

COURSE REPORT

I Training of Trainers in Rural Settlements: Sustainable Productive Landscapes

ELTI-IPÊ Focal Training Site:

Teodoro Sampaio, Pontal do Paranapanema, São Paulo, Brazil
September 17-21, 2018

A field course organized by:

The Environmental Leadership & Training Initiative (ELTI) and the Faculty for Environmental Conservation and Sustainability of the Institute of Ecological Research (ESCAS-IPÊ).



Participants of the Training of trainers in rural settlements: sustainable productive landscapes.

ELTI is an initiative of:

Yale SCHOOL OF FORESTRY &
ENVIRONMENTAL STUDIES

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Background

The Brazilian Atlantic Forest is one of the world's most important yet most threatened ecoregions. The remnants of the Atlantic Forest contain genetic banks of the world's rarest species and support the livelihoods of 70% of the Brazilian human population who live there. These fragments protect watersheds, prevent erosion and regulate microclimates, all ecosystem services that are vital to the existence of Brazil's most populated cities and rural areas. After centuries of unsustainable use, this important ecosystem has lost 90% of its original cover and turned into small forest islands surrounded by rapid agricultural and urban growth.

In the Pontal do Paranapanema, the Atlantic Forest has seen a recent deforestation and dramatic increase in human population. Large-scale conventional ranching and sugarcane encroached on the forest remnants in this region during 1960-1990. In the mid-1990s, with pressure from the Landless Rural Worker's Movement (MST), farmlands were expropriated and redistributed to more than 5,000 landless families who now live in rural settlements. With an increase in human population, there is a continuous need to promote sustainable productive systems that protect the remaining biodiversity, sustain ecosystem services and support social welfare within this landscape.

For 26 years, the non-profit organization Instituto de Pesquisas Ecológicas (Institute for Ecological Research - IPÊ) has studied forests in Pontal do Paranapanema and has undertaken conservation initiatives, such as environmental education, community involvement, habitat restoration and the promotion of policies that protect natural areas while simultaneously empowering people to improve their conditions of living. IPÊ engages with regional stakeholders to secure the conservation and the recovery of forests in the Pontal do Paranapanema area and to work in partnership in capacity building.



Objectives

IPÊ and ELTI created a field course for members of these rural settlements to adopt sustainable productive systems. This course taught principles of agroecology and ecological restoration through agroforestry, silvopastoral systems and forest restoration. Over five days, participants studied ecological and sustainable agriculture principles and practiced concepts with visits to demonstration sites and practical activities. The course also covered practical tools for participants to become leaders within their communities. By the end of the course, each participant had a plan for how to start developing sustainable productive practices in their own lands and a vision for how they want to manage their farms more sustainably in years to come.

Course content

Introduction to sustainable production systems, ecological restoration and social engagement

- Site contextualization: local environmental problems, ecosystem services and sustainable production
- Tools for participatory engagement and leadership empowerment

Introduction to agroforestry and to silvopastoral systems

- Principles and applications
- Establishing and managing an agroforestry system
- Establishing and managing a silvopastoral system

Forest restoration with native species

- Principles and applications
- Brazilian Forest Code
- Establishing and managing forest restoration projects

Nurseries

- Principles and applications
- Seed collection and germination methods



Day 1

The course began with an introduction of all the participants, trainers and IPÊ staff, followed by a presentation of the course agenda. Then, ELTI's Assistant Director Desirée Lopes gave a presentation of ELTI. ESCAS coordinator Eduardo Badialli followed with a talk about ESCAS-IPÊ. Next, Dr. Laury Cullen Jr. presented his story as a former hunter and talked about the potential of personal change. He also gave a contextualization of the region history, environmental questions, challenges and IPÊ's work.

After a coffee break, ELTI's Colombia Coordinator Zoraida Calle gave two lectures about agroecology principals and ecosystem services. Then, ELTI affiliate Simone Tenório gave an overview of an IPÊ restored forest corridor.

In the afternoon, sociologist Dr. Marcos Ortiz discussed leadership and participatory enrollment within communities. Participants were inspired to continue course exercises long after dinner.

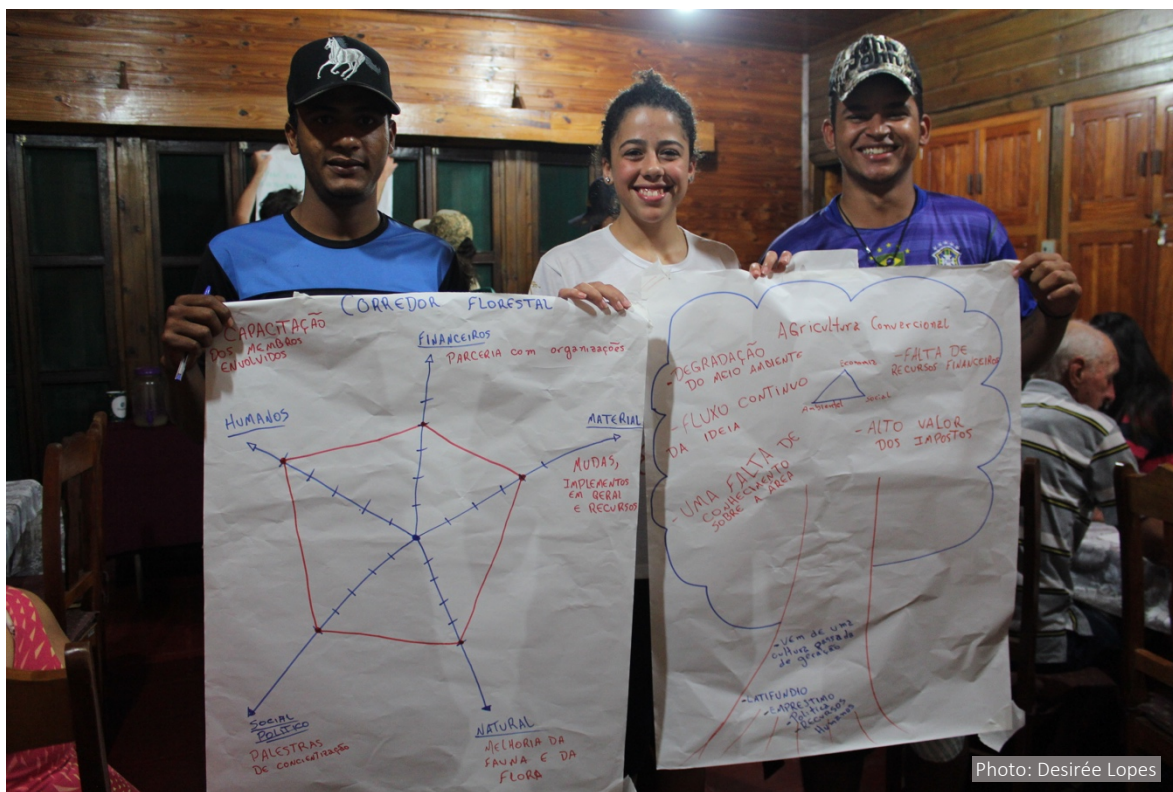


Photo: Desirée Lopes

Participants showing the work they developed during Dr. Marcos Ortiz class.



Day 2

The second day was devoted to forest restoration. Dr. Laury Cullen gave a lecture about forest restoration principles, the importance to biodiversity and ecosystem services, case studies and implementation of restoration practices. Dr. Cullen also showed the results of the IPÊ restored forest corridor in the Rosanela ranch, which includes the planting of approximately three million native seedlings in the last 16 years, the enrollment of 800 families in the production of seedlings, agroecological products and handicrafts that promote income for local communities. This restored corridor is crucial for the local biodiversity, connecting the two main forest reserves of the region, the Morro do Diabo State Park and the Mico Leão Preto Ecological Station.

After a coffee break, Dr. Maria José Zakia (Zezé) gave a lecture on the Brazilian Forest Code. In a very dynamic and interactive class, she discussed the history of the Forest Code and the steps that farmers and landowners need to take to be in compliance with it.

In the afternoon, participants went with Dr. Laury Cullen and IPÊ staff to see the forest corridor and some areas in the initial stage of forest restoration.



Photo: Desirée Lopes

Maria José (“Zezé”) talking about Forest Code and legislation.



Photo: Desirée Lopes

Dr. Laury Cullen, IPÊ staff and participants seeing the forest corridor and areas in the initial stage of forest restoration.



Day 3

The theme of the third day was agroforestry. The day began with a lecture from IPÊ extension agent Haroldo Borges, who lives in a settlement and has been working to establish agroforestry systems in these communities. Haroldo introduced sustainable productive systems for family farming, including the historical context, benefits and opportunities and the implementation practices. After Haroldo's lecture, another IPÊ extension agent Aline Souza talked about socioeconomic vision and the importance of measuring individual production and of having diverse cultivars for food security. She also presented methods of taking care of cultivars and technics for treating diseases.



Photo: Desirée Lopes

Haroldo Borges teaching about sustainable productive systems in the context of family farming.



Photo: Zoraida Calle

Participants diligently taking notes. Photo: Zoraida Calle

After lunch, participants observed the principles they learned that morning in two agroforestry systems created during the Café com Floresta ("Coffee with Forests") project. One system was three-years old and was actively managed by farmers in partnership with IPÊ.



Photo: Zoraida Calle

Three-year-old agroforestry system.



Photo: Desirée Lopes

Participants observing soil samples and discussing their perceptions.

The other system was over 10 years old, was not managed and had become a forest. The first agroforestry system was from Antônio and Maria and the second from Francisco (Chico), small farmers of the region and residents of rural settlements.

During the visits, participants were also able to see the differences in the soil amongst pasture, the three-year old agroforestry plot and the not



Photo: Desirée Lopes

The not managed agroforestry system with coffee.



Photo: Desirée Lopes

Chico in a formerly degraded pasture, sharing with participants his passion for agroforestry.

Day 4

The fourth day was dedicated to silvopastoral systems with the guidance and expertise of Zoraida Calle, ELTI Colombia coordinator and ecological restoration coordinator of the Center for Research on Sustainable Agricultural Production Systems (CIPAV) .



Photo: Miriam Perilli

Participants working on their “dream farm” exercise, where they envisioned how silvopastoral systems would function in their own lands.

Zoraida presented the different types of silvopastoral systems, their foundations, the ecological and functional variables, the positive results for the animal’s welfare and for the productivity and the improvement of ecosystem services.

In the afternoon, participants had a hands-on exercise to represent their dream farm visually. In this exercise, their drawings incorporated the knowledge they received during the course in their own family farms.



Photo: Desirée Lopes

Zoraida Calle and Daniel Neves discussing Zoraida’s lecture

After the dream farms presentations, participants and instructors enjoyed a Brazilian barbecue celebration.



Photo: Desirée Lopes



Photo: Desirée Lopes



Photo: Desirée Lopes



Photo: Desirée Lopes

Participants presenting their dream farms to the class.

Day 5

The final day began with an introductory lecture from Nivaldo Ribeiro, IPÊ extension agent, about plant nurseries. After that, Valter Ribeiro, the nursery manager, led a guided tour of the nursery and germplasm bank. The morning ended with participants planting trees.



Photo: Desirée Lopes

Participants learning about nursery practices and seedling production at the IPÊ's plant nursery school.



Photo: Desirée Lopes

Valter Ribeiro, showing how to grow different kinds of seedlings.



Photo: Desirée Lopes

Participant José Carlos Marinho with a seedling produced in the nursery that participants visited.

Participatory enrollment and community associations emerged as themes throughout the course. Small-scale farmers have to compete with large farmers, who commonly have access to more capital, land and other resources. Course instructors challenged participants to think about a joint strategy for each of the schools where they study. In the afternoon of the last day, they presented the results from their group project work.



Photo: Desirée Lopes

Participants planting a tree to celebrate the conclusion of the course.



Closing out the course, Desirée Lopes presented about ELTI's Leadership Program and facilitated a discussion about the participants' perceptions of the course. Afterwards, IPÊ and ELTI team members distributed certificates of completion and took a photo with course participants.



Photo: Desirée Lopes

Participants preparing their group project.

Participants

The 20 participants came from three technical schools located in local rural settlements of Pontal do Paranapanema, São Paulo, Brazil. Course instructors selected participants with the support of school coordinators. Those selected showed an interest in sustainable production systems. Notably, participants' ages ranged from 15 to 63 years old.



Concluding photos from the Training of trainers in rural settlements: sustainable productive landscapes.



Instructors and staff

- Eduardo Badialli, ESCAS/IPÊ
- Desirée Lopes, ELTI
- Laury Cullen Junior, IPÊ
- Zoraida Calle, ELTI Colombia Program and CIPAV, Colombia
- Simone Fraga Tenório Pereira Linares, IPÊ
- Marcos Affonso Ortiz Gomes
- Maria José Brito Zákia, IPEF
- Haroldo Borges, IPÊ
- Aline dos Santos Souza, IPÊ
- Nivaldo Ribeiro, IPÊ
- Valter Ribeiro, IPÊ
- Williana Marin, IPÊ
- Miriam Lucia Lages Perilli, ELTI (Brazil Program) and ESCAS-IPÊ

Outcomes and Follow-up:

The course participants demonstrated remarkable interest, focus and motivation during lectures, field visits, exercises and group discussions. After completing the course, participants decided to create three farmer associations with specific project plans. They expressed an interest in refining their projects and searching for funds to support and implement them.

This event was possible thanks to Arcadia Fund, whose Environmental Conservation grants support programs that protect and enhance biodiversity, and provide field training and academic research.