

Eco-job Training And Eco-job Market

Youth Program experiences



SECRETARIA DO
MEIO AMBIENTE



INTRODUCTION

The Atlantic Forest, one of the planet's richest and most threatened biomes, was reduced to a mere 7% of its original coverage. Although fortunately the deforestation rates have decreased in several states that encompass this invaluable treasure, it still has a battle to fight against the current threats.

Urbanization is surely among such threats. 82% of the Brazilian population lives in urban areas¹ and most have yet a lot to learn about interacting harmoniously with nature, be it close or removed. Therefore the launching of socioenvironmental policies and actions focused on these urban areas is of primary importance.

The creation of urban and periurban biosphere reserves, both being increasingly valued all over the world, are valid alternatives for the introduction of such policies. Brazil pioneered in introducing this model, by creating the São Paulo City Green Belt Biosphere Reserve (GBBR), an integral part of the Atlantic Forest Biosphere Reserve.

The GBBR includes 73 municipal districts and surrounds the metropolitan regions of São Paulo - the world's 4th largest city - and *Baixada Santista*. More than that, it is home to important remnants of Atlantic Forest and associated ecosystems inside and outside these cities.

Two questions immediately arise: is there any vegetation left in these seemingly very arid and dull regions? And are the preserved areas really important for people?

The answer to these questions is "Yes" !

The vegetation surrounding these metropolitan regions is among the most important vegetations in the Brazilian strip of Atlantic Forest, as

far as quality and quantity are concerned. They represent over 6,000 km² of urban and periurban forests, including the Serra do Mar state park (the largest Atlantic Forest park in Brazil) and the Cantareira state park.

As regards its importance, we could certainly say it is vital for the well-being of 23 million people living locally. Besides its enormous biodiversity, it provides this megapopulation with water, food, thermal comfort, flood and pollution control, leisure, tourism, culture, etc, also known as environmental services, which are the sources of human well-being.

In such a peculiar area, environmental problems cannot be solved without tackling population issues, especially because it is in these more susceptible and environmentally affecting areas (the so-called outskirts and periurban zones) that we find the highest rates of social exclusion (*source – Revista da Fapesp*).

Within this context the GBBR's Youth Program – Environment and Social Integration (YP-ESI) was created in 1996.

As will be seen in detail in this compendium, the YP-ESI aims to invest in the eco-job training of young people living in the Green Belt communities and to foment their participation in the eco-job market, ultimately seeking to secure social inclusion for these adolescents at the same time it foments the conservation and recovery of their local environment.

Rather than being merely a promising initiative, the YP-ESI is a model of socioenvironmental intervention and, though still under construction, it has proved an absolutely feasible alternative for dealing with the critical issues of our society and common environment.

We hope that the concepts and experiences registered in this publication will be an incentive and help guide public and private decision makers as well as civil society to construct a future that is more just and sustainable.

¹ COSTA NETO, J.B. and VICTOR, R.A.B.M.. “Aplicação do Conceito de Reserva da Biosfera em Áreas Urbanas – O Caso da Reserva da Biosfera do Cinturão Verde da Cidade de São Paulo” [Application of the Biosphere Reserve Concept to Urban Áreas – The São Paulo City Green Belt Biosphere Reserve Case] – internal document – 2002.

THE SÃO PAULO CITY GREEN BELT BIOSPHERE RESERVE



A serious challenge of reconciling human race and environment, compounded by a major civil movement launched in the 80's in defense of those areas, with 150,000 subscribers, led the Forest Institute of the São Paulo Environment Department to postulate the São Paulo Green Belt Biosphere Reserve declaration. On June 9, 1994, UNESCO acknowledged the **São Paulo City Green Belt Biosphere Reserve** to be an integral part of the Atlantic Forest Biosphere Reserve, which is featured among the nearly 500 Reserves existing worldwide. The GBBR is currently managed by a Management Committee and is coordinated by the Forest Institute.

What are Biosphere Reserves?

- ★ Biosphere Reserves are areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use.
- ★ They are internationally recognized, nominated by national governments and remain under sovereign jurisdiction of the states where they are located.
- ★ Biosphere reserves serve in some ways as 'living laboratories' for testing out and demonstrating integrated management of land, water and biodiversity.
- ★ There are almost 500 biosphere reserves in more than 100 countries.

(www.unesco.org/mab)

Urban Biosphere Reserve is:

- ★ A Biosphere Reserve characterized by important urban areas within or adjacent to its boundaries where the natural, socio-economic and cultural environments are shaped by urban influences and pressures, and set-up and managed to mitigate these pressures for improved urban and regional sustainability.

(UNESCO / MAB, June 2003)

ABOUT THE YOUTH PROGRAM-ENVIRONMENT AND SOCIAL INCLUSION (Y.P. - E.&S.I.)



The Youth Program is an eco-job training and full preparation program intended for youths aged 15 to 21 living in periurban zones and regions Reserve (G.B.B.R.).

Eco-job training entails the creation of opportunities for participation,

training and qualification in four (4) thematic workshops comprising a wide range of job possibilities in the so-called eco-job market, whether in the extraction, the processing or the service industry.

The practical reflexive workshops to foment productive and creative skills are divided in 4 categories under four generic names:

- I - Sustainable Agricultural and Forest Production and Management;
- II - Sustainable Tourism;
- III - Consumption, Waste and Art;
- IV - Small-scale Agribusiness

Full preparation entails the creation of opportunities for involvement and conviviality in the quest for full development of the natural potentialities inherent in the human being, using synchronic processes of 'self-learning', 'hetero-learning' and 'eco-learning', which in turn are considered as a permanent dialogue and reflexive interaction human beings have with themselves, with others and with their social and natural environment .

The proposal of the Youth Program is in tune with the Biosphere Reserve concept, as it combines the need to secure the economic sustainability of youths with preservation and recovery of the environment. By promoting the insertion of these youths in the eco-job market, it constitutes a program of social inclusion with generation of income.

In addition to professional qualification and inclusion of youths in the job market, the program acts as an agent to promote public policies and create jobs at the local level while fomenting the eco-job market.

The Beginning...

In 1996, Sao Paulo Green Belt Biosphere Reserve contacted UNESCO in order to develop new and innovative training models on the environment for young people that one day could be implemented throughout the Atlantic Forest Biosphere Reserve System. The idea was to contribute to and to build on a programme that had been initiated in 1990 by the Sao Paulo State Government in collaboration with FAO entitled 'Agroforestry Practices and Youth Participation in the Peri-Urban Zone - The Case of Sao Paulo', and to address a broader range of training issues, beyond agroforestry, relevant for the Biosphere Reserve. Later in 1996, the pilot project entitled 'Integrated Eco-job Training for Biodiversity Conservation and Sustainable Use' was subsequently launched in Sao Roque involving a number of partners.

Sao Roque situated 60 km from Sao Paulo within from Sao Paulo City Biosphere Reserve. Sao Roque comprises an area of 308 km² of which more than 50% is rural and hosts some 60,000 inhabitants who derives their main income from agricultural products, and organic production.

WHY INVEST IN YOUTHS?

- ★ The logic behind the Youth Program proposal is that youths having in common a situation of potential social risk, with no job or economic sustenance prospects, be encouraged to acquire technical and professional knowledge while adopting ethical, mutually supportive and responsible practices, all of which are greatly valued by the job market of the 21st Century, giving them the opportunity to fulfill their great potentials of human development.
- ★ Knowing how to do' is not quite enough today: it is 'knowing how to do' with sustainability, efficiency, efficacy and effectiveness that counts.
- ★ This particular phase in the life of adolescents is decisive as regards their future as professionals and citizens.
- ★ The lack of opportunities regarding the fulfillment of basic needs in preparation for life, work and citizenship could throw them into a life of marginality with no turning back.
- ★ The creation of opportunities to reveal and unlock the wide skill and ability potential within themselves, ultimately seeking to encourage the development of competencies to conduct sustainable production processes oriented to the conservation and recovery of the natural environment, does redeem citizens at the same time it strengthens and humanizes our civilization.



I'm seeking for better days, not just for me, but for my one year old daughter. I hope she can live in a better world. (Rodrigo - Criativa magazine)

Rodrigo Barea, 27, ex-student from Guarulhos Eco-job Training Center, Ecoficina de Oficinas NGO president

Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005, Editora Globo



I didn't think about the future. I just thought I could be an employ. Nowadays, I know I can have my own business. (Lucienne - Criativa magazine)

Luciene da Costa Silva, 21, São Bernardo do Campo Eco-job Training Center, environmental monitoring of Caminhos do Mar Ecotouristic Pol and Billings Tour partner

Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005, Editora Globo

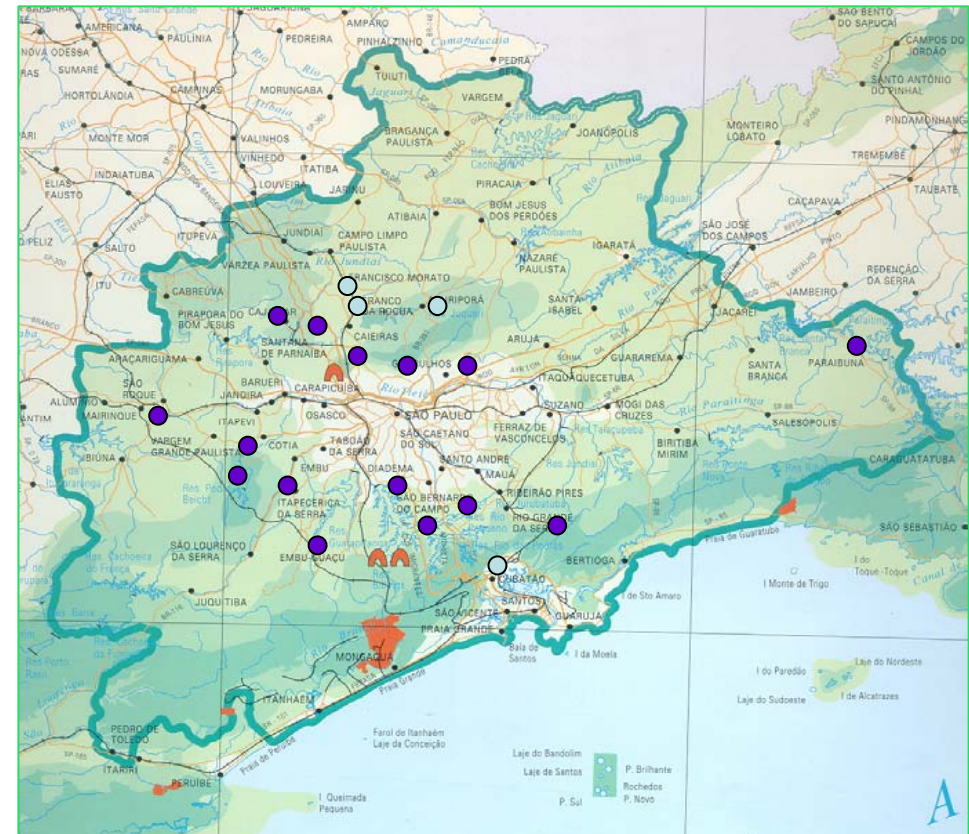
WHERE THE YOUTH PROGRAM–E.&S.I. OPERATES

The Youth Program operates in units known as eco-job training centers. Each eco-job training center is equipped with several training areas with basic classroom infrastructure for pedagogical activities, facilities to hold practical reflexive workshops, men’s and women’s restrooms, and an administrative area for record maintenance, management and support in order to turn the pedagogical and productive activities operational

Until 2005 the Youth Program network relied on seven (7) units headquartered in public venues in the municipalities of Santos, São Bernardo do Campo, Santo André, Guarulhos, Itapeverica da Serra, Cotia e São Roque. From 2006, some new centers are being conceived, designed and implemented in the municipalities of Embu-Guaçu, Caieiras, São Paulo and Santo André.

The minimum curriculum guidelines which are set for the Program network refer to those centers situated within the São Paulo Green Belt Biosphere Reserve as being “permanent centers”. Other than the “permanent centers” within the scope of the G.B.B.R., there is a possibility that other centers may be created in any part of Brazil or the world, and theses the minimum curriculum guidelines refer to as “associated centers”. An example is the “Geração XXI” project network, comprising eco-job training centers in the northwest of São Paulo state and including the municipalities of Rio Claro, Limeira, Piracicaba, Santa Bárbara d’Oeste, Americana, Sumaré and Hortolândia.

GBBR Zonation and its Eco-job Training Centers



- Eco-job Training Centers
- Eco-job Training Centers to be launched

THE METHODOLOGICAL PROPOSAL OF ECO-JOB TRAINING AND FULL DEVELOPMENT

About the proposal:

The Youth Program-E.&S.I. is an educational program viewing eco-job training and full development of youths who live in the periurban regions of the São Paulo Green Belt, through creative and productive workshops that use constructivist methodologies which in turn are facilitated by public, private and civil society partnerships, all targeting the development of potentials within these youths in combination with the preservation and recovery of the natural environment.

Objectives:

- 1- To develop the ability to observe, grasp and interpret reality.
- 2- To develop the ability to exert influence in the local environment with responsibility and human, social, as well as environmental awareness.
- 3- To promote eco-job training and full preparation.
- 4- To promote active participation and eco-entrepreneurism.
- 5- To facilitate the inclusion of young people in the eco-job market.
- 6- To promote the eco-job market.
- 7- To promote conservation, recovery and sustainable use of the natural, social and cultural resources

Pedagogical tools:

1. Creation of a cultural and educational setting for the practice of ethics, solidarity and ecology.
2. Classes, dynamics and cooperative games.
3. Practical reflexive workshops, creative & productive.
4. Technical visits for study, research, survey and diagnosis.
5. Miscellaneous records on which to base monitoring and assessments.
6. Practical drills of inclusive mutual monitoring.
7. Preparation of personal life projects and eco-job projects.
8. Participation in the definition of standards and procedures for each local center.
9. Participation in action plans within the community.
10. Inclusion trails in the eco-job market.



Sustainable Agricultural and Forest Production and Management workshop in "Espaço Eco", a NGO from Basf Co



Consumption, Waste and Art workshop in Guarulhos Eco-job Training Center

THE PROCESS TO CONSTRUCT A WHOLE HUMAN BEING

From the moment of birth, human beings each carry a unique genetic program that defines how they will perceive, process and express their impressions of the surroundings and how they absorb, metabolize and excrete the nutrients consumed.

It is in family life that this program of potentials gradually unfolds, to the extent that basic needs like air, water, nutrients, affection, shelter as well as other needs gradually are met. Through conviviality with neighbors, school mates and work relations, human beings gradually enrich their family culture acquired during childhood by adding these other cultural forms of perception and conviviality.

From the harmonious arrangement of genetics and the culture assimilated throughout life, they construct their values, concepts, principles and character.

If allowed an opportunity to understand the process of learning about the environment they live in through the relationship they have with themselves, the relationship they have with others, and the relationship they have with their natural and social environment, they gradually gain independent to construct their own personal learning process.

This permanent and gradual process of building knowledge and developing skills is never-ending for as long as life lasts.

Every setting and experience constitutes an opportunity for construction of permanent knowledge and learnings.

Multiple Learnings

Through this multitude of experiences involving interaction and conviviality in multiple institutional and natural settings, multiple learnings gradually build up:

learning to learn,
learning to get acquainted,
learning to do,
learning about conviviality,
learning to participate,
learning to be,
learning to predict,
learning to plan,
learning to organize,
learning to venture,
learning to manage and
learning to communicate.

After all I've learned, I was sure the bar was too small for me. I didn't want keeping on serving spirits, because I knew another side of my life. I realized I could have a future.
(Criativa Magazine)

Ednalva Aparecida de Oliveira, 19, ex-student from Santo André Eco-job Training Center, environmental monitoring of Pólo Caminhos do Mar



Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005,

THE METHODOLOGICAL FRAMEWORK FOR THE PEDAGOGICAL PROPOSAL

Characteristics sought by the methodology under construction:

- ★ Open, flexible, unfinished, participative and network-interactive
- ★ Grounded in natural ecosystem prototypes: complex, organic, systemic, dynamic, integrated, interdependent and sustainable.
- ★ Committed to multi-, inter- and transdisciplinary attitude and praxis in order to be able to read and interpret reality.
- ★ Leading to full preparation through dialogues and interactions (self-, hetero- and eco-learning).
- ★ Use of network and matrix-like tools capable of showing the flows and exchanges, and capable of providing transparency to the process.
- ★ Use of participative strategic planning to act on the local environment with awareness and responsibility.
- ★ Committed to collective construction of knowledge as well as construction of a healthy, mutually supportive and sustainable human society.
- ★ Committed to life, truth, solidarity and sustainable practices.

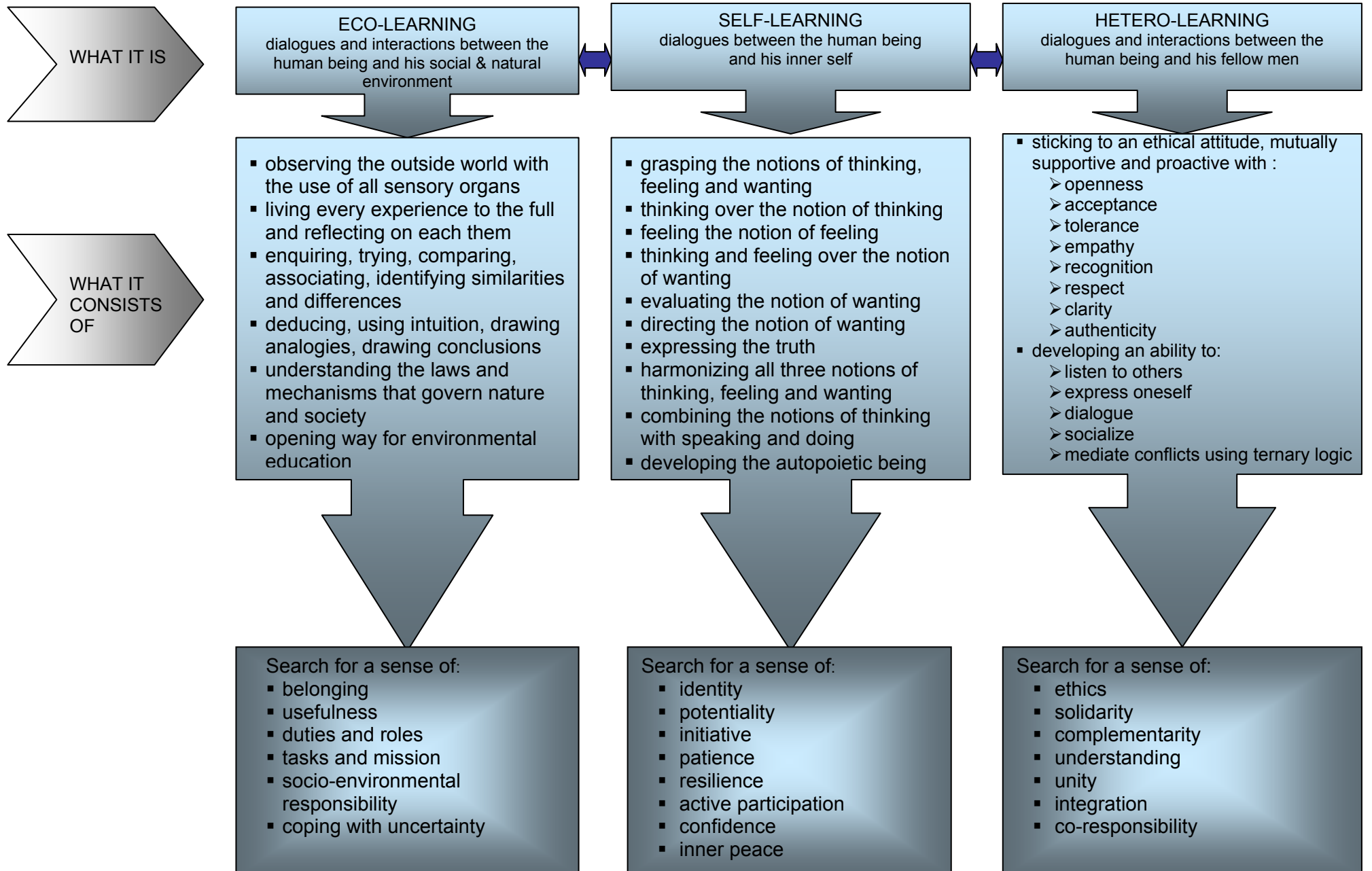
The idea of transdisciplinary praxis is to qualify the students so that they can read and interpret reality through:

- ★ Language rigor
- ★ Clarity as regards values, concepts, principles, and benchmarks
- ★ Use of ethics in human relations
- ★ Openness to things new, to the unknown
- ★ Acceptance of diversity and differences
- ★ Tolerance for things different
- ★ Coping with uncertainty
- ★ Acknowledging complexity
- ★ Perceiving the different levels of reality
- ★ Seeking complementarity between conflicting opposites
- ★ Use of ternary logic to solve and mediate conflicts.

Inspirational references:

- ★ Edgard Morin's Complexity Theory
- ★ Transdisciplinary approaches and methodologies
- ★ Pedagogy of alternation as followed by Rural Family Schools ("EFAs") in Brazil
- ★ Paulo Freire's Autonomy Theory
- ★ A pedagogy based on human values as disseminated by the Petrópolis Foundation
- ★ Leonardo Boff's Liberation Theory
- ★ The anthroposophic principles of Waldorf's pedagogy
- ★ Paulo Freire Institute's Earth Pedagogy (eco-pedagogy)
- ★ The principles of "Agenda 21"
- ★ The statute for children and adolescents ("E.C.A.")
- ★ The Guidelines and Bases for Brazilian Education Law ("L.D.B.")
- ★ Environmental Legislation
- ★ Brazil's Federal Constitution

A FRAMEWORK OF TRIANGULAR LEARNING: SELF-, HETERO- AND ECO-LEARNING:



THE STRUCTURE OF THE Y.P.-E.&S.I. OF THE G.B.B.R.

★ **Course duration:**

Two years of basic training structured into four six-month modules. Students quitting prior to completing a module will receive a certificate for any completed six-month modules. Students completing the two-year training may continue in the center by preparing a work plan to evaluate their eco-business abilities or else by preparing a business plan to set up their eco-business following the incubating process.

★ **Target public:**

Young people aged 15-21 attending secondary school in the public education system. Exceptional cases may be accepted up to a limited percentage and provided it is duly justified and possible.

★ **Teaching staff:**

Predominantly staffed by local technicians from municipal secretariats of local government bodies, complemented by university interns, volunteers and members of potential partner institutions, all of whom duly trained by the G.B.B.R. team and later by an in-service training system, following the network's event calendar.

★ **Workload:**

The activities are scheduled to be held five (5) days a week, four (4) hours a day, complementing standard school hours. A document prepared by the G.B.B.R. with minimum curriculum guidelines sets out some alternative models adaptable to each situation as they arise (see attachment for curriculum guidelines).

★ **Vacancies available:**

Each new group of students entering the program every year is given customized treatment to determine and develop their skills, hence the limited number of 20 to 30 vacancies available per group.

Support from the Brazilian Education Guidelines & Bases Law for the Certification of Courses

★ Article 3 of Decree 2208, dated April 17, 1997, which regulates Paragraph 2 of Article 36 and Article 39 through 42 of said Brazilian Education Guidelines & Bases Law, stipulates that professional education comprises the following levels:

I - Basic: intended for qualification, re-qualification and re-professionalization of workers, regardless of prior education

II - Technical: intended to provide professional skills to students enrolled on or completing secondary education, it being taught as stipulated by this decree.

III - Technological: these courses correspond to college level technological courses and are intended for secondary school and technical school leavers.

★ Article 4 stipulates that: Basic professional education falls into the 'nonstandard education with variable duration' category and is destined to provide working citizens with knowledge that will allow them to re-professionalize, qualify and update themselves to perform the functions demanded by the workplace, with this knowledge being compatible with the technological complexity of the job as well as with the student's technical knowledge level and education level, thus not being subject to standard curriculum regulations.

★ Paragraph 2 of same Article 4 adds that: Students completing basic level professional education courses will be granted a certificate of professional qualification profissional.

HOW A Y.P.- E.&S.I. CENTER IS FORMED

The process stages include:

- 1- The municipality shows an interest and contacts the G.B.B.R./S.P.
- 2- The G.B.B.R. organizes a calendar of visits and submission of a proposal to the relevant municipality.
- 3- The aspiring municipality replies and decides whether that particular time is suitable to initiate preparations and implement a youth program center locally.
- 4- The G.B.B.R. includes the municipality in its program to qualify new centers, as it is committed to facilitating the implementation process.
- 5- A local technical/pedagogical team is brought together and submitted to training.
- 6- A political/pedagogical project containing a course plan is collectively constructed prior to being implemented in the center.
- 7- Definition of a partnership system each with their relevant competencies.
- 8- Planning and implementation of a selection process to admit the 1st group of students.
- 9- The center's internal organization is finalized and so is its operational infrastructure.
- 10- Module I activities start.
- 11- Participation of the center in the network's event calendar.
- 12- Fruition and monitoring of Module II activities.
- 13- Preparation and training of monitor students in preparation for mutually supportive inclusive monitoring and selection of new students.
- 14- Planning and implementation of the selection process to admit the 2nd group of students.
- 15- Fruition and monitoring of Module I activities for the 2nd group concurrently with fruition of Module III activities for the 1st group of students.
- 16- Fruition and monitoring of Module II activities for the 2nd group concurrently with fruition of Module IV activities for the 1st group of students.
- 17- Completion of course for the 1st group of students and awarding of certificates.
- 18- Planning and submission of a process to facilitate the inclusion of eco-professionals in the eco-job market.
- 19- Continuation of the training process, maintaining and reproducing the same dynamics as developed throughout the first two years of activities in the center.



Technicians
training at
GBBR
headquarters

HOW THE CENTER IS OPERATED, THE CENTER'S INTERNAL AND EXTERNAL ACTION LINES ARE AS FOLLOWS

1. The center's basic infrastructure includes workshops, classrooms and other educational settings, administrative and experimental settings, in addition to men's and women's restrooms.
2. The technical/pedagogical team and their coordinator get themselves organized and conceive a political/pedagogical project containing a course plan for each already detailed academic semester, sharing among themselves the roles and responsibilities.
3. All actors involved, including the coordinator, the technical team and the students, are responsible for participative management and maintenance of the center internally.
4. The external action and interaction lines providing the basis for this youth training and integrating process to place them in society and in the job market are as follows:
 - ★ student actions within the community, schools and families
 - ★ eco-job training actions with technical visits for study, research and diagnosis, culminating in action plans in the local environment as conceived by Module IV students
 - ★ this training process leads to the creation of goods and services potentially traded in the local market or in the network

- ★ including diagnoses to identify and characterize the market's situation, the actions in the job market seek to promote the eco-market and find sponsors for youth training, internship and job finding
- ★ besides its internal management with permanent database, image and information updates, the center must be sure that information is disseminated to the media and partner institutions
- ★ every center activity, internal and external, adopts an interactive approach so as to meet the center's political/pedagogical project goals, with coordination following the network's activities calendar.

Each center comprises the following infrastructure:

- ★ socio-environmental educational settings
- ★ facilities and equipment for the workshops
- ★ material and financial resources
- ★ multidisciplinary human resources
- ★ database, image, information and technology collection
- ★ a direct communication system, real and virtual
- ★ a methodology and standard base of participative and sustainable procedures

THE CHALLENGE OF TURNING LOCAL TECHNICIANS AND CIVIL SERVANTS INTO YOUTH PROGRAM TECHNICIANS / TUTORS

- ★ In order to make the Youth Program-E.&S.I. financially possible, it was crucial to establish a partnership between state and local government bodies.
 - ★ Human resources and payroll charges constitute highly expensive components which could obstruct program feasibility should the professionals have to be hired specifically to that end.
 - ★ The training of the local technical/training team composed of staff from various municipal secretariats, including environment, health, education, culture, tourism, planning, social development secretariat etc, allows formation of a multidisciplinary team.
 - ★ To awaken the interest of professionals working in different areas within the municipality to dedicate part of their time to guiding the eco-job training and edification of adolescents is the first step in this transformation process.
 - ★ In order to guide students, we need to resort to our own personal life history summoning up our personal experience in different life stages, and in order to succeed we need to equip ourselves with information, methods and activities that will generate opportunities for effective learnings.
 - ★ In order to create opportunities for eco-job training and full preparation of young people, anyone deciding to participate in the program should be willing to invest in their own eco-job training and full preparation.
- ★ This is the greatest challenge to be faced by the G.B.B.R. team: through the training and edification of a team of professionals from different government sectors, to provide them with tools and lay the foundations of the program network's methodological/pedagogical proposal.
 - ★ Besides methodological training to instill the eco-job training and edification proposal, surveys and diagnoses are conducted of the local social, political and environmental reality in order to characterize the current situation of that particular context.
 - ★ With this knowledge at hand regarding proposal and local context, the team is guided in the preparation of a feasible political/pedagogical project with the available human, material, logistic, social and natural resources. It goes on to produce a document containing a local course plan proposal to be implemented, with responsibilities to be shared between the relevant professionals and partner institutions.
 - ★ It is through implementation of this proposal collectively built by the team and grounded on transdisciplinary principles as well as human, social and environmental values in order to attain sustainable quality of life that the local technical/training team is gradually rounded out and builds confidence.

HOW TO TURN THE ECO-JOB TRAINING PROCESS OPERATIONAL

Stage I:

Training and preparation of the program's local team in order to contextualize the proposal to the municipality's local reality.

- ↳ organizing the multidisciplinary technical/training team
- ↳ identification of the local reality by the technical/training team in order to back decisions and planning, generating the center's database and image collection.
- ↳ training and preparation of the team by the G.B.B.R. for command of the pedagogical methodology and its foundations.
- ↳ joint construction of the center's political and pedagogical project, providing details of its two-year eco-job training course plan, along with a detailed event calendar for the 12+ weeks of Module I.
- ↳ each semester, a daily detailed calendar of activities should be provided to better adapt to the reality and conditions of each moment.
- ↳ from the second year of running a center, the relevant technical/pedagogical team should be trained and qualified to do tutoring or guidance for monitoring students as they prepare their action plans and projects.
- ↳ a copy of the political-pedagogical project should be submitted to each of the partner institutions.

Stage II:

First selection process to admit students aspiring to the eco-job training course:

- ↳ surveying the social and educational reality locally
- ↳ identifying the target public and their originating schools
- ↳ arranging visits and mediations with heads and teaching staff of the relevant schools
- ↳ jointly conceiving the selection process and possibility of implementing it in the school and community
- ↳ Implementing the process and recording its every stage (including pictures)

Stage III:

Implementation of the course plan in two (2) years with four (4) six-month modules:

- ↳ Module I's program is put to action
- ↳ Module II's program is put to action
- ↳ Module III's program is put to action
- ↳ Module IV's program is put to action

Stage IV:

Once the training of the eco-professional is completed:

- ↳ work plan by the eco-entrepreneurs
- ↳ business plan for their eco-business
- ↳ promotion and stimulation of the local eco-job market
- ↳ guidance work plan for eco-job students, as prepared by the center with support from partnerships for the nursery and incubator stages of the projects

SUSTAINABLE AGRICULTURAL AND FORESTAL PRODUCTION & MANAGEMENT (“PROMAFS”)

The core purpose of this workshop is to train students in preparation for the agricultural and forestal eco-job market based on sustainable practices.

Exploring the most important ecological processes as well as anthropic drivers of environmental degradation stimulates the development of an investigative and critical spirit to support the management of protected areas.

The implementation of agroecological systems for production and recovery of degraded areas as well as forest handling provides students with a focus for their life projects and reduces negative impacts on the environment.

Topics addressed:

Biosphere, Biosphere Reserves, Ecosystems, Botanics, Ecological Succession, Water cycles and nutrients, Environmental services and human well-being, Types of agriculture, physical/chemical/biological elements affecting production, Environmental problems, forest seedling production, Forest Restoration, Seed collection and storage, Preparation and use of organic pesticides and fertilizers, Project development, Environmental problems.

Eco-job Market

- ★ Restoration of degraded forestal areas.
- ★ Rendering of services / implementation of projects designed for environmental recovery resulting from Conduct Covenants, compensation and other environmental liabilities, Clean Development Mechanism, etc.



Santo André – Pedroso Training Center
organic vegetable garden

- ★ Implementation of sustainable productive systems based on agroecological practices, including organic vegetable gardens, seedling production nurseries, agri-forests, apiculture, medicinal herb gardens.
- ★ Introduction of forest trails.
- ★ Handling of forests and their products (collecting seeds, regional fruits, handcraft material, wood).
- ★ Town landscaping and tree planting.
- ★ Support to management and handling of conservation units.

ECO-JOB TRAINING IN PERI-URBAN ZONES – A PARTNERSHIP WITH THE WORLD BANK

In May 2005, the "Youth Program" won the "Development Marketplace" international competition held by the World Bank in a process that selected 31 out of 2,700 environmental projects that had been assessed.

The project named "Eco-job Training in Peri-urban Zones" was submitted by the *Núcleo da Terra* Holistic Association for Ecological and Community Participation ("AHPCE") in partnership with the Forest Institute.

With the prize (US\$ 150,000.00) a project is being developed to unfold over a period of 24 months, ensuring continued supervision by the coordinating board of the Biosphere Reserve concerning the Eco-job Training Centers and, more specifically, reinforcement of agri-forest practices within the Program.

Support to Agri-forest Training

The idea with this project component is to ensure that the Sustainable Agricultural and Forestal Production & Management workshop receives technical advice and to implement training and multiplication of core activities proposed in this field. The following modules will be introduced in 8 Eco-job Training Centers (except business incubators):

- ★ Nursery Module – Planting of native and fruit trees.
- ★ Organic Vegetable Garden Module – a food production system in small areas.
- ★ Forest Recovery and Handling Module – 1 hectare per center, involving the community.
- ★ Eco-business Incubation Module – guidance on incubation of two eco-businesses.

Expected Outcome

- ★ Restoration of degraded forestal areas: at least 8 hectares
- ★ Production of 16,000 seedlings of native species to meet the demands of the centers, partners and community.
- ★ Initial production of two tons of health food for consumption in its natural state, sale or supply to the agri-industry workshop.
- ★ Depositories for forestal and agricultural seeds.
- ★ 600 youths trained
- ★ Continued training of workshop technicians
- ★ Participation of 8,000 people from the centers' relevant communities in reforestation processes.
- ★ Start of the incubation process of 2 eco-businesses.
- ★ Sprouting of communal reforestation policies and processes in the São Paulo City Green Belt Biosphere Reserve.



Students from Santo André – Paranapiacaba Training Center building their nursery

SMALL-SCALE AGRIBUSINESS WORKSHOP

Objectives

The small-scale agribusiness workshop prepares youths for practices involving small-scale health food processing on a regime of environmental sustainability and considering that the quality of food intake is directly related to the quality of life of human beings, besides encouraging hygiene, change of habits and generation of income.

Topics Addressed:

- ★ Basic health concepts
- ★ Food properties, microbiology and origin
- ★ Personal hygiene, IPE and food handling
- ★ Food processing
- ★ Aromatic and medicinal herbs
- ★ Food intake and consumption habits
- ★ Accident prevention and handling
- ★ Food intake reeducation practices
- ★ Small-scale food preparation
- ★ Projects

Possibilities of work in the eco-market:

- ★ Working in small-scale kitchens
- ★ Processing of herbs with aromatic and medicinal properties
- ★ Research and development of activities intended to rescue the gastronomic practices and culture of small communities.



Products made by São Bernardo do Campo Training Centre students.



Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005. *Editora Globo*

CONSUMPTION, WASTE AND ART WORKSHOP

Objectives:

The Consumption, Waste and Art workshop allows students to reflect and make a critical analysis of our society's consumption habits and patterns, preparing them to work with reprocessing, reuse and recycling of residue, including handcraft production and production of other consumption goods, thus encouraging a change of habits and a reduction in the impact of waste on the environment.

Topics Addressed:

- ★ Basic health concepts
- ★ Basic concepts of consumption and storage of raw material
- ★ Waste and its destination – production and environmental impacts
- ★ Stimulating creativity
- ★ Production of packagings and handcraft from reused and recycled material
- ★ Production of consumption goods from reused and recycled material
- ★ Notions of project devising
- ★ Organization of processes involving residue collection and its commercialization
- ★ Water: availability, use, treatment and recycling, etc.
- ★ The principles of performing in the community
- ★ Techniques for preparation of educational workshops

Possibilities of work in the eco-job market:

- ★ Working in projects involving selective garbage collection
- ★ Using raw material surplus to produce handcraft, jewelry, paper, toys, soap and other goods
- ★ Development of pedagogical workshops in companies, communities, etc.
- ★ Development of awareness and information campaigns and projects on the impacts of irresponsible consumption, its residues and stock implications
- ★ Development of products from residue composting.



Products made by Ecoficina de Oficinas (Guarulhos NGO)

Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005, Editora Globo



SUSTAINABLE TOURISM WORKSHOP

Objectives:

The Sustainable Tourism workshop within the scope of the Y.P.-E.&S.I. project is designed to train and prepare students to perform in the local tourism eco-job market on sustainable bases, valuing and preserving the environment, the culture and the communities as well as the eco-job market of the local regions on the basis of a work that prizes solidarity, citizenship and ethics.

Topics Addressed:

- ★ Introduction to Tourism: concepts, history, typologies, impacts and functioning
- ★ Essential Elements of Tourism: legislation, supply and demand
- ★ Conservation Units: history, São Paulo City Green Belt Biosphere Reserve
- ★ Environmental Monitoring
- ★ Environmental Education
- ★ First Aid
- ★ Planning and Implementation of Trails
- ★ Event Organizing
- ★ Rural Tourism
- ★ Cultural Tourism
- ★ Projects
- ★ Business Management

Possibilities of work in the eco-job market:

- ★ Research and identification of tourism potentialities
- ★ Research and rescue of the local history for tourism purposes
- ★ Preparation of tourist itineraries both locally and regionally
- ★ Development of tourist packages and practice of inbound tourism
- ★ Environmental monitoring in Conservation Units, in areas specific to the work being developed (pursuant to Resolution 32 by the Environment Secretariat)¹ and in surrounding zones
- ★ Preparation and practice of recreational activities
- ★ Preparation and practice of activities involving environmental education and community involvement
- ★ Planning, construction and implementation of trails
- ★ Preparation of tourism projects at the local level



Caminhos do Mar Ecotourism Pol

Joint-effort tourism in Cotia



JOIN-EFFORT TOURISM AS A TOOL TO IMPLEMENT THE WORKSHOP AND TO STIMULATE DEVELOPMENT AT THE LOCAL LEVEL

The “Joint-Effort Tourism” project is a practical activity inserted in the Sustainable Tourism workshop, where students from different centers exchange visits, sometimes undertaking an outbound tourism business and sometimes undertaking an inbound tourism business, not only as tourists but also as professionals, citizens and fellow men who are all co-responsible for the São Paulo Green Belt.

The “Joint-Effort Tourism” project flourished from 3 basic ideas:

- ★ To promote integration among Program students
- ★ To act as a pedagogical tool for the workshop, allowing an opportunity for sustainable tourism
- ★ To promote appreciation of the local culture and work
- ★ To generate new opportunities in the eco-job market in order to meet tourist visitation demands in the municipalities comprised by the São Paulo Green Belt.

For this project, which in scope comprised 7 municipalities of the Green Belt and a total of 195 youths, it was established that the price should be low. The price fixed was R\$10.00 (ten Brazilian reais) per visiting tourist. This rate would include meals and tours in the host municipality. It was thought that the principles of sustainable tourism should be the basis for the activity. Therefore, in addition to low cost, given that the students come from low-income families, the activity should focus on keeping environmental impacts to a minimum and valuing history and work at the local level.

Three events were held for three consecutive years, where the YP municipalities alternated between inbound (host) and outbound (visiting) centers. Each year, 2 centers were selected for inbound tourism and 4 to 5 centers were selected for outbound tourism. The activities unfolded at weekends: on Saturday one center would host 2 to 3 centers and on Sunday another center would host another 2 to 3 centers.

Possibility of moving youths living in poor conditions to respond to environmental and social issues through engagement in a tourism-related activity that will turn them into multiplying agents of the importance of harmonizing conviviality between men and the environment. “This activity showed that we at the Y.P. have a commitment to passing on what we learned in order to improve the world’s future.”

“Nothing is difficult if you are committed to doing it” (Itapecerica da Serra)

“I would participate in the Join-Effort Tourism project again because what you learn there you can pass on to other people”, (Itapecerica da Serra)

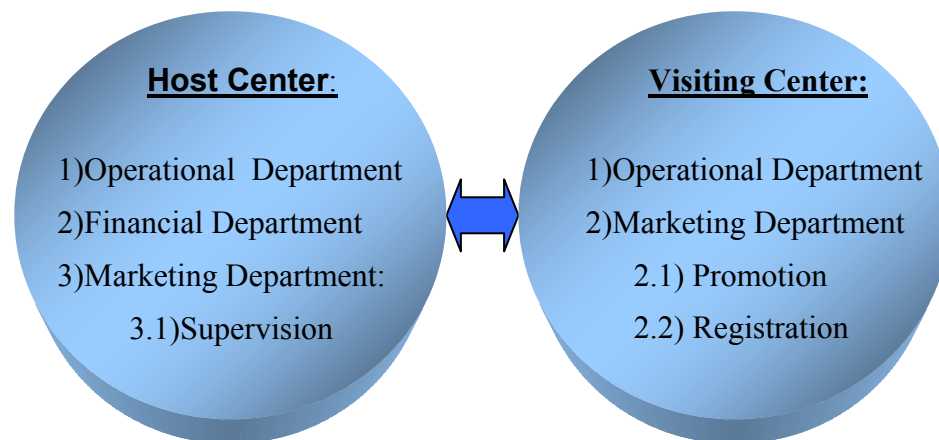
“We should join forces and behave and prove that we are capable of doing our best”, (Santo André)

“Continue to improve; and I hope we can help this planet” (São Bernardo do Campo)

JOINT-EFFORT TOURISM METHODOLOGY

The Methodology for activity implementation underwent the following stages:

- ★ Theory class on sustainable tourism, its principles and relationships with environmental conservation and valuing of the municipality.
- ★ Assignment of roles to the centers, sometimes as host and sometimes as visiting centers:
 - In 2001, the host centers were Itapecerica da Serra and Santos while the visiting centers were São Bernardo do Campo, Santo André, São Roque and Guarulhos.
 - In 2002, the host centers were São Bernardo do Campo and Santo André while the visiting centers were Itapecerica da Serra, Guarulhos, São Roque and Santos.
 - In 2003, the host centers were São Roque and Itapecerica da Serra while the visiting centers were Cotia (new in the network), Guarulhos, São Bernardo do Campo, Santo André and Santos.
- ★ Duties of each visiting and host business:



As we perceive it, the outcome of the “Joint-Effort Tourism” proposal was effective and positive with regard to the motivation of the students to practice sustainable tourism locally, as they felt motivated and encouraged their own families to participate in the activities. The São Bernardo do Campo center, for instance, encouraged the birth of a local eco-tourism initiative formed by Program students, the Billings Tur, with prospects of it being established as the first tourism enterprise of the Program.

Another satisfactory outcome was the development of a Sustainable Tourism activity for the low-income population. A one-day eco-tourism tour including meal and monitoring for up to R\$15.00 per person proved effective, feasible and interesting, as it stimulates the development of tourism based on communal efforts, promotes leisure and recreation and foments the local eco-market.

The “Joint-Effort Tourism” project additionally used reciprocity and replication concepts afforded by the exchange of roles, with the centers alternating between being visitors and hosts, thus facilitating the exchange of information, tourists, resources and stimulating our perception to tourism potentials in different municipalities of the São Paulo Green Belt.

This is the proposal intended by the “Joint-Effort Tourism” project, one of an innovative tourism activity that combines theory and practice, foments active participation of the students and exercise of the eco-professional activity, encouraging the development of assorted types of sustainable tourism for low-income population while reinforcing the image of the Biosphere Reserve in its capacity as a territorial zone for the development of integrated, joint-effort and sustainable activities.

ECO-JOB MARKET

PRODUCTION SECTORS

- ★ Eco-market segments are to be found in the public and private spheres, the organized civil society, and the extraction, processing and service industries alike.
- ★ Extraction industry: organic food production (agriculture and animal raising), seeds, resins and other forestal products developed with sustainable management.
- ★ Processing industry: application of environment management models in industrial plants (large, medium, small and individual businesses), for instance Total Quality Environmental Management; Cleaner Production; Eco-efficiency; Design for Environment.
- ★ Service industry: this includes a large variety of services, e.g. sustainable tourism, environmental education, advisory services on environment management.

Contemporary society, particularly over the past century, has attained a remarkable scientific, technological and economic development, which in turn has led to an intense process of intervention in the Earth's natural ecosystems, creating a major current day paradox: intense destruction of the natural resources and biodiversity and impaired quality of the environment for promotion of life and health, motivated by the high rates of consumption of the industrialized modern world that displays a specific concept of development, while at the same time the world's population progressively develops awareness of the role of the ecosystems in maintaining life sustainable on planet Earth.

Among the new concepts under construction today, grounded in reflections on the current state of our socioenvironmental reality and using human, social, environmental, economic, political, ethical as well as aesthetic values as benchmarks, is the **eco-job market**.

Eco-job market can be defined as being any production sector involving goods and services that are useful and necessary to secure life and health for human beings who in turn make sustainable use and management of the natural resources and the energy and secure ethical, safe and dignified work conditions and relationships while employing suitable gentle technologies of low social and environmental impact on the environment, with no disposal of polluting and toxic products or energy and generating job opportunities for the population of workers and consumers. In fact, it involves awareness, principles, attitude, approach and ethics rather than merely dealing with an inventory of activities related to the natural environment.

We note that this concept entails the existence of supporting pillars for the eco-job market: **natural environment, economy and society**. By understanding that these three elements are definitive job market wise, with the formulation of public policies capable of fomenting the creation of an eco-job market yet another supporting pillar comes into the equation: the **political** pillar

ECO-MARKET PILLARS

- ★ Natural environment: it addresses the conservation and preservation processes involving the physical, biological and sociocultural spheres.
- ★ Economy: it addresses the processes from which economically sustainable businesses are generated and conducted, given the said environmental concern.
- ★ Society: it addresses the processes of environmental awareness and involvement of the population.
- ★ Policy: it addresses the processes involving insertion of the 3 previous pillars into public management.

OPPORTUNITIES IN THE ECO-JOB MARKET

Bearing this CONCEPTUAL MODEL in mind, we note that, as far as strategies and interventions are concerned, the eco-market opportunities seek to mitigate or eliminate the drivers of change in the natural environment. These opportunities are listed as follows:

1. Mitigation of indirect drivers of change:
 - a) Environmental education and social assistance in birth control; (organic) agricultural production and rural tourism as well as community festivities to discourage rural exodus.
 - b) Establishment of small businesses and participation in cooperatives for better income distribution.
 - c) Insertion of communities in corporate projects promoting social responsibility as a form of social inclusion; analysis of the legislation with regard to environmental compensations, statements of compliance (TAC) and other legal instruments; use of a market mechanism to meet international agreements and covenants.
 - d) Research on diseases, clean technologies and sustainable management.
 - e) Environmental education on hygiene and consumption patterns and emphasis on traditional technologies

- 2 and 5. Attaining and securing well-being
 - a) Establishing businesses and jobs in connection with the natural environment.
 - b) Education focused on health (information on the importance of vaccination campaigns and hygiene patterns), food intake patterns (consumption of health food); projects related to basic sanitation.
 - c) Collective cultural and leisure services.
 - d) Research and education projects relating to natural disasters (floods, landslides, droughts, fires).
 - e) Citizenship-oriented education.

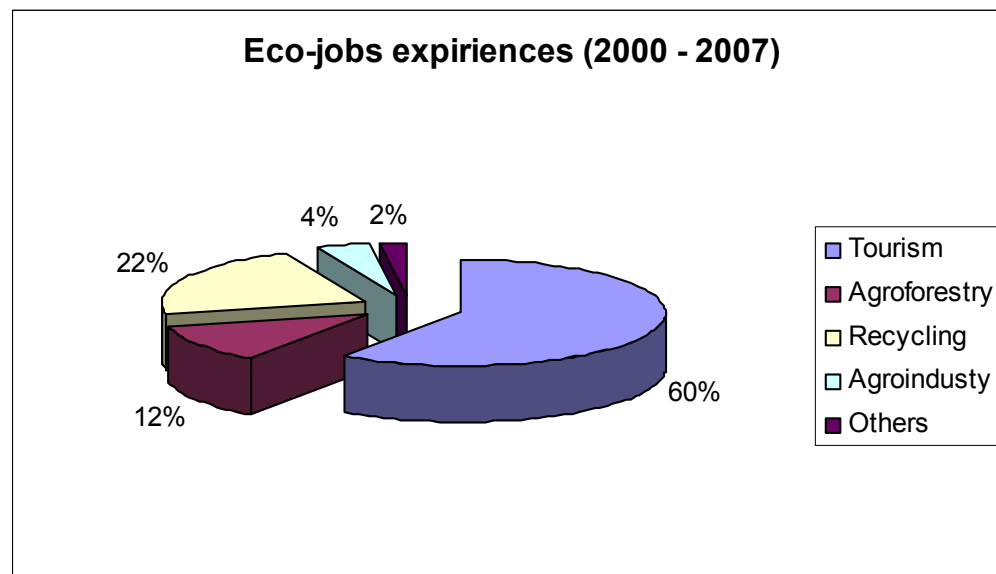
3. Mitigation of direct drivers of change
 - a) Research projects and services as well as analysis for suitable use of the soil, management projects for Conservation Units.
 - b) Research projects on biodiversity and its importance; services to assess the environmental legislation to the extent that protection of biodiversity is concerned.
 - c) Projects and services to develop and introduce clean technologies and environmental management systems (ISO 14000).
 - d) Research projects and services to introduce organic agriculture, agriforestral systems and processes to reduce/reuse/recycle externalities.
 - e) Research projects on use and management of renewable natural resources; environmental education focused on reviewing the consumption patterns.
 - f) Area recovery services seeking to restore the vegetal coverage, project for creation of Conservation Units, research project and implementation of clean technologies in order to reduce pollution; research on pollution control.
 - g) Research and participation in monitoring projects of natural phenomena

4. Recovery services in degraded areas, implementation of nurseries, production of native seedlings, studies on soil usage.
 - a) Implementation of nurseries for native species; activities for recovery of degraded areas and agriforestral management; introduction of organic vegetable gardens and agriforestral systems; water reuse technology; environmental education on responsible consumption of water and other natural resources.
 - b) Introduction of nurseries with native species; activities for recovery of degraded areas and agriforestral management; environmental education on disposal of solid, liquid and gaseous residues.
 - c) Sustainable tourism activities; creation and management plan for Conservation Units (including private); activities involving study of the environment.
 - d) Introduction of nurseries with native species; activities for recovery of degraded areas.

ECO-MARKET EXPERIENCES IN THE YOUTH PROGRAM NETWORK

The eco-job market experiences that best exemplify the intervention strategies previously mentioned in the CONCEPTUAL MODEL of the Millennium Assessment can be subdivided in 4 workshops that compose the YP: Sustainable agricultural and forestal management & production; Small-scale agri-industry; Consumption, waste and art; Sustainable tourism. In addition to those, there are other eco-job experiences unfolding in environment-related public institutions or NGOs that act in various thematic areas and are focused on society at large.

Total experiences between 2000 and 2007: 895
Total of students participating: 410



ECO-MARKET EXPERIENCES IN THE YOUTH PROGRAM NETWORK

Tourism: 535 opportunities

This eco-job experience category includes especially trail walks for study of the environment, visitor monitoring in Conservation Units, monitoring in natural areas or thematic areas within private property, recreational activities in accommodation lodgings, tourist guidance in tourist areas.

Sustainable agricultural and forestal management & production: 104 opportunities

This of eco-job experience category includes especially activities to recover forested areas, as in the case of *Espaço Eco Foundation* -- a NGO created by Basf, and introduction of organic vegetable gardens in schools.

Agri-industry: 36 opportunities

This eco-job experience category includes especially snack preparation for the trails as a complement to the tourist activity, and monitored workshops on health food and its production.

Recycling: 199 opportunities

This category includes especially recycling workshops attended by various types of public and addressed issues such as consumption patterns, waste disposal and its use as raw material for handcraft. Some of these workshops were requested by companies like UNILEVER and Grupo Pão de Açúcar. There were also event-specific projects, e.g. making of Carnival masks and Christmas cards, in addition to accessories and ornaments for the end user.

Projects and City Administration: 21 opportunities

This category includes activities in support of the local government body, whether environment-related or not (e.g.: Youth Center, in Santos). Other activities include providing administrative and logistic support to socioenvironmental projects proposed by NGOs, as is the case of the holistic association AHPCE, which hired a former student to support an environmental project in a water catchment area.

MECHANISM FOR CREATION OF ECO-JOB MARKET OPPORTUNITIES

Institutional requirements

Institutional requirements are imposed to the extent that the conventional market generates drivers of environmental degradation. In order to mitigate or prevent them altogether, a number of policies have been created for management and control, along with public market instruments:

- ★ Environmental compensations: activities concerning environmental recovery, resulting from the licensing of upcoming business activities with some type of impact.
- ★ Statement of Compliance (TAC): activities aimed at environmental compensation on account of environmental impacts generated by entrepreneurial action (projects in protected areas or in areas where the environment is highly valued).
- ★ Environmental zoning: this restricts the right to property, as it defines the types of activity permitted, for instance eco-tourism being possible in a given area.
- ★ Clean Development Mechanism (CDM): commercialization of bonds referring to pollution quotas, particularly the carbon market in this case.

The main mechanisms to create these opportunities are:

- ★ To absorb the **institutional requirements** (public and private organizations) resulting from socioenvironmental problems that in turn are generated by the conventional market, that is, the drivers of environmental degradation that represent a threat to the maintenance of life on the planet. Drivers include: pollution, urban sprawl, real estate speculation, infrastructure works, ground clearance by fire, extraction of forestal goods, urban waste, mining, industrial

- ★ To absorb the **consumer market requirements** as detected by market research or else by statistics and consumption trends of products somehow related to the eco-market. Special emphasis goes to the growing demands for eco-jewelry, organic foods and eco-tourism in metropolitan regions yet to be established as eco-tourism destinations, among other things.

Consumer market requirements

These requirements reflect the interest of consumers in sound and environmentally responsible products. This interest results both from public market instruments, which stimulate this type of consumption and production, and from higher levels of information and awareness by the consumers regarding environmental issues. Special emphasis goes to businesses focusing on production and commercialization of:

- ★ Organic foods, which circulate some US\$ 130.4 million a year in the Brazilian market.
- ★ Eco-jewelry: the sale of accessories made from recycled material and/or seeds has trebled in recent years.
- ★ Eco-tourism: it has expanded at a 10% rate a year worldwide.

THE ECO-PROFESSIONAL

- ★ Any professional interested in developing his/her professional life by following his/her vocations and contributing to a salutary and fair world is an eco-professional in his/her own right.
- ★ The eco-professional constructs his/her profile and professional competences based on his/her talents, qualities and skills, and that way, when the time comes to make professional decisions, their “will to do” is synchronized with their “obligation to do” notion, thus creating a feeling of well-being and peace of mind for doing what they want by vocation and what they should by competence and by conscience as professionals and citizens.
- ★ Any and all fields of human activity can be conducted by an eco-professional, be it arts, culture, religious traditions, philosophy, sciences, technologies or production processes.
- ★ We lack tertiary-level courses to train eco-professionals, as this skill develops gradually throughout life in every professional category, whether formally regulated or not.
- ★ The Youth Program eco-professional develops an outlook on our society that is at the same critical and affectionate, making it special for this very reason.

YP Eco-professionals

I know I´ve won many things and now, my parents understand my choyses. They even are proud of me. I am their first daughter to go to the college and I am na exemple to my brothers. (Ednalva -Criativa magazine)



Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005, Editora Globo

Ednalva Aparecida de Oliveira, aged 19, former student at the Santo André Eco-Job Training Center, and monitor with the *Caminhos do Mar* Eco-Tourism Complex, in an interview with *Capricho* magazine, 2004.

SOCIAL ISSUES IN THE GBBR AND ITS YOUNG INHABITANTS

The process of social exclusion in Brazil has intensified in the 90's, victimizing in particular young people.² As regards violence, we note from a UNESCO³ survey that youths aged between 15 and 24 and living in São Paulo City, are twice as prone to dying especially from homicide as the rest of the population, with homicide accounting for 61.9% of deaths in this age group. In 2000 the rate was 39.2%. These figures make Brazil rank 3rd among 60 other countries with regard to youth deaths. Likewise, suicide rates among youths aged between 15 and 24 rose by 42.8% in Brazil in a span of 20 years, according to a study by the Latin-American Violence and Health Center (CLAVES)⁴. Among the causes are depression, psychiatric diseases, hereditary disposition, family conflicts, relationship difficulties, drug or alcohol use and social exclusion. Bleak prospects only add to this grim picture. The Monthly Employment Poll carried out by the Brazilian Institute of Geography and Statistics (IBGE) shows that unemployment involving the 15-to-17 age group rose from 11.7% in 1991 to 13.4% in 2001. As regards the 18-to-24 age group, the rates rose from 9.2% to 12.5% in the same period. According to Márcio Pochmann, more vacancies were created in the 90's which did not require special qualifications, and there was greater pressure for work on those with an academic degree. Still, the lack of qualifications leads youths to enter the informal economy, which in turn provides no stability.

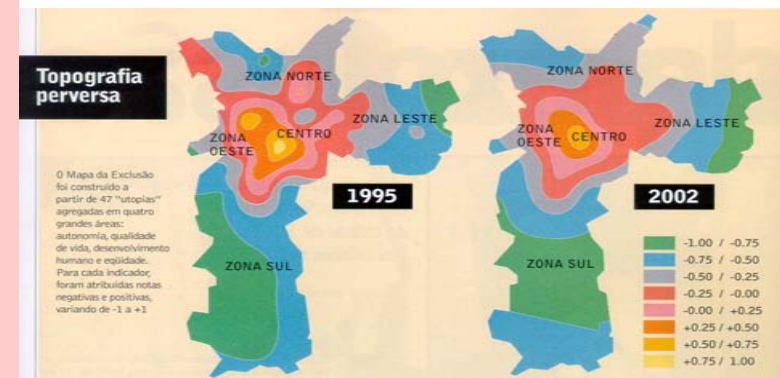
² Pochmann, M. *Inclusão Juvenil como Estratégia Pública* [Juvenile inclusion as a public strategy] – *Folha de São Paulo* newspaper – *Brasil* Section – 04/23/2002, p.A3.

³ *O Estado de São Paulo* newspaper – *Cidades* Section – 05/04/2002, p. C1 and C4.

⁴ *Folha de São Paulo* newspaper – *Cotidiano* Section – 10/27/2002, p. C4.

THE SOCIAL EXCLUSION

The project “Social Dynamics, Environmental Quality and Intra-Urban Venues in São Paulo: A Sociospatial Analysis”, developed by the Public Policies Research Program run by FAPESP (2003), shows that, out of over 10 million inhabitants living in the capital city of São Paulo, approximately 8.9 million live below what is considered to be a suitable life standard. The problem becomes even greater the farther away they live from the city center, as shown by the **map of exclusion** drawn for the said project. The blue and green areas correspond to places where the rates of exclusion are higher and at the same time the environment is better preserved. The conditions here potentially favor devastation, since nature offers environmental services free of charge which are important to human well-being. Given this scenario, the Youth Program proposal has come to intensify the efforts to encourage the population of these areas to interact with their natural environment and generate income which will ultimately bring about social integration.



Izique, C. "The Map of Exclusion" – Research FAPESP 83 – January 2003, p.17.

SUSTAINABLE TOURISM: CAMINHOS DO MAR ECO-TOURISM POL CASE

The *Caminhos do Mar* Eco-Tourism Pol comprises historical and environmental heritage spread throughout 5,000 ha, a stage for major events of the past 500 years of the Brazilian history. Sitting in the municipalities of São Bernardo do Campo and Cubatão, some good references include: the old public road *Estrada Velha de Santos* (the first public road connecting the plateau to the Santos lowland known as *Baixada Santista*, inaugurated in 1842 under the name *Estrada da Maioridade*); the *Calçada do Lorena* (1782); and the Serra do Mar State Park (Brazil's largest Atlantic Forest conservation unit).

After some restoration works and some partnership strategies involving various secretariats and state institutions of São Paulo⁵, the site was reopened for visitation.

The amount of visitors to the site is monitored and conditional on the conservation of the environment, while the visits have to be booked and monitored by especially trained youths from the [local communities](#). This aspect is indeed a distinguishing feature of the commitment of this enterprise to securing social inclusion and development in the region. The *Caminhos do Mar* Eco-Tourism Complex is under the management of the Foundation for Historical Heritage of Natural Resources of São Paulo State (FPHESP), a body with vast experience in the preservation of the historical and cultural assets of São Paulo State. The GBBR coordinated a Course for Environmental Monitors in partnership with the Water & Energy Metropolitan Company (EMAE), the São Paulo State Environment Secretariat / Forest Institute (SMA-IF) and

⁵ State Environment Secretariat / Forest Institute (SMA-IF), Science, Technology, Economic Development and Tourism Secretariat (SCTDET) / Tourism Section, Culture Secretariat, and Water Resources Secretariat / Water & Energy Metropolitan Company (EMAE).

the Tourism Section of the Science, Technology, Economic Development and Tourism Secretariat of São Paulo State (SCTDET) to ensure the Complex is fully functional.



During the course, a survey was carried out to investigate the socioeconomic profile of the local youths/students:

- 54% of the families earn 0 to 2 minimum wages worth
- Average monthly family income: US\$198.00
- Average family with 5 people
- 62% of the parents have not finished elementary school

SUSTAINABLE AGRICULTURAL AND FOREST PRODUCTION MANAGEMENT : THE ESPAÇO ECO FOUNDATION CASE



Picture: Samuel G. Protetti

Showing a sign of concern for the fate of our planet, the German chemical company BASF S/A decided in partnership with GTZ, SESI, SENAI and PMSBC⁶ to set up an Eco-efficiency Excellence Center in Brazil known as the *Espaço Eco* Foundation, the mission of which is to promote sustainable development in society, transferring knowledge and technology, especially with the application

of solutions in eco-efficiency, environmental education and reforestation, with emphasis on achieving an equilibrium in the social, economic and environmental issues”.

In a pioneering initiative introduced by its Social Responsibility department, BASF established a partnership with the Holistic Association for Ecological and Community Participation (AHPCE) and with the Local Government Body of São Bernardo do Campo, looking to fund the project “*Espaço Eco* Foundation Management Plan – Phase I – Environmental Management Plan”, enabling sustainable use of the local natural resources and also securing the inclusion of 9 youths of the São Bernardo do Campo Eco-Job Training Center into the eco-job market, with work ranging from seed collection, production

⁶ GTZ: German Technological Cooperation

SESI: Social Service of the Industrial Sector

SENAI: National Industrial Training Service

PMSBC: São Bernardo do Campo’s Local Government Body

of seedlings and greeneries, implementation and monitoring of trails, that way allowing the São Paulo City Green Belt Biosphere Reserve concepts to be put to practice.

All the activities in connection with the project are supervised by especially trained technicians



Picture: Samuel Gerson Protetti



São Bernardo do Campo Eco-job Training Centre working in the Espaço Eco.

Research Program Activities:

- Production of seed collectors;
- Seed sorting;
- Planning and construction of trails;
- Training of monitors on environmental interpretation;
- Trail monitoring;
- Assessment of seed rain (dispersion);
- Research on information about native vegetal species;
- Phytosociological assessment;
- Collecting, sorting and drying botanical material;
- Sorting the collected botanical material into family categories;
- Planting seeds of native species;
- Production of greenhouse seedlings;
- Cultivation of ornamental species by branching;
- Cultivation of greeneries.

Bernardo do Campo Center, supported by the holistic association AHPCE and coordinated by the GBBR.

SMALL-SCALE AGRI-INDUSTRY: THE DELICIAS VITALIS CASE

In 2004, during the small-scale agri-industry workshop, Mariana, Pamela, Talita and Jaqueline, all students of the São Bernardo do Campo Center, were very enthusiastic about the classes on wholewheat bread making given by technician Márcio. Their interest gradually grew to the point of helping the workshop coordinator during the classes. By noticing the interest these girls developed in the whole process, the local coordinator and other technicians encouraged them to take a step forward and provide the snacks for the *Billings Tour* trails, an enterprise undertaken by other Center girls to develop sustainable tourism, especially eco-tourism. On completion of the 2-year Youth Program course, the girls decided to start their own business, informally to start with, and so they developed a product line consisting of wholewheat bread, cereal bars and pates prepared with vegetable skin. Their most rewarding experience was providing snacks to the students under training at the *Caminhos do Mar* Eco-Tourism Complex, which took lasted 2 months (see Sustainable Tourism case). During that period, the young entrepreneurs were charged with shopping for the ingredients as well as preparing and packing the snacks. They were distributed throughout the Complex in a van that collected them from Riacho Grande (where the girls were based) while transporting the students undergoing training. At first they found it difficult to assist everyone all in one go (40 snacks a day). However, they learned from this difficulty and tried to diversify their selection, thus diversifying their product line. In order to improve their skills, they joined the “Young Entrepreneur” course offered by SEBRAE⁷ and so they are currently seeking to develop their Business Plan by way of a business incubation process in the São

⁷ SEBRAE: Brazilian Small and Micro Business Support Service.

“We thought about giving it up at times for fear of making mistakes. But we realized we can also learn from our mistakes”
(Talita - *Criativa* magazine)



Picture: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005, *Editora Globo*

Talita, aged 19; Pâmela, aged 17; Jaqueline, aged 20 and Mariana, aged 17. Former students of the São Bernardo do Campo Eco-Job Training Center and partners in the *Delicias Vitalis* enterprise.

CONSUMPTION, WASTE AND ART: THE ECOFICINA DE OFICINAS CASE

In 2001, a few technicians from the Guarulhos Eco-Job Training Center decided to formally establish a venue so that Program students could exercise their creativity, their citizenship and their entrepreneurial spirit, and so the *Ecoficina de Oficinas* came to life, a non-governmental organization particularly oriented toward the production of ornaments, paintings, jewelry, accessories, home items and all sorts of products made from plastic bottles, aluminum cans, polystyrene foam, old magazines and even old coffee filters. The *Ecoficina* has rendered services to large companies such as the retailers *Pão de Açúcar* group and Unilever and its products were used to decorate sets in the 2004 edition of the São Paulo Fashion Week show.

Currently presided by former Youth Program student Rodrigo Barea, the NGO is also supervised and supported by technicians from the Guarulhos YP Center.

As president Rodrigo reports “At first, the work involved only reuse workshops and public displays where we sold a few pieces. But we gradually improved our production and diversified our items, despite many financial difficulties and lack of support. I was removed for 2 years, having returned in early 2005 to research alternative ways of securing stability to the NGO. Since then we’ve been engaged in: recycling used frying oil to produce glycerin, in gardening and landscaping for our local schools and in seeking new partners to finance our projects”

I've been told countless times, including by my family, that working in the environmental area is not promising.

(Rodrigo - *Criativa* magazine)



Rodrigo Barea, aged 26, president of the NGO *Ecoficina de Oficinas*

Pictures: Egberto Nogueira for *Criativa* magazine, issue 191, March 2005,

MATERIAL, FINANCIAL AND HUMAN SUPPORT

A lot of experiences, news, courage and... results!
Without the support of important partnerships, the Youth Program couldn't get here.

We would like to emphasize the support of:

- ★ Associação Holística de Participação Comunitária Ecológica – AHPCE – Núcleo Terra
- ★ World Bank
- ★ United Nations Foundation
- ★ Forest Foundation
- ★ Forest Institute
- ★ Environment Ministry
- ★ City Administration of Caieiras, Cotia, Embu-Guaçu, Guarulhos, Itapeverica da Serra, São Roque, Santo André, Santos, São Bernardo do Campo, Subprefeitura de Perus, Diadema, Cajamar and their local partnership.
- ★ Atlantic Forest Biosphere Reserve
- ★ Environment Secretariat of São Paulo State
- ★ UNESCO – MaB



Biosphere Reserves Office

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