

Serra do Mar and the Atlantic Forest Mosaics System

A Social and Environmental
Recovery Project



Cota 200 upgrading



Secretaria do Meio Ambiente

Secretaria da Habitação



Serra do Mar and the Atlantic Forest Mosaics System

A Social and Environmental Recovery Project



São Paulo
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**GOVERNO DO ESTADO
DE SÃO PAULO**

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It is a great pleasure for me to present to the reader this booklet on the Serra do Mar and The Atlantic Forest Mosaics System Recovery Program, an innovative project of social inclusion, environmental restoration and conservation, and tragedy prevention.

The largest area of preserved Atlantic Forest of Brazil is in the state of São Paulo in the territories of the Serra do Mar State Park and its three mosaics: Paranapiacaba, Jureia-Itatins and Jacupiranga. Just the Serra do Mar State Park individually consists of 332,000 acres in 24 municipalities of São Paulo, which contribute to climate regulation, promote the quality of water supply and provide shelter for mammals, amphibians and reptiles, and half of the bird species of the biome.

Preserving ecosystems and, at the same time, prioritizing concrete improvement of the living conditions of needy people who had lived those risk areas for decades requires knowledge, planning, investment and high technical competence in the performance. Thanks to the valuable partnership with the Inter-American Development Bank (IDB) and the work of *Companhia de Desenvolvimento Habitacional Urbano* – CDHU (Housing Urban Development Company), of the Forest Foundation and of the Environmental Police, the Social and Environmental Recovery Program of the Serra do Mar became an international standard in combating these issues.

Today, more than 5000 families living in risk or protected areas have been assisted with housing and upgrading works, with all the infrastructure and real opportunities for progress. Living in new structured communities, they have also been benefited from professional training programs, such as the partnership between Senai and CDHU that has trained 203 construction professionals and the project that has trained gardeners and nurserymen to work with the reforestation of reclaimed areas. We have already started the second phase of the Program, which has made plans to assist approximately 25 thousand families, with removal and relocation, or upgrading works.

In 2009, CDHU accepted the challenge to participate in the United Nations Environment Program for the Sustainable Social Housing (Sushi), which consists of building sustainable social housing for low-income population. The *Residencial Rubens Lara* in Cubatão has been widely recognized by the United Nations Environment Program (UNEP) as a replicable model in other countries.

In 2012, the Serra do Mar Social and Environmental Recovery Program earned the Greenvana GreenBest award, the highest distinction conferred in Brazil to quality initiatives in the environmental field. For the government of São Paulo, the victory in the Government Initiative category, by the popular vote, is a good reason for pride, mainly because the evaluation of the public means population awareness on environmental issues.

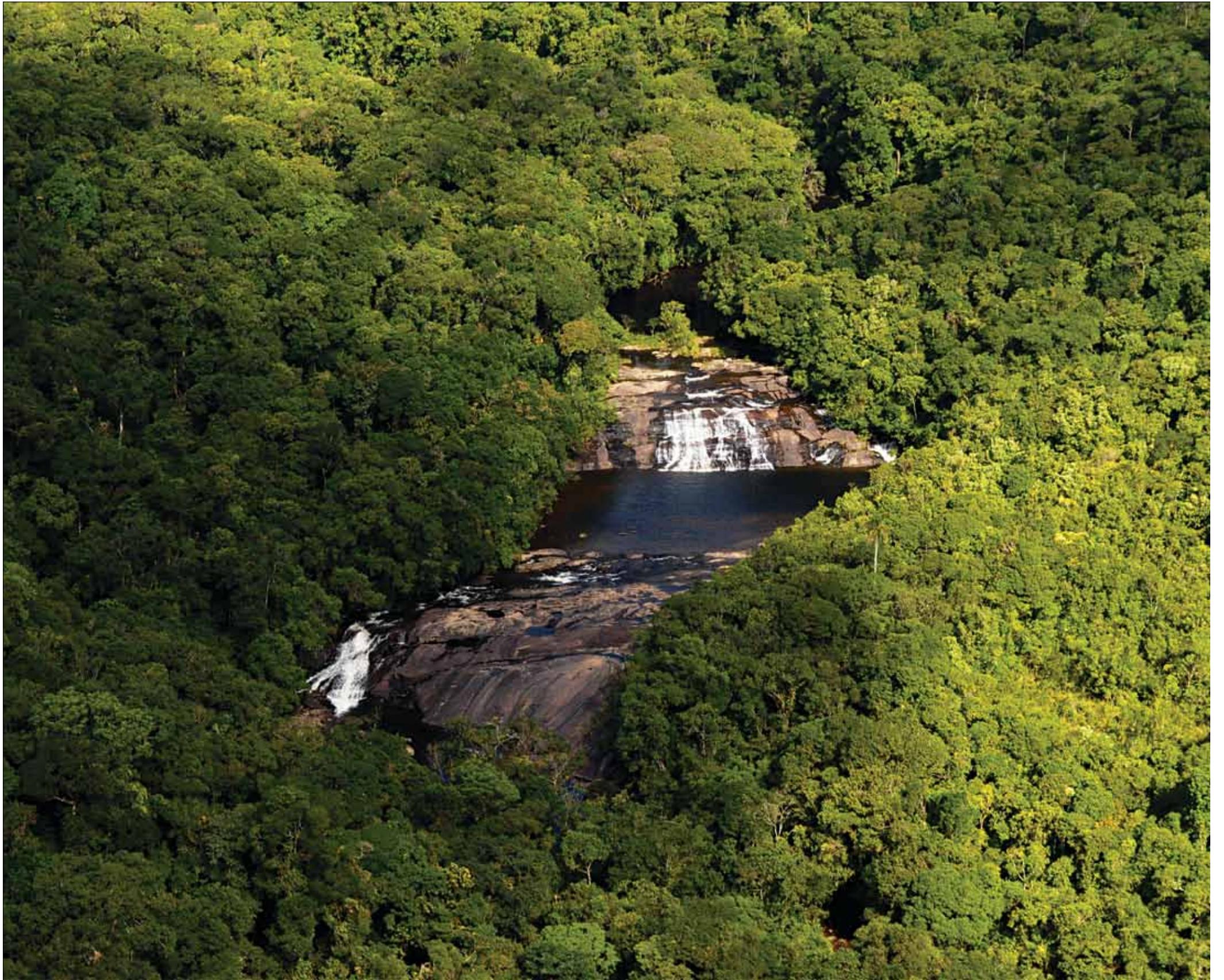
This is also purpose of this booklet: to promote environmental education, a preservation critical aspect. This publication explains the achievements of the Serra do Mar Social and Environmental Recovery Program and its new challenges. Today, as the reader will see, scholars can now say that the Serra do Mar is reasonably free of the most serious threats. It is time to move forward and to celebrate the mobilization of the civil society sectors and the work of dedicated researchers, environmentalists and many public officials who, with sensitivity and hard work, have contributed to making the program successful now and in the future. Enjoy your reading!

Geraldo Alckmin
Governor of the State of São Paulo



Serra do Mar and the Atlantic Forest Mosaics System

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Supporting the state of São Paulo in the implementation of the Serra do Mar and the Atlantic Forest Mosaics System Social and Environmental Recovery Program has allowed the Inter-American Development Bank (IDB) to further expand its operations and experience in integrated development projects.

The salient features of the region have given the keynote of a project that seeks to balance environmental best living conditions for the local population, with the expectation of resettlement of more than 6,700 families and improving water quality, strengthening the management and protection of conservation units, plus an additional protected 20,000 hectares of Atlantic Forest protected and the recovery of 1,240 hectares of the Serra do Mar State Park, in a context of intense commercial activity on the Northern Coast, among other activities.

The geographical, social, and economic complexity in such a rich region has asked for a combined action among multiple instances of the public sector, civil society, and the private sector. To meet this multi-sector condition, different methodologies have been developed and applied, offering family assistance that combines social, cultural, economic, and environmental aspects. The IDB is proud to have helped build these methodologies.

The resettlement action, for example, which has benefited 4,300 families and other 1,000 in urban improvements, has brought innovations that enabled families to feel sufficiently attended before and after moving out from their homes, to the point of seeking for one of fifteen housing options offered.

This is perhaps an unprecedented move for this type of program, considering that the housing units have not been donated. Leaving the house in which one had lived for a long time, due to external factors, it is not an easy decision, even if it is to live in better conditions. For families who live in rural or semi-urban areas, other methods have been developed. To anchor all actions, the synergy between the three institutions has proved decisive: the Urban Housing Development Company (CDHU), the Conservation Authority of the Forest Foundation, and the Environmental Police. The IDB has had the opportunity to contribute to the design of this joint work, and that is precisely why we are confident that the integrated vision of the development is the way to ensure social and environmental sustainability in the long run, benefiting future generations.

Promoting citizenship and better living conditions is the responsibility of all the spheres that are involved. Surely, we will take the innovations practiced in the Serra do Mar to other regions of Brazil, Latin America and the Caribbean, and we thank the State of São Paulo for the opportunity to be part of the program.

Daniela Carrera-Marquis
IDB Representative in Brazil



Better Human and Nature Living Conditions: the Lessons of the Serra do Mar

Atlantic Forest: Social and Environmental Situation, Preservation, and Recovery in the State of São Paulo



Serra do Mar State Park,
Bertioga Settlement.

Brazil is world renowned for the richness of its natural resources. Among them, the exuberant Atlantic Forest, considered to be most diverse forest on the planet, has been of interest since these lands were discovered by the Portuguese expeditions. In just over 500 years, this forest formation, which almost continuously covered all the coast bathed by the Atlantic Ocean – from Rio Grande do Sul to Rio Grande do Norte, about 1.3 million sq. km – has reduced its native vegetation, and today only 7 % has been well preserved in fragments of over 100 acres, according to the Ministry of Environment¹.

The Atlantic devastation began in the sixteenth century, with the cycle of *pau-Brasil* (Brazil wood), and continued for the following periods, being replaced by agricultural cultivation, livestock expansion, industrial development and the technology expansion. The remnants are today mostly in the Southeast – the country's most populous region. According to the 2010 Population Census of the Brazilian Institute of Geography and Statistics (IBGE), about 61 % of the population lives in municipalities located in the regions of the Atlantic Forest. This has caused an intense pressure on it, demanding that both governmental institutions and the society in general plan and develop action plans for preservation, conservation, and rehabilitation of the set of ecosystems that comprise it.

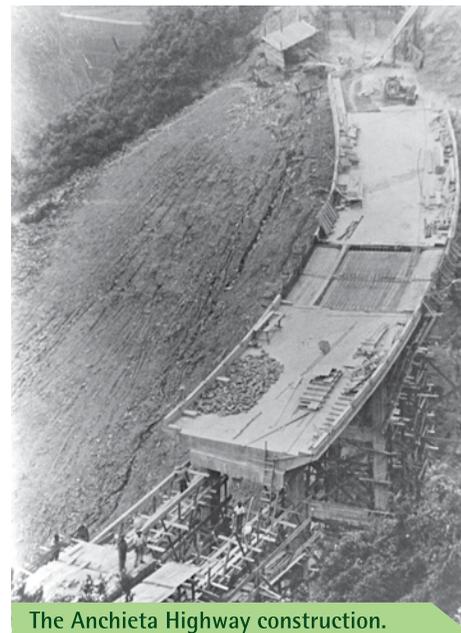
Currently, the largest continuous area of the preserved Atlantic Forest in Brazil is located in the State of São Paulo, specifically in the territories of the *Parque Estadual da Serra do Mar* – PESH (Serra do Mar State Park) of the Jacupiranga Mosaic, the Jureia-Itatins Mosaic, and the Paranapiacaba Mosaic.

It can be asserted that these forests, particularly the transposition of the Serra do Mar, have always been closely linked to the development of the State of São Paulo. The natural barrier between the former Planalto de Piratininga – today the city of São Paulo – and the sea, crossing the Serra do Mar, has had a direct impact in the life and economy of its inhabitants since the first tracks of the Tupiniquin Indians, who moved from the Planalto to the coast during the winter, escaping from the cold and in search of fishing. In the periods following the São Paulo expansion, the relationship with Atlantic Forest has gone through several stages, always keeping a dichotomy between exploitation and conservation: while the agriculture, real estate, and industry development have affected large portions of the forest, the conservation actions have been ensuring the water supply of the metropolitan areas of São Paulo and of the Baixada Santista (TN: region around the city of Santos), the flow of water sources, the soil fertility and the climate balance.

For this reason, even in such complex situations, experts have highlighted the good results and the technological advances that São Paulo has provided the conservation of its natural areas. To the geologist and researcher Álvaro Rodrigues dos Santos "Thanks to the decisive action of São Paulo society, through researchers, scholars, cultural and environmental organizations, public officials, private engineering firms, today we can say that the Serra do Mar, with its stunning forest reserve of the Atlantic Forest, is now reasonably free of major assaults and threats that it has always been a victim since the discovery of Brazil" (SANTOS, 2004: 107).



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The Anchieta Highway construction.

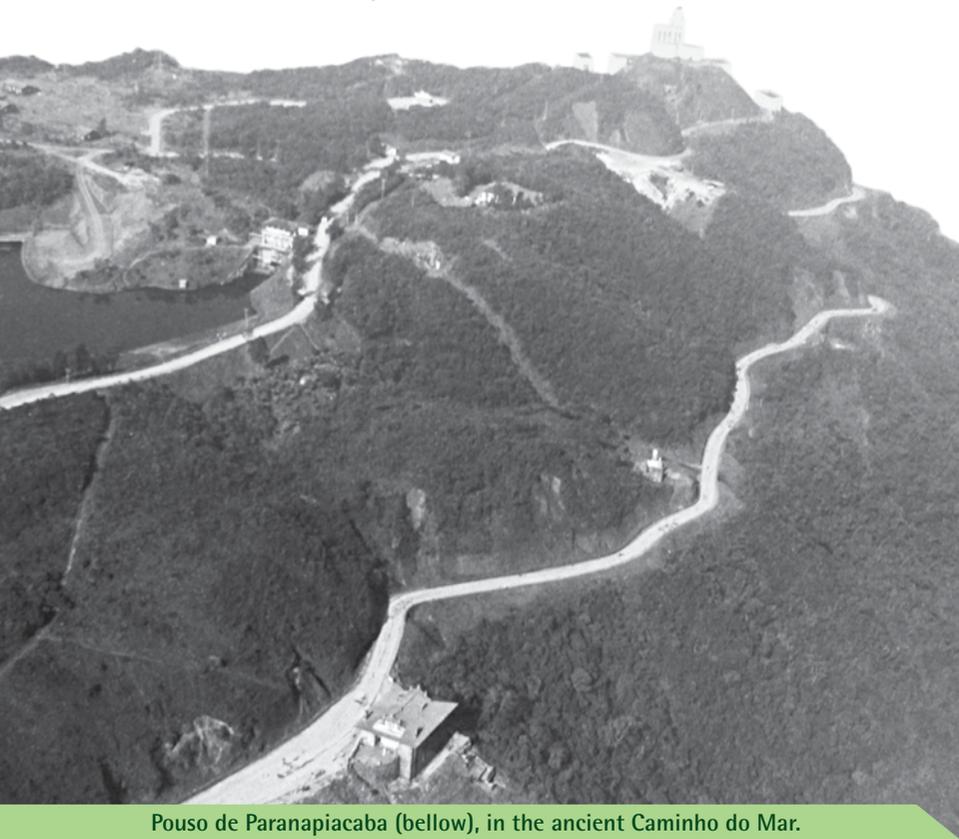


Original situation



Present situation

In fact, the gathering of different efforts by various sectors of society is what has ensured the search for appropriate and sustainable solutions for the Atlantic Forest. It is also what has enabled an intense discussion on the need and importance of management actions and environmental recovery areas. Several study groups and non-governmental organizations have sprung up in defense of the forest, also encouraging a new segment of civil society participation in Brazil². Considering the public administration, the actual in the Serra do Mar transformation in State Park (Decree N. 10,251), still in 1977, contributed to make this section of the forest today the best preserved one in the entire country.



Pouso de Paranapiacaba (below), in the ancient Caminho do Mar.

Today only 7% of the **Brazilian Atlantic Forest** has been well preserved in fragments of over 100 acres. It is the largest preserved continuous area is in the State of São Paulo.

The most emblematic situations of social and environmental vulnerability had their origins in the construction of the Anchieta (1939-1953) and Immigrants (1974-2002) highways. Economically strategic paths for São Paulo and for Brazil, these highways demanded many studies and innovative engineering solutions, and the coming of thousands of workers to perform their work. With time, each worker brought or constituted a family, transforming the workers' old campsite in informal



Works in Anchieta Highway and accommodation of the DER works (below).

1. Ministry of Environment: <<http://www.mma.gov.br/biomas/mata-atlantica>>. Accessed on June 10, 2013. Importantly, we chose to use these numbers because they are official information from the Ministry of Environment, although they are different from the information found in other sources, such as specialized bibliographies and NGOs.

2. In Brazil, non-governmental and non-profit organizations gained strength after the process of political democratization, with the end of the period of the military dictatorship (1964-1985). From the 1990s, there were organizations devoted to environmental preservation, such as the *Rede de ONGs da Mata Atlântica*, which includes about 300 institutions in 17 states.

3. The Serra do Mar hillside areas are defined by their height above sea level (elevation). The *bairros-cota* names in Cubatão derive from there: Quota 95/100 (located outside the Highway Anchieta, Km 52/53 upward lane, 3 km from the center of Cubatão); Cota 200 (50 Km of the upward lane of the Anchieta Highway); Cota 400 (Km 47/48 of the upward and downward lane of the Anchieta Highway); Cota 500 (45 Km of the upward lane of the Anchieta Highway).





settlements. The *bairros-cota* in Cubatão³ originated from this period. In the following decades, the *bairros-cota* had a significant increase of the population, expanding into the area of the Serra do Mar State Park.

The illegal occupation and consolidation of these areas have brought harm not only to the preservation of the Park, but also the actual resident population. The *bairros-cota* were built in one of the narrowing points of the Serra do Mar, therefore, one of the weakest parts of the forest, with high geotechnical risk. In over 40 years of occupation, there has been a worsening of environmental impacts – with deforestation, exploitation of species and pollution of the Cubatão River – at the same time that the vulnerability of families reached alarming rates, with the risk of serious accidents, the economic precariousness of the residents, the precariousness of many households, and the constant accidents caused by the proximity of highways.

Because of this high probability of environmental accidents, in 1999, the prosecution filed a Public Civil Action (Case N. 944/1999) against the State of São Paulo and the Municipality of Cubatão, requiring that thousands of households located in these risk areas were removed from the park. The state became the action defendant for being legally responsible for the area of the Serra do Mar State Park, having to provide an adequate solution for families that would have to leave their homes, besides an action program for the forest recovery.

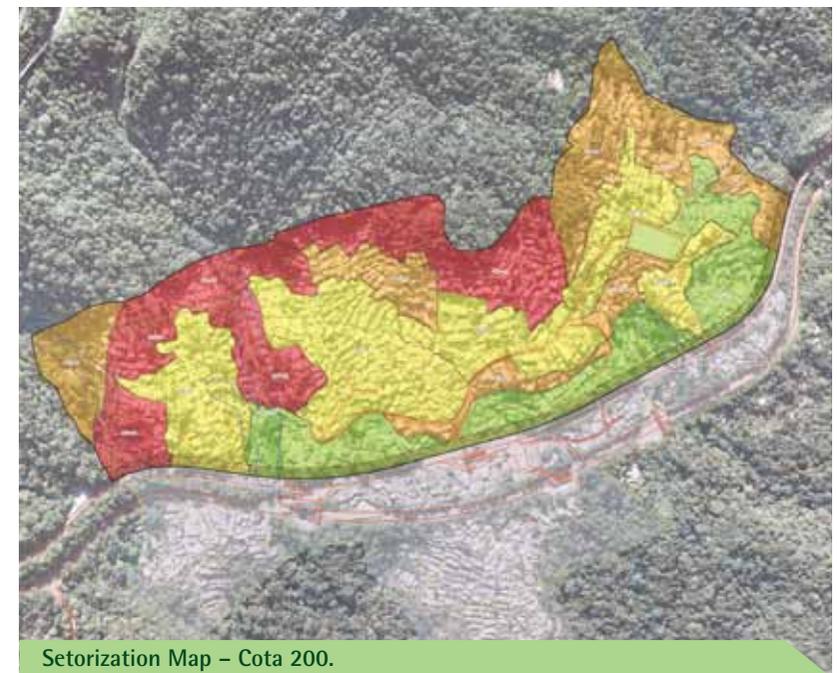
In 2007, the Government of the State of São Paulo started the *Programa de Recuperação Socioambiental em Áreas de Proteção Permanente no Município de Cubatão* (Social and Environmental Recovery Program in Permanent Protection Areas in Cubatão Municipality), which became known as the Serra do Mar Program. The Program objectives were to improve the quality of life of residents that lived in areas located in the Buffer zone of the Park (areas immediately surrounding the perimeter of the park) and to recover these environmental preservation areas. During this period, the *Companhia de Desenvolvimento Habitacional e Urbano do Estado de São Paulo – CDHU* (Housing and Urban Development Company of the State of São Paulo) performed the registration of families of the *bairros-cota* in the municipality of Cubatão,

which identified 7,242 households and established an accurate diagnosis of the socioeconomic conditions of this population.

Concurrently with the completion of registration, the CDHU commissioned a technical report about the *bairros-cota* to the *Instituto de Pesquisas Tecnológicas do Estado de São Paulo – IPT* (Technological Research Institute of São Paulo). This survey has been instrumental in the planning of future interventions in the region, since it has presented a report on the geotechnical condition, through a mapping of risk areas, classified into 4 degrees: R1 low, R2 medium, R3 high, R4 too high⁴.

The basic scope adopted by IPT has obeyed two criteria for defining risk sectors. The first one was related to the sensitivity analysis of land and likelihood of slope instability, from geometric (slope, height), natural (natural hillside) and anthropogenic (slope excavation) indicators. The material present on the slopes, the situation of the surface water runoff and the terrain movement features, such as cracks, fissures, and *degraus de abatimento* (TN: a kind of rotational landslide) in the households and on the ground, were also objects of analysis.

The second criterion estimated the potential damage to dwellings and their residents, considering the position of the dwellings on the slopes and their distances to the critical slopes, besides the degree of vulnerability of the buildings



VERY LOW RISK LEVEL – R1

MEDIUM RISK LEVEL – R2

HIGH RISK LEVEL – R3

VERY HIGH RISK LEVEL – R4

4. OGURA, Agostinho Tadashi; YOSHIKAWA, Nestor Kenji; GOMES, Luiz Antonio; MIRANDOLA, Fabrício Araújo; ALAMEDDINE, Nabil. Programa de recuperação socioambiental da Serra do Mar: mapeamento de risco de escorregamentos nos bairros-cota, município de Cubatão. In: CONFERÊNCIA BRASILEIRA DE ESTABILIDADE DE ENCOSTAS, 5, 2009, São Paulo. Anais. São Paulo: ABMS, 2009. v.2, p. 231-236. 8 p. (IPT. Comunicação Técnica 168750)

5. Instituto de Pesquisas Tecnológicas. Relatório Técnico nº 97 082-205 – 5/34. p. 8.

6. GOVERNO DO ESTADO DE SÃO PAULO. Revista Serra do Mar. November, 2007. Year 1. N. 1. p.11.

themselves, assessing their constructive pattern and level of urban consolidation⁵.

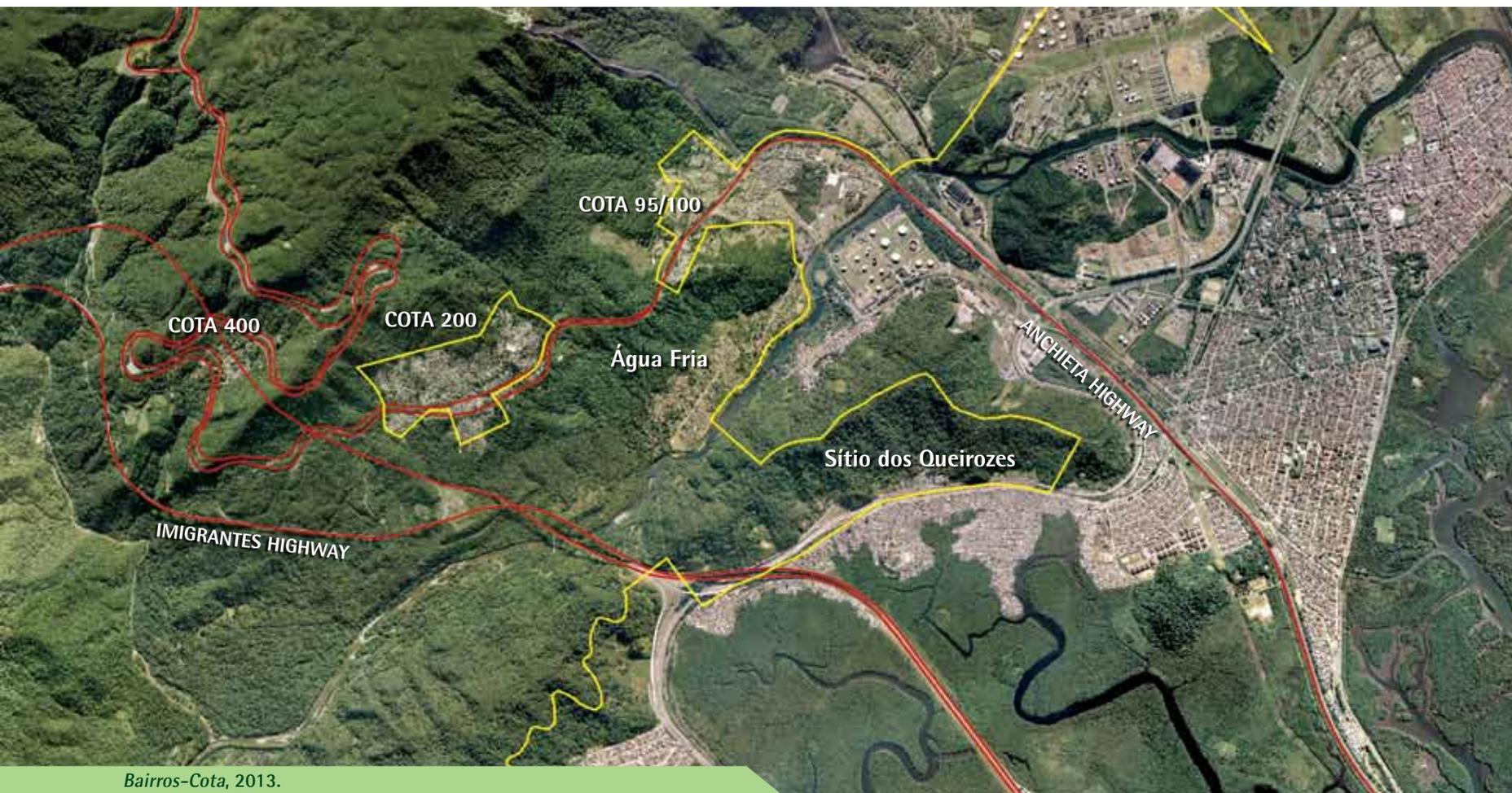
The joint analysis of these criteria could establish a mapping of risk sectors, which spots have revealed, as it can be seen in the Cota 200 example, that most households were located in areas of high and very high risk.

This set of information subsidized an important decision in 2007: the freeze. The freeze was accomplished through supervision of the Military Police, which had 130 policemen, of whom 76 were environmental police. The action primarily consisted in protective measures for the Park, preventing deforestation, fires, the capture of wild animals and extraction of plant species, and monitoring of the various sectors of the *bairros-cota* preventing its expansion, i.e., no new family could move to one of the neighborhoods and no new room or home could be built. Thus, the *bairros-cota* stopped expanding⁶.

Between 2007 and 2008, a series of activities and actions continued the Serra do Mar program, such as: beginning of

the environmental education with the population; completion of the enrollment process and the sealing of buildings; hiring of the basic housing and urbanization projects; attainment of the environmental license exemption for the Program by the Environmental Secretariat; approval of projects in the Municipality of Cubatão; public hearing for the publication of notices of the works program (July 2008).

Also in 2008, the Government of the State of São Paulo started to negotiate with the Inter-American Development Bank (IDB) the financing of part of the actions of the Serra do Mar Program, in order to expand it and make it even more comprehensive. With this, the Program exceeded the limits of Cubatão and the activities began to be planned within the whole scope of the Atlantic Forest of São Paulo, extending throughout the Park (north and south of the state), to the Jureia-Itatins territory and the Units for Marine Conservation, being calling, thereafter, Serra do Mar and the Atlantic Forest Mosaics System Social and Environmental Recovery Program.



Bairros-Cota, 2013.



Atlantic Forest: Global Hotspot



Ilha do Cardoso.

The Atlantic Forest is considered a global hotspot, which means it is one of the planet's richest regions in biodiversity and also one of the most endangered.

The concept of hotspot was created in 1988 by the English ecologist Norman Myers⁷, in order to identify which environmental areas of the Earth that the most needed to be preserved and most needed to be urgently recovered. Myers initially identified 10 hotspots in the different parts of the world: the island of Madagascar, the Brazilian Atlantic Forest (Brazilian Atlantic Coast), West of Ecuador, Colombian Chocó, the western part of the Amazon (Uplands of Western Amazonia), eastern Himalaya, Peninsular Malaysia, north of the island of Borneo, the Philippine Islands and New Caledonia. In 1990, Myers, adding eight other areas to this list, posted a new article.

In the following years, more precisely between 1996 and 1999, the American non-governmental organization Conservation International, in collaboration with Norman Myers, conducted a comprehensive review of conservation areas on the planet, identifying 25 hotspots. Currently, there are 34 identified hotspots in the world⁸, whose characteristics meet the following criteria: regions that are home to at least 1,500 species of endemic vascular plants and have maintained 30% or less of its original vegetation (coverage of the historical habitat)⁹.

Still in 1988, the year that was considered a global hotspot, the Atlantic Forest was enacted Cultural Heritage by the Brazilian Federal Constitution (Chapter VI, Article 225) and, years later, a Biosphere Reserve by UNESCO.

The rich biodiversity of the Atlantic happens by the particularities of its features. It consists of a set of forest formations (Dense Ombrophilous Forest, Mixed Ombrophilous Forest, Open Ombrophilous Forest, Deciduous Forest, Semi deciduous Forest), besides *restinga* (TN: *restinga* is Brazilian ecosystem of sparsely vegetated sand ridges), ecosystems, mangroves, and high mountain grasslands.

Originally, the Atlantic stretched for 17 Brazilian states – from Rio Grande do Sul to Rio Grande do Norte –, besides the eastern track of Paraguay, and the Misiones Province region, in Argentina. Over the centuries, however, the exploitation and devastation of this biome have been so aggressive that the classification as a hotspot alert now has been not only for its rich environment, but also, and mainly, for the need of preserving the forest remnants.

It is estimated that today, despite having been reduced and highly fragmented, the Atlantic Forest is habitat of more than 20,000 plant species – a wealth of diversity greater than that found in North America (17,000 species) and Europe (12,500 species). Out of the native plant species, 8,000 are endemic, that is, native species that only exist in Brazil.

Sources of funds of the First Phase of the Program

	TOTAL SPECIES	ENDEMIC SPECIES
Plants	20,000	8,000
Mammals	263	71
Birds	936	148
Reptiles	306	94
Amphibians	475	286
Fish	380	133

Source: Conservação Internacional Brasil. *Hotspots revisitados – as regiões biologicamente mais ricas e ameaçadas do planeta*. 2005, p. 14.

The high level of rain throughout the year has enabled the existence of a rich and dense vegetation with trees that reach 30 meter high, among which those stand out: *pau-brasil* (Brazil wood), *jequitibá*, *quaresmeiras*, *jacaranda*, *jambo* and *jamboão*, *xaxim* (tree fern) and palm tree, *paineira*, fig tree, *caviúna*, *angico*, *maçaranduba*, *ipê-rosa*, *jatobá*, *imbaúba*, *murici*, and *canela-amarela*. Sub-wood, with smaller trees,

10



Biodiversity Hotspots

Earth's biologically richest places, with high numbers of species found nowhere else. Hotspots face extreme threats and have already lost at least 70 percent of their original vegetation.

- | | | |
|---|--|--------------------------------|
| 1 Atlantic Forest | 13 Horn of Africa | 25 New Zealand |
| 2 California Floristic Province | 14 Indo-Burma | 26 Philippines |
| 3 Cape Floristic Region | 15 Irano-Anatolian | 27 Polynesia-Micronesia |
| 4 Caribbean Islands | 16 Japan | 28 Southwest Australia |
| 5 Caucasus | 17 Madagascar and Indian Ocean Islands | 29 Succulent Karoo |
| 6 Cerrado | 18 Madrean Pine-Oak Woodlands | 30 Sundaland |
| 7 Chilean Winter Rainfall-Valdivian Forests | 19 Maputaland-Pondoland-Albany | 31 Tropical Andes |
| 8 Coastal Forests of Eastern Africa | 20 Mediterranean Basin | 32 Tumbes-Chocó-Magdalena |
| 9 East Melanesian Islands | 21 Mesoamerica | 33 Wallacea |
| 10 Eastern Afromontane | 22 Mountains of Central Asia | 34 Western Ghats and Sri Lanka |
| 11 Guinean Forests of West Africa | 23 Mountains of Southwest China | |
| 12 Himalaya | 24 New Caledonia | ● NEW HOTSPOTS |

Map Conservation International/Brazil, 2005.

is home of many epiphytes, *gravatás*, bromeliads, orchids, mosses and liquens, ferns, begonias and many kinds of lilies.

Regarding the fauna, the previous research indicates that the Atlantic is home to 936 bird species, 475 amphibians, 306 reptiles, 263 mammals and 380 fish. Some of his main examples are endangered, such as the jaguar, *jaguarica* (TN: ocelot), *mono-carvoeiro* (TN: spider monkey), the *macaco-prego* (TN: capuchin monkey), the *guariba* monkey, the *mico-leão-dourado* (TN: golden lion tamarin), several marmosets, the *preguiça-de-coleira*, the *caxinguelê*, and anteater.

Among the birds, the *jacu*, *macuco*, *jacutinga*, *tiê-sangue*, *araponga*, *sanhaço*, numerous hummingbirds, toucans, *saíras*

and *gaturamos* stand out. Among this ecosystem main reptiles, the *teiú* (*Tupinambis merianae*) – a lizard with more than 1.5 meters long –, pythons, vipers and *corais-verdadeiras* stand out¹⁰.

7. Myers, N. (1988). *Threatened Biotas: "Hot Spots" in Tropical Forests*. The Environmentalist. 187-208.

8. Besides the Mata Atlântica, the Brazilian Cerrado is also considered a global hotspot.

9. Conservação Internacional Brasil. *Hotspots revisitados – as regiões biologicamente mais ricas e ameaçadas do planeta*. 2005. 16 pages.

10. Source: (1) the Environment and Natural Resources Ministry website <<http://www.mma.gov.br/biomas/mata-atlantica>>, accessed on Oct. 06, 2013. (2) Enciclopédia Larousse, volume 16, 1998, p. 3.858. (3) Conservação Internacional Brasil. *Hotspots revisitados – as regiões biologicamente mais ricas e ameaçadas do planeta*. 2005, p. 14.



The Serra do Mar and Atlantic Forest Mosaics System Social and Environmental Recovery: Concepts and Guidelines



Serra do Mar State Park, Cubatão.



The Serra do Mar and Atlantic Forest Mosaics System Social and Environmental Recovery program began its negotiation process in 2008, and in December 2010, a contract was signed between the Government of the State of São Paulo and the Inter-American Development Bank (IDB). Their guidelines, however, were based from the work that has already been carried out since 2007, especially the registration of families of *bairros-cota* in the municipality of Cubatão, conducted by CDHU, and the survey of geotechnical risk presented by the IPT.

With the expansion to other regions, the initial scenario has become even more complex. To the Cubatão critical situation and its section in the Serra do Mar State Park, issues have now added up, which are peculiar to parts of the park located along the Northern and Southern coasts, the Marine Protected Areas, and the Jureia-Itatins Mosaic. These areas were in very different stages of preservation and sustainable use, requiring different management actions and recovery, through dialogue with communities of *quilombolas*, *caiçaras*, fishermen, landowners, settlers and other traditional population, as well as

a detailed analysis for the appropriate practices of ecotourism, environmental education, and scientific research.

To equate this plurality of situations, the program has been organized in several fronts, involving several public administration teams. Thus, in this first phase, BRL\$ 877 million funds were estimated for the most emergency preservation and recovery activities of the Atlantic Forest, as well as the resettlement of families living in risk areas and upgrading of settlements located in areas in the process called *desafetação* (alienation) of the Serra do Mar State Park.

Resources allocated to the First Phase of the Program			
SOURCES OF FUNDS	AMOUNT (BRL\$)	VALUE (BRL\$) 2.28	%
Inter-American Development Bank	369,360,000	162,000,000	35
State Government of São Paulo and others	702,240,000	308,000,000	65
TOTAL	1,071,600,000	470,000,000	100



Southern Coast: to the left, Ilha Comprida; to the right, Iguape.



According to the contract between the State Government and the IDB, the main objective of the Program is:

To promote the conservation, sustainable use, and environmental restoration of the Serra do Mar, the Juréia-Itatins Mosaic territory, and the Marine Conservation Units and their surroundings, all in the state of São Paulo. The program actions will generate social and environmental benefits and promote the effective protection of biodiversity and water sources that supply the metropolitan area of São Paulo and Baixada Santista. (SÃO PAULO. STATE. LEG/SGO/CSC/IDBDOCS: 35029934. Single annex)

This general objective has more detailed lines of actions, which were structured and grouped into three major components:



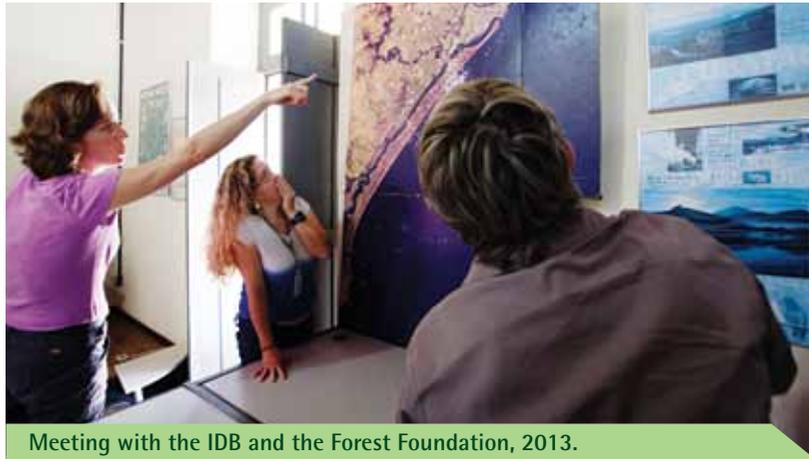
The Program actions will generate social and environmental benefits and promote the effective protections of biodiversity and water sources that supply the metropolitan area of São Paulo and Baixada Santista.



Southern Coast, Ilha do Cardoso.

Each of these components, which will be detailed below, has specific objectives, which actions have been developed through the implementing agencies of the program: (a) the State Environment Secretariat, through the Forest Foundation; (b) the State Housing Secretariat, through the CDHU (Housing and Urban Development Company of the State of São Paulo Development); (c) the Planning Secretariat through the *Unidade de Gerenciamento do Programa* – UGP (Program Management Unit).

To operate these components, the contract between the State Government and the IDB has established the creation of the *Unidades de Execução do Programa* – UEPs (Program Implementation Units) in the Environment and Housing secretariats – each with a minimum team necessary to carry out the work. The contract also required, as a precondition for the start of activities that these executing agencies and their teams would make a general agreement with the Planning and Regional Development Secretariat, and also in this area, indicated that the Forest Foundation would hold specific



Meeting with the IDB and the Forest Foundation, 2013.

agreements with the Institute of Botany and the Environmental Police to develop their actions.

With so many teams working on such a complex process, the contract has also highlighted the establishment of an UGP (Program Management Unit), to ensure the success and integration of actions taken: the UGP of the Serra do Mar and the Atlantic Mosaics Systems Social and Environmental Recovery.

Connected directly to the Office of the State Governor, the UGP has been established with the task of managing the fulfillment of the strategic objectives of the Program and perform the necessary actions for interagency coordination, conducting the physical, technical, institutional, and financial monitoring of the different components and activities. In addition, the UGP has been responsible for interfacing with the IDB technical teams in the process of implementing the Program, as it has been the official spokesman of the government authorities of the State Government and other relevant public bodies.

With the implementation of all this planning and management model, this Program has introduced a new

process integration in actions related to housing and the environment in the State of São Paulo, because it is definitely not a program of resettlement of families, or building housing units, or environmental protection, or supervision of protected areas. This is not a program of individual projects, but of integration of all of them through a single planning for joint actions with overall and articulated management.

The integration between the technical teams of the State of São Paulo and of the IDB has also been very successful and responsible for the smooth progress of the deployment and management actions, because besides the financial support, it has also evaluated the entire methodology resettlement of families, the development and implementation of management plans, the conservation and protection of natural resources, and has primarily dedicated to monitor the social and environmental impacts of the program, by means of assessments conducted by independent consultants.

With very strict operational policies, this partnership with the IDB has ensured a high standard in carrying out recovery actions and resettlement of families, as it is a program run through funding that must comply with the provisions and goals established in the contract. In addition, the monitoring system has been constant through biannual surveys that assess the social and environmental indicators, and this practice will continue after the end of the Program.

Regular audits have been also carried out to evaluate the physical and financial implementation of the Program, contributing to effective and transparent management of resources.

For this reason, the UGP managers and the IDB team estimate there has been not such a positive experience like this one, in size and scale, in any other region of Brazil and there have not been any news about something similar in other countries.



Northern Coast, Ilhabela.



Serra do Mar State Park.

Component

1

Protection of Fully Protected Conservation Units

Conservation Units (CUs) are territorial and marine areas that play a significant role in the maintenance of biological diversity, since they are attributes of natural and/or cultural issues

that must be maintained, preserved or have their resources sustainably used. In the Serra do Mar and the Atlantic Forest Mosaics System Social and Environmental Recovery Program, the labor protection, restoration and management actions have been implemented by the Forest Foundation that, to better detail the actions, divided its activities into three distinct lines of work:

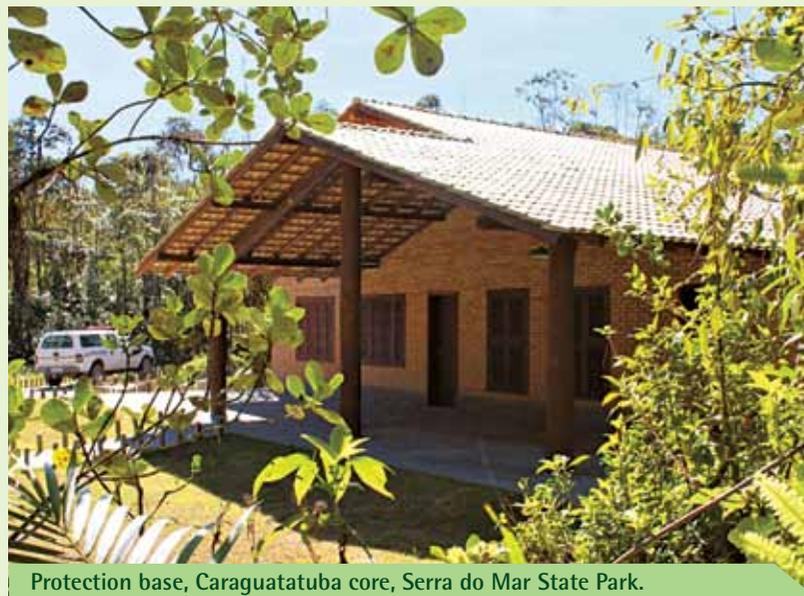
1. Implementation of the *Plano de Manejo do Parque Estadual da Serra do Mar* – PESH (Management Plan for the Serra do Mar State Park), by adapting the Park's boundaries, improving its infrastructure protection and public use. Recovery of environmental liabilities through reforestation and restoration of approximately 90 acres in Cubatão; about 200 open acres of exotic species and in process of recover; about 850 hectares of forest in the process of enriching its biodiversity; and construction and operation of a Botanical Garden.
2. Support for the creation and deployment of the Jureia-Itatins Mosaic, contributing to the consolidation of the Ecological Station, Parks and the Sustainable Development Reserves that have been created. This action has contributed to the drafting of the Bill for the *re-categorization of the Ecological Station and the creation of Mosaic*; the consolidation of Management Plans; improvement of the existing infrastructure of management; protection and public use; staff training; and incentives to the adoption of sustainable economic activities among communities.
3. Support for the operation of the new Mosaic of Islands and Marine Protected Areas, which includes the development and early implementation of the Management Plan of the Marine APAs (TN: Environmental Protection Areas); the strengthening of the management system; the awareness work of the fishermen population to promote sustainable fishing practices; and the project for the implementation of ecotourism and marine sports good practices.

Among three groups of CUs, the Serra do Mar State Park, which has 322,000 hectares and passes through 24 municipalities in the state,

is the most advanced from the point of view of the legal and institutional frameworks for the conservation, since it was established as a park in 1977 and its Management Plan was approved in 2006. Therefore, under the Program, the actions involving its conservation have aimed at implementation of this Management Plan, through several lines of activities.

The Forest Foundation has also been proposing studies for a readjustment of the boundaries of the Park in the critical areas of socio-environmental conflict, which has allowed the incorporation of 17,000 hectares of Atlantic Forest to the Serra do Mar State Park.

Infrastructure projects have also been carried out that contribute to the improvement of environmental management, such as the implementation of visitor centers (Curucutu and Itutinga-Pilões Visitor Center) and support bases within the Park (as the headquarters of the Itutinga – Pilões, Caraguatatuba, Cunha, Curucutu, Catuçaba settlements, etc.), implementation of a signage system for trails and of the improvement of communication with the public through exhibitions, leaflets, posters etc., contributing to the visitor environmental education and proper use.



Protection base, Caraguatatuba core, Serra do Mar State Park.



Trees for the replanting in the *bairros-cota*.

However, the recovery of the areas of the Cubatão municipality is among the most important recovery actions of the Atlantic Forest in the Serra do Mar State Park where the irregular settlements were located, whose families have been resettled in adequate and sustainable housings under the Program (Component 2). About 90 acres are in the process of recovery with replanting actions, and other large territorial portions have been in the biodiversity enrichment process.

Finally, the implementation the Cubatão Botanical Garden has been planned in the area released by the Água Fria settlement, which will provide the recovery of 100 hectares for the Serra do Mar State Park and will count with eight collections of plant species on display and 6 km of built trails, creating 55 new jobs – 30 of which will be reserved for the community dwellers.

In the Jureia-Itatins Mosaic, which has 110,800 acres, the first result achieved by the Program was the passing of the legislation that re-categorized part of the Ecological Station as Park areas – the Prelado and Itinguçu Parks – and *Reservas de Desenvolvimento Sustentáveis* – RDS (Sustainable Development Reserves) – the Barra do Una and Despraiada. This has enabled the implementation of management plans for the six units that compose it, performing actions for conservation and sustainable use that respect the preservation of the area and the permanence of the traditional communities, ensuring the social and economical development of families.

The infrastructure of management, protection and public use, management training, and system for communication and dissemination have also been re-adjusted in order to signal the accesses of the headquarters, of the five centers and of the implanted tracks, with a language directed at the school public of the neighboring municipalities and at the settler and visitor population.

As the two *Reservas de Uso Sustentável* (Sustainable Use Reserves) were

implanted in this mosaic, actions have been undertaken with the traditional communities, so that they can maintain sustainable economic activities. This has been one of the most important projects of environmental conservation, as families living in these regions have very deep roots with the place, usually from birth, where their ancestors had also been. The dialogue with the communities has been permanently marked by tradition and memory, even when it has proposed reallocations to improve the preservation of local biodiversity. However, the direct support from residents of these communities can ensure the effectiveness of preservation, through a relationship of respect and sustainable return to nature.

The Marine Conservation Units, with islands totaling 46,000 acres in total, have required a different management model. Therefore, agreements have been established between 19 Marine Conservation Units and collaborative arrangements for the coastal management with non-governmental organizations.

The awareness of society and a promotion of sustainable fishing practices, tourism and water sports are important direct results of the Program, having as its end, the goal of the eight coastal municipalities informed and made aware of the objectives of marine APAs, 12 organizations of fishermen trained to responsibly practice the activity, and management councils empowered for the three APAs.

Finally, one of the most significant and important actions of the Program for the protection of Conservation Units is the development and implementation of new management plans for the three (South, Central and North) coastal APAs and the Ilha Comprida Marine APA, in the Southern coast. The deployment plans will be added to the installation of basic infrastructure to extend protection and to support public use in the Ilha Anchieta, Ilhabela, Laje de Santos, Xixová-Japuí and Ilha do Cardoso State Parks.



Management Plan Meeting of the North Coast Marine APA.



Component
2
Social
Investment in
the Serra do Mar
State Park

Since 2009, the activities performed from the component 2 of the Program have promoted one of the most significant changes the landscape of the state of São Paulo.

After all, for decades, people crossing the Serra do Mar by its main routes – Anchieta and Immigrants highways – have got used to seeing the occupations known as *bairros-cota* in the municipality of Cubatão.

Considered one of the key risk areas of landslides of the coastal area of São Paulo, the urban settlement on the slopes, as we have said, has its origin in the 1940s, with the construction of the Anchieta Highway. In the 1950s and 1960s, with the construction of the Imigrantes Highway and development of the Cubatão industrial center, these popular settlements became denser.

This Program component has been carried out by the Housing and Urban Development Company of the State of São Paulo (CDHU) and has comprised assistance not only to the *bairros-cota* residents, but also the families living in other regions of the Park. In total, approximately 9,100 families will be benefited from upgrading and resettlement actions, divided into two phases: the first one focused on the resettlement of Cubatão's families; the second one in the municipalities of Northern and Southern coast of the State.

A Resettlement Plan has been developed for 6,700 families, of whom 5,300 are from the 500, 400, 200, 95/100, Pinhal do Miranda, Água Fria, Sítio dos Queirozes *bairros-cota*. The other 1,400 families come from the other 22 municipalities that make up the Serra do Mar State Park.

Already in the consolidation of a settlement part of the 200 and Pinhal de Miranda *bairros-cota*, about 2,400 families have been benefited through upgrading works, creating access and installation of adequate basic services such as sanitation, and others. Besides upgrading, land tenure regularization will also take place in the consolidated neighborhoods.

The early work involving resettlement has usually caused discomfort, distrust, uncertainty, and doubt on the part of residents. Due to discredit on the government actions – because of the historic urban interventions in Brazil – many families do not believe in the project implementation. In the case of the *bairros-cota*, this people's perception was corroborated

by the lack of infrastructure in various sectors, such as water and sewage networks, street lighting, and paving, among others.

To reverse that judgment, the field teams in the process of resettlement of families, formed by professionals from various fields – engineers, social workers, architects, environmental officers, psychologists, teachers, geologists, historians, among others – had to start a transparent dialogue with the population. In this process, the settlement freeze that took place in



Meeting with residents for discussion of the upgrading project.

the area proved to be very efficient. As the Environmental Police remained 24 hours in the fields, when the program was announced, there was no change or expansion of irregular settlements of the sector. Residents that had to do some kind of repair work on their home informed the Environmental Police staff, who authorized the entry of building materials just for the requested case.

Next, 11 polytechnic offices have spread across the *bairros-cota*, where the family assistance has been carried out and the projects have been developed with the community, besides serving as the basis for technical support. Ongoing activities have been carried out with the residents, both for training and socioeconomic and cultural development, and the housing assistance.





Between Dec. 2010 and Feb. 2011, 41 meetings were held in the areas to present the Program with the presence of more than 1,800 residents. At these meetings, the population was informed about the issues involving the need of resettlement, from environmental remediation to risk situations in which many households were. Next, possibilities for housing assistance were also presented, as well as the architecture and urban designs of the new housing complexes that were being built by CDHU.

This process is not as simple as it may look through the description. It is complex and, in general, shows the conflict between the need for change and the desire to stay from the part of residents. The negative reaction has been common in the first presentations of the project, which has required new approaches of the teams, in a forward and backward process, dialoguing, explaining and coming up with new solutions that take time, weeks, months, and even years. The knowledge of the details of the program, the transparency in the dissemination of information, the constant presence of the teams in the neighborhoods, these teams empowered to balance the demands, have given credibility and have provided a re-reading of the resettlement process to the residents.

The first families called to be assisted were those who were in high-risk areas, such as Grotão, Pinhal do Miranda and Cota 200. Meetings were held according to the blocks and sectors, so that these neighboring families could get familiar with the Project at the same time, being aware of how it would be like to their sector. At these meetings, in addition to discussing the Project, residents elected their representatives, known as community agents.

At each meeting, the residents could elect as many representatives as they wanted. With this, more than 200 were chosen in different sectors at the beginning of the work. All elected agents attended a course called *Formação de Agentes Comunitários de Urbanização* (Training of Urbanization Community Agents). The aim of this course was to strengthen the representation and participation and also to promote the creative potential and the ability to reflect on the transformations of the neighborhood, providing the creation of a network of multipliers able to identify problems, propose solutions, and involve the whole population in the urbanization process. The course, lasting about six months, was divided into modules on the following subjects: I. Urbanization and Community Protagonism; II. Memory, Citizenship, and Community Communication; III. Social Inclusion and Human Promotion; IV. Environmental Transformation and Sustainable Local Development. At the end, all participants receive certificates.

This work methodology developed in the Program had already been formatted and enhanced by the CDHU the over years, being the Jardim Pantanal Upgrading Project an important laboratory. Other activities coordinated with other families have also had positive results in the process of resettlement and upgrading, promoting the residents' citizenship and social inclusion through income-generating activities, community organization, local and sustainable development:



Art in the Cotas

in the "Art in the Cotas" studio, daily activities of the Artistic-Urban Intervention Course have been developed, promoting art education through the techniques of mosaic, drawing, painting, stencil and artistic interventions in urban areas. The goal is to raise the self-esteem of residents and promote the construction of new community identity. The residents themselves have applied all techniques learned on the facades of the houses in the neighborhood, alleys, and squares. Today, the project has a visual identity and, in addition to interventions in public spaces, has been producing a line of stationery and clothing. Chromatic and artistic Interventions have already been made in 81 dwellings and four public spaces (squares, walls, alleys, etc.). From 2011 to 2013, six courses were held and certified more than 120 dwellers in "Intervention in Urban Art" courses.



ComCom Project

ComCom means Community Communication. This project promotes training in different media, with the purpose of appropriation, production, and dissemination of information by the community. In addition to training in newspaper, radio, TV and social media, the ComCom has had a great work to mobilize the families from the Serra do Mar Social and Environmental Recovery Program. More than 1,500 *bairros-cota* residents have already participated in the more than 400 project activities, including workshops, film screenings, memory booths, mobilization events and documentaries. The ComCom has produced the bi-

monthly journal called *Morro Vivo! Viva o Morro*, which is in its 17th edition with a circulation of 3,000 copies. There is also a radio program, called *Voz do Morro*, broadcast live three times a week, already totaling 220 editions. There are two TV programs entitled *Comunidade em Ação* (Community in Action), through partnerships with TV Polo and TV UNISANTOS, and so far 26 programs have been made. The training activities have also produced good results, and ComCom has delivered certificates to 75 residents trained in the techniques of reporting, editing, video, photography, writing, and speech.



Nesdel

the *Núcleo de Economia Solidária e Desenvolvimento Local*, (Center for Solidarity Economy and Local Development) has operated, valuing the local culture and potentials, promoting training, debates, and mechanisms for generating income based on solidarity economy and fair trade. This project has been organized by a group of women that articulates with other activities and projects of other programs managed by the CDHU. The Nesdel has promoted and enabled activities to the professional and industrial cooking, besides crafts, stimulating participatory entrepreneurship through partnerships, networks of ongoing formation, professionally acting at events and fairs (receptions, coffee breaks, brunch, lunches, etc.). Currently, the program has involved 21 women, who are divided into two groups: *Empreendedoras da Serra do Mar* (TN: food-related) and *Fabricadeiras* (TN: handicraft related)



Cota Viva

Joint Initiative of the CDHU and the Forest Foundation, Viva Cota Project is intended for the *Bairros-Cota* residents and it will be held at Núcleo Itutinga-Pilões of the Serra do Mar State Park, where an

Environment School has been built, which will host a series of actions to form the Environmental Community Agents.

After four months of theoretical and practical course, participants enrolled in the project will receive a certificate and will be able to work at, for example, the very reforestation foreseen in the Program, which indicates the 80 hectares of vacant degraded areas by the irregular settlements. These agents may also participate in the implementation of the Botanical Gardens scheduled for 2016 in the area of the Água Fria current neighborhood. The first class will have 30 students, and followed by others, forming a total of four classes over 12 months.



Feira Cultural e Gastronômica dos Bairros-Cota

(Cultural and Gastronomic Fair of *Bairros-Cota*): This event is part of the Social Projects developed by the solidarity economy practices of the local community, valuing the resident culture and history. The fair is in its 3rd edition and has already become part of the local calendar.

In addition to the socioeconomic and cultural activities that have qualified this Program, it is important to highlight the quality of the housing units and the architecture and urban designs being built for the resettlement of families.

In recent decades, the CDHU has been improving the social housing projects that have implemented throughout the State of São Paulo. Today, the housing units have a number of items that bring more comfort to the residents and more sustainable use of resources, such as solar heating, individual water consumption meters, floors with drainage systems, higher ceilings, greater ventilation and lighting environments, Universal Design of units – ensuring accessibility –, elevators in buildings of four floors or more, plus all the leisure facilities for children, landscape work in gathering places and recreational areas, trade structures, among others.

In this program case, the quality of the new units has also been associated with the plurality of offered types. The families, from the established criteria, could opt for apartment two or three rooms in four or nine-floor buildings, houses, overlapping houses, finally, there was a great





20



Infrastructure Improvements.

diversity of projects, which aimed to create a qualified neighborhood, with business units and public and community facilities. Thus, the role of the *Unidade Gestora do Programa* – UGP (Project Management Unit) has been to coordinate with other secretariats of the State, such as Health, Education, Transport, the deployment of schools, kindergartens, basic health units, bus lines etc., which could meet the population needs.

As families were moving to the new units, the Program has also identified new demands. As much as all managers and technical teams can plan interventions, it is only the interaction between the public power and the residents that reveals the true needs for solutions to everyday problems. For this reason, the constant monitoring of the work steps evaluates the effectiveness of actions taken, but also reorganizes, redesigns, and redefines the activities, which naturally changes the initial scenario foreseen in the contract to appropriately deal with matters that are imposed.



Infrastructure Improvements.

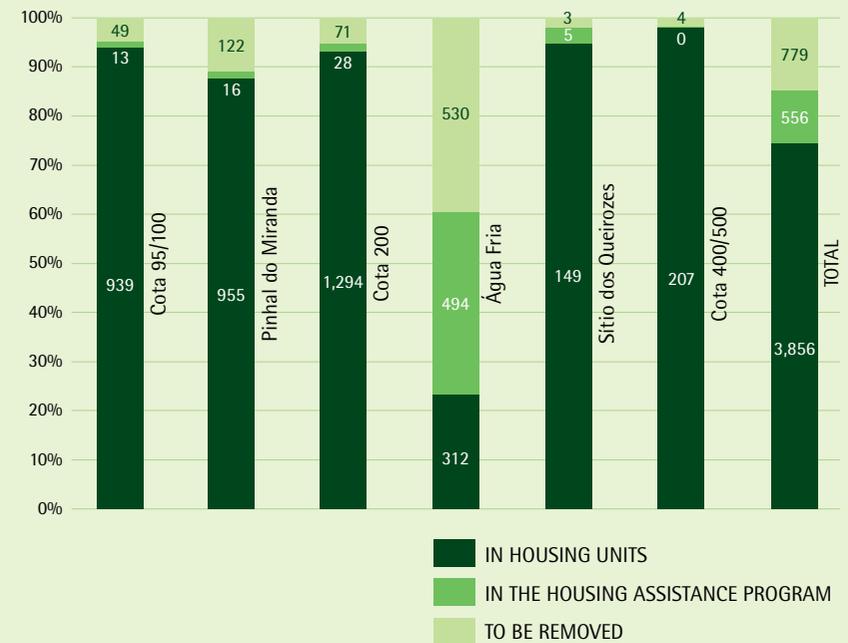
With this, and from all stages of interaction and housing assistance options, from which residents could choose, from March 2010 to September 2013, the program resettled 3,856 families in new housing units; other 556 are receiving *auxílio-moradia* (rental assistance) while they were waiting the completion of the works of new housing units and apartments; and 779 will be removed from their homes in the *bairros-cota* for projects that will be built by CDHU until 2016.

After moving to the apartment or house, the residents have been monitored by the post-occupation team, which have guided them through the new roles they now have in the condominium life.

It is important to note that a small portion of the households located in Cota 200 and Pinhal do Miranda, which was not at risk, remained in the neighborhoods. Within the program works, all these areas have been receiving adequate infrastructure to ensure better quality of life for families, such as paving, drainage, street lighting, and implementation of water and sewage networks, among others.

This decision has been taken together with community residents and has been directly followed by their leaders at all stages. This resident's work of residents has also been central so that upgrading has always presented sustainable solutions for both families and for the forest itself.

Besides de action in Cubatão, the resettlement of 1,400 families that lives in areas of social and environmental risk or irregular occupations in Serra do Mar State Park, will be held. Finally, the resettlement projects of the second phase of the program are ongoing, with the realization of social and technical diagnostics in the buffer zone of Serra do Mar State Park.



Resettlement of the *bairros-cota*, families, November 2013.



Component
Monitoring of Fully Protected Conservation Units

Preserving natural areas requires preparation, technology, knowledge, and supervision. Component 3 of the contract between the State Government and the IDB is one of the most important aspects of the Program: the Monitoring of Fully Protected Conservation Units. Basically, this component involves the training and the equipment provision to the Environmental Police (PMA) for the implementation of surveillance activities in the terrestrial and marine Conservation Units, as well as for the development of a monitoring system.

Its execution is the responsibility of the Forest Foundation and the Environmental Police and it is the result of an agreement made through this Program, with guidelines for the environmental monitoring and inspection. Component 3 has a value to be highlighted for its innovative aspect. It is an integrated work undertaken by competent bodies that, in an unprecedented manner, has shown impressive results.

The role of the Environmental Police has been critical to the Program since its inception, especially in the freeze action of the *bairros-cota*, besides inspecting areas 24 hours a day, preventing them from getting denser after the announcement of the Program. With the implementation of other actions of the Program, this field performance has been enhanced, from the management point of view, as well as of the equipment conditions for holding land and sea operations.

Within the management framework, the most important step has been the integration of the Environmental Management System of the Environmental Police to the Operating System of the Military Police. The data integration has enabled to establish the profile of the environmental offender and connect with his background records, providing the data for the entire state system, being possible the search through the access to the operating system at the time of occurrence by the agent, allowing safe execution of the enforcement activities. There is the possibility of data entry by the user at time of the occurrence, reducing manual labor for entering data into the system.

To perform the operations, two important plans for monitoring the protected areas have been created: the *Plano de Policiamento e Fiscalização das Unidades de Conservação* – PRO-PARQUE (Policing and Supervision Plan

of Protected Areas) and the *Plano de Policiamento Ambiental Marítimo* – PRO-MAR (Marine Environmental Policing Plan). Respectively, these programs have guided the actions of monitoring the terrestrial areas – parks, ecological stations, eco-tourism trails, roads, among others –, and of monitoring in marine areas – marine islands and APAs. Between January 2011 and June 2013, there were 1,230 terrestrial operations, 5,900 routine actions of terrestrial monitoring, 99 marine operations, and 448 routine actions of marine monitoring. These monitoring plans implemented under the Serra do Mar Environmental Recovery Program was so successful that it was adopted throughout the State, receiving the name of *Plano de Fiscalização das Unidades de Conservação de Proteção Integral* – SIM (Monitoring of Fully Protected Conservation Units Plan) and *Plano de Fiscalização Integrada da Atividade Pesqueira nas Áreas Costeira do Estado de São Paulo* – SIMMAR (Fishing Activity Integrated Monitoring in the Coastal Areas of the São Paulo State (SIMMAR).

Through the Program new equipment has also being purchased for the Environmental Police, allowing the monitoring of terrestrial areas and the marine protected units to be improved. Today, 5 new vessels are available to the Forest Foundation and the Environmental Police for monitoring and surveillance of coastal areas. Furthermore, 65 new cars have been available for land patrol, and the purchase of 1 aircraft has enabled overflying and supervising the more protected areas and areas of difficult access of Serra do Mar State Park, and of the state islands and marine areas, making possible monitoring 100% of the Program area.

Still as improving management methodology, there have been several infrastructure projects in the Conservation Units, such as construction of administrative centers, surveillance sentry boxes, and visitor centers, improving the Surveillance and Monitoring System of the area. Executive Projects have also been developed for the construction of the 1st and 3rd Battalions of the Environmental Police, besides a Training Center for the qualification of police agents.

11. Inspection actions characterized by a joint planning, defined goal and use of more than one patrol team.

12. Inspection actions of daily routine characterized by a patrol team.

Sustainable Development: the Future of the Atlantic Forest in São Paulo



Ilha Anchieta.

The program activities of the Serra do Mar and Atlantic Forest Mosaics System Social and Environmental Recovery will not be terminated. All work of the Environment and Housing State Secretaries, through their respective implementing bodies, and the Forest Foundation, and the CDHU, and coordinated by the Unidade Gestora do Programa (Program Management Unit), will continue through the actions of the Sustainable Development of the São Paulo Coast program.

Keeping the same rigor and the same methodology of the program developed in partnership with the IDB, the Sustainable Development of São Paulo Coast program will run through a financing agreement between the São Paulo State Government and the Banco do Brasil.

Counting on the support of Civil Defense too, the main lines of work of the Sustainable Development of São Paulo Coast program have amplified the actions, focusing on the most vulnerable areas of the urban centers, especially those that are located in the Northern and Southern coast, where there are irregular settlements. These sites have presented environmental risk, with imminent landslide, flood, and pressure situations to the conservation unit areas, among others. First of all, pilot tests will be performed to implement a settlement monitoring system through videos and pictures.

Every diagnosis of these areas has been carried out within the Serra do Mar and Atlantic Forest Mosaics System Social and Environmental Recovery program and it is expected to achieve the following objectives:

Sustainable Development Program of the costal area

SOURCES OF FUNDS	AMOUNT (BRL\$)	%
Banco do Brasil	607,000,000	51
São Paulo State Government and others	590,000,000	49
TOTAL	1,197,000,000	100



Serra do Mar State Park, Bertioga Settlement.



Environmental Restoration and Monitoring

- ✦ Settlement freeze and Monitoring of 131 areas, 44 of which are located within the Serra do Mar State Park;
- ✦ Structuring of 26 *Salas de Situação* (Situation Rooms) for data sharing of the Environmental Monitoring System (13 installed in the Municipalities; 1 in Civil Defense; 1 in the State Housing Secretariat; 3 in the Environmental Police; 3 in the State Environment Secretariat; 4 in the Forest Foundation; and 1 in the Public Prosecutor's Office);
- ✦ Training and structuring of the Baixada Santista, and the North and South Coast municipalities, for operation of the control systems;
- ✦ Implementation of the Environmental Monitoring System in the Fully Protected Conservation Units and other areas subjected to risk and human pressure by irregular settlements;
- ✦ 100 % protection of environmental and terrestrial and marine resources;
- ✦ Recovery of vacated areas in the upgrading process and removal of risk areas (250 hectares).

Risk Areas and Upgrading

- ✦ Production of 16,000 housing units to assist the families in areas of risk in the priority areas and in the intervention areas of the Northern Coast, Baixada Santista, and Southern coast;
- ✦ Assistance to 9,000 families through upgrading works, with the implementation of infrastructure and public and community equipment;
- ✦ Intervention in irregular settlements with further expansion;
- ✦ Assistance to the municipalities with a history of low investment and greater social/economic pressure (pre-salt oil exploration);
- ✦ Fostering local development and community organization through the Social Technical Work replicating the Serra do Mar models.

Territorial Planning

- ✦ Territorial management implementation, as set out in the *Zoneamento Ecológico-Econômico* – ZEE (Ecological-Economic Zoning) of the Northern Coast and Baixada Santista;
- ✦ Implementation of the Action Plans of the ZEE of the Northern Coast and Baixada Santista;
- ✦ Equipping and empowering of the local governments for implementation of the Action Plans of the ZEE;
- ✦ Designing of an Integrated Information Network for dissemination of knowledge to the involved institutions, interested communities and the mainstream media;
- ✦ Technical assistance, support and training to municipalities involved in the program for managing at-risk units and monitoring of new irregular settlements in areas of environmental protection and urban interests.



Serra do Mar State Park, Picinguaba Settlement.



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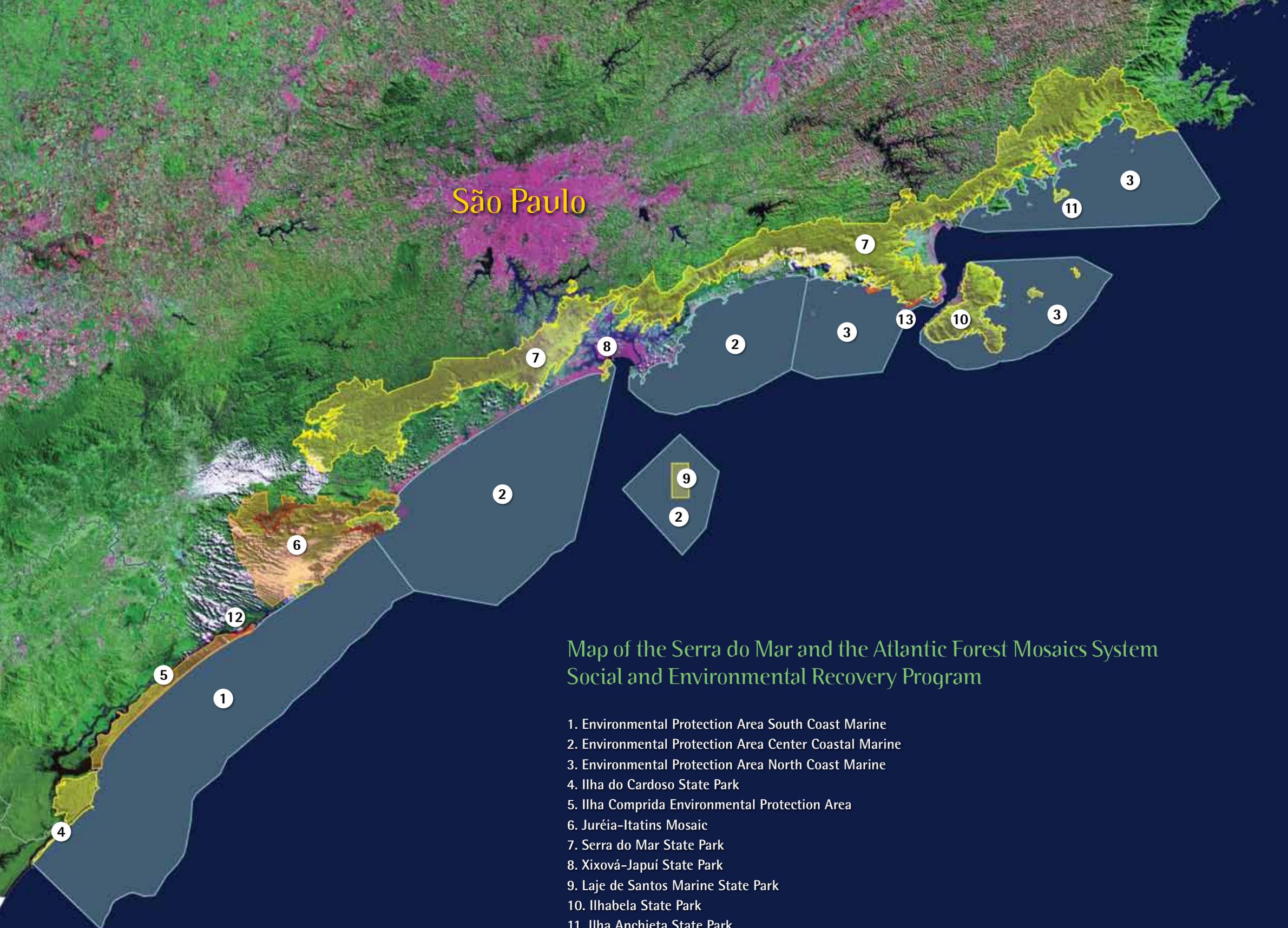
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Map of the Serra do Mar and the Atlantic Forest Mosaics System Social and Environmental Recovery Program

1. Environmental Protection Area South Coast Marine
2. Environmental Protection Area Center Coastal Marine
3. Environmental Protection Area North Coast Marine
4. Ilha do Cardoso State Park
5. Ilha Comprida Environmental Protection Area
6. Juréia-Itatins Mosaic
7. Serra do Mar State Park
8. Xixová-Japuí State Park
9. Laje de Santos Marine State Park
10. Ilhabela State Park
11. Ilha Anchieta State Park
12. Relevant Ecological Interest Area Guarú
13. Relevant Ecological Interest Area São Sebastião



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