	97	96	N/A	96/97/98/99
3. Information/data analysis carried out and maps prepared	98	96/97	97	97	96	98	96/97/98/99
4. Participatory management plan proposed	97	97/98	97	97	96	N/A	N/A
5. Management plan approved	98	98	97	98	96	N/A	N/A
6. Environmental education activities carried out	96/97/98/99	99	98/99	96/97	97	98	N/A
7. Implementation of management plan w/ participation of community/stakeholders initiated	98/99	98	98	98	97	98/99	N/A
8. Resource management initiated (ecotourism; palm heart, Brazil nut extraction)	N/A	99	98	98	98	98	N/A
9. Review and update of management plan	N/A	99	99	N/A	99	99	N/A
10. Participatory buffer zone management plan initiated	N/A	98/99	N/A	96	N/A	98	N/A
Total number of hectares	2,270,000	605,000	481,650	7,022	600,000	313,406	1,000,000

Result: - IR 1.1 - Systems for sound land use identified, promoted and adopted in target areas

Indicator: - IR 1.1-c Low impact forest management systems developed and validated

Unit of Measure: number of sites meeting at least 80 percent of their annually-established benchmarks divided by total number of sites receiving USAID support

Source: USAID collaborators

Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	3/3	3/3	3/3		
Actual	3/3					

Comments: This indicator will be used to report on the development and validation of low-impact forest management practices/steps. An index of steps constituting "adoption" is established for each site (the actual steps will be site specific), together with a site-specific timetable for developing and validating each low impact forest management system (see index on following page). Progress at each site is reviewed annually to determine, based on the index, whether it is "on schedule", i.e. whether it has met at least 80 percent of its annually-established benchmarks. The performance of the program is reported as a ratio of the number of sites "on schedule" divided by the total number of sites in which USAID-supported collaborators are working.

Additional pilot sites may be added in future years.

INDEX FOR INDICATOR 1.1-C: Low Impact forest management systems developed and validated			
Index of adoption of low-impact forest management Management Practices/Steps:	Site 1 Paragominas	Site 2 Tapajos	Site 3 Cauaxi
1.General forest inventory completed	96	96	96
2. Community participation in the development of long-term forest management plan	N/A	96	N/A
3. Approval of long-term forest management plan by IBAMA	96	96	96
4. Pre-harvest inventory completed (100%)	96	97	96
5. Annual operating plan (with appropriate harvest technology) completed	96	97	96/97
6. Pre-harvest treatments applied	96	97	96
7. Establishment of permanent plots	96	96	96
8. Harvest crew trained in safe, low impact harvesting practices	N/A	97	96
9. Layout and construction of forest infrastructure	96	97	96
10.Low impact harvest with emphasis on worker safety completed	96	97	96/97
11.Post harvest silvicultural treatments and forest protection implemented	99	98	96/97/98
12.Re-measurement of permanent plots completed	99	98	96/97/98
13. Socio-economic and environmental analyses completed, documented, and published	99	98	98
Total number of hectares	100	400	500

Result: - IR 1.2 - Target institutions and local human capacity strengthened

Indicator: - IR 1.2-a: Institutions strengthened

Unit of Measure: Number of institutions meeting at least 80 percent of their annually-established benchmarks divided by the total number of institutions involved

Source: USAID collaborators

Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	9/9	9/9	9/9		
Actual	9/9					

Comments: This indicator will be used to report on the progress of institutional strengthening activities supported by USAID. An index of elements required to strengthen Brazilian environmental institutions has been developed for each institution (actual requirements will vary depending upon the institution), together with an institution-specific timetable for meeting each requirement (see index on following page). The progress of each institution will be reviewed annually to determine, based on the index, whether its institutional training program is "on schedule", i.e., whether it is meeting at least 80 percent of its annually established benchmarks. The performance of the program is reported as a ratio of the number of institutions "on schedule" divided by the total number of institutions with which USAID-supported collaborators are working. Additional pilot sites may be added in future years.

INDEX FOR INDICATOR 1.2-a: Institutions strengthened

Elements of Institutional Development/Definitions	COOP-CA	FVA	IESB	JUPARA	IPAM	PESACRE	SOS Amazonia	SPVS	IBAMA
1. Improved accounting system and ability to pass an audit -- Accounting system in place with supervision of accredited accountant and having passed at least one external audit	98	97	97	98	97	97/8/9	97	98	N/A
2. Ability to attract funding from other sources -- Having at least one proposal funded by an organization other than USAID in the previous year.	N/A	97/8/9	97/8/99	98/9	97	97/8/9	97/8	98	N/A
3. Publications produced -- Having at least one publication (scientific or not) in the past year.	99	97/8/9	97/8/9	99	97	97/8/9	97/8	99	98/9
4. Strategic planning tools in use -- strategic plan defined and being implemented.	98/9	97/8/9	97/8/9	99	98	97/8/9	97	98	99
5. Organizational visibility -- Participation in local, regional, state, or nation-wide environmental committees and/or established mechanisms of influencing public policy.	99	97/8/9	97/8/9	99	97	97/8/9	97	99	97
6. Technical capacity improved in information management and technologies (e.g., GIS)	98/9	97/8/9	97/8/9	97/8/9	97	97/8/9	97	99	97/8/9
7. Institutionalization of gender as part of institutions objectives and strategic planning	99	97/8/9	97/8/9	97/8/9	98	97/8/9	97/8	99	N/A

Result - IR 1.2: Target institutions and local human capacity strengthened

Indicator: IR 1.2-b Number of persons trained (those with and without a high school diploma).

Unit of Measure: Number of person-months of training given/Number of persons trained (cumulative)

Source: Grantee's reports (CI, UF, WHRC, WWF, and TFF)

Persons trained who do not have a high school diploma (person months of training/number of individuals trained/gender breakdown)

Year	1991-96	1997	1998	1999	2000	2001	2002
Planned	Baseline	115.4 p/m 1315 persons (480F;835M)	185.6 p/m 1582 persons (587F; 995M)	246.3 p/m 1872 persons (706F; 1166M)			
Actual	72.2 p/m 1138 persons (405F; 733M)						

Persons trained who have a high school diploma (person months of training/number of individuals trained/gender breakdown)

Year	1991-96	1997	1998	1999	2000	2001	2002
Planned	Baseline	2503 p/m 1622 persons (778F; 844M)	3165.4 p/m 1876 persons (889F; 987M)	3871.4 p/m 2164 persons (1021F; 1143M)			
Actual	1932.8 p/m 1340 persons (654F; 686M)						

Comments: Number of persons is disaggregated by gender. F= female, M = male

The reason for dividing this indicator by persons with and without diploma is because USAID partners wanted to highlight the fact that they work with different levels of individuals (PhDs, technicians, field workers, etc.).

Result - IR 1.2: Target institutions and local human capacity strengthened

Indicator: IR 1.2-c Number of persons trained who are now trainers or have training/extensionist functions/roles.

Unit of Measure: Number of trainers (cumulative)

Source: Surveys of former training participants -- UF, WHRC, FS, CI, WWF, TFF)

Year	1997	1998	1999	2000	2001	2002
Planned	154 (70F; 84M)	265 (112F; 153M)	404 (167F; 237M)			
Actual						

Comments: The number of persons is disaggregated by gender. F = female, M = male
Data is collected via surveys of former trainees undertaken by the partner organizations. Individuals are not considered "trainers" unless they report that they have trained at least three others in techniques learned during the training session.

Result: - IR 1.3 - Target policies adopted and/or implemented that support environmentally sound land use

Indicator: - IR 1.3-a: National and local policies which support biodiversity conservation and natural resources management implemented and/or policy implementation improved

Unit of Measure: Number of policy-related activities that have met at least 80% of their annual "benchmarks" divided by the total number of policy-related activities underway

Source: USAID collaborators

Year	1996	1997	1998	1999	2000	2001
Planned	BASELINE	10/10	10/10	10/10		
Actual	10/10					

Comments: This indicator will be used to reports the progress of selected policy-related initiatives supported by USAID. The policy agenda includes:

- a. Monitoring the environmental impact of the Itacaré Road
- b. Creation of Itacaré Park (Conduru State Park)
- c. Adoption of "ICMS Ecológico" (value-added tax) in the State of Bahia
- d. Improvement of the "ICMS Ecológico" policy at the national level and its replication to additional states
- e. Improvement and revision of the Federal Forest Policy (e.g., changing the forest code)
- f. Reform of the national law for protected areas (SNUC)
- g. Creation of, and initiation of activities in Brazil by, the Forest Stewardship Council (which certifies timber firms as "green", i.e., using sustainable management practices)
- h. Improvement of national, state, and local fire management policy
- i. Implementation of Agrarian Reform in the State of Bahia
- j. Reduction or elimination of the number of permits for logging in the remaining Atlantic Forest in State of Bahia. An index of steps required (benchmarks) to achieve the specified policy objectives has been developed for each initiative (actual steps will vary depending upon the policy initiative), together with a timetable for meeting each requirement (see index on following page). The annual benchmarks will be revised each year. The progress in each policy area will be reviewed annually to determine, based on the index, whether each given policy activity has met its benchmark. The performance of the program is reported as a ratio of the number of policy initiatives that have met their "benchmarks" divided by the total number of initiatives with which USAID-supported collaborators are working. Additional policy areas will be added during the life of the SO.

INDEX FOR INDICATOR 1.4-a: Target policies adopted and/or implemented that support environmentally-sound land use										
Index of policy results	Policy Initiatives									
	a	b	c	d	e	f	g	h	i	j
Steps Completed:										
1. Policy Analysis	96	96	96/97	97	96	97	N/A	97/98	97	96
2. Alternative policies proposed	96	96	97	97	96/99	97	98	98	97	96
3. Communication and educational activities to improve policies and their implementation	97	96/97	97	98	96/7/8/9	96	99	97/8/9	97	97
4. Improved policies adopted by national, regional and local institutions	97	97	N/A	98	99	98	99	99	N/A	N/A
5. Policy implemented	97	97	N/A	99	99	99	99	99	N/A	N/A

a - Itacaré Road

b - Itacaré Park (Conduru State Park)

c - ICMS Ecológico-Bahia

d - ICMS Ecológico-National Policy

e - Federal Forest Policy

f - SNUC bill - National System of Conservation Units

g - Forest Stewardship Council

h - Fire management

i - Agrarian Reform - Bahia

j - Logging - Bahia

Result: - IR 1.4 - Sound land use systems disseminated beyond target areas

Indicator: - IR 1.4-a: Number of persons reached and amount of environmental materials disseminated

Unit of Measure: Number of persons/number of pieces of environmental information disseminated

Source: Grantee reports (CI, FS, Smithsonian, WWF/SUNY, TFF, UF, WHRC, and WWF)

Direct Dissemination (dissemination tools/individuals reached)

YEAR	1991-96	1997	1998	1999	2000	2001	2002
Planned	Baseline	49 75,000	49 76,300	50 85,400			
Actual	176 127,620						

Mass Media (tools/individuals reached)

YEAR	1991-96	1997	1998	1999	2000	2001	2002
Planned	Baseline	16 379,000	23 451,000	21 406,000			
Actual	33 735,900						

Comments: Dissemination materials are divided into two groups:

- (1) Direct dissemination tools, which aim to reach a specific target audience. These could include scientific, technical, and educational publications and videos; and
- (2) Mass media tools, which could include printed material and TV and radio events.

The first figure in each cell above is the number of dissemination materials (e.g., number of publications, videos, or radio spots) produced. The second number in the cell is the estimated total number of persons reached by the dissemination materials.

USAID will produce annually a table disaggregating the figures reported, using the format on the following page.

TABLE FOR INDICATOR 1.5-a: Number of persons reached and amount of environmental materials disseminated (current figures are through FY 1999)

	Quantity (X)								No. of Persons (Y)							
	97	98	99	2000	2001	2002	Total	97	98	99	2000	2001	2002	Total		
1. Direct Dissemination Tools (D)																
a) scientific/technical publications	37	35	38				110	45,700	45,900	56,200				147,800		
b) educational publications	10	11	10				31	29,000	29,100	28,900				87,000		
c) videos	2	3	2				57	300	1,300	300				1,900		
Sub total (D)	49	49	50				148	75,000	76,300	85,400				236,400		
2. Mass Media (M)																
a) printed material	9	14	12				35	139,000	209,000	164,000				512,000		
b) broadcast (TV, radio)	7	9	9				25	240,000	242,000	242,000				724,000		
Sub total (M)	16	23	21				60	379,000	451,000	406,000				1,236,000		
Grand total (D + M)	65	72	71				208	454,000	527,000	491,400				1,472,700		