



COURSE REPORT

Silvopastoral Heirs: Sustainable Farming and Ecological Restoration

Lucerna and Los Chagualos farms,
Municipalities of Bugalagrande and Buga, Valle del Cauca, Colombia
June 20-21, 2018

A field course organized by:

The Environmental Leadership & Training Initiative (ELTI),
the Center for Research on Sustainable Agricultural Production Systems (CIPAV) and the Mainstreaming Biodiversity in Sustainable Cattle Ranching Project (GCS Ganadería Colombiana Sostenible)¹



Silvopastoral Heir Manuela Davison at Lucerna farm.

Photo: Enrique Murqueitio

Background

A large proportion of biodiversity in Latin America exists outside of large protected areas. Agricultural landscapes should be managed to complement the role of national parks and reserves in safeguarding the region's exceptionally rich biota. On the other hand, a growing number of farmers and cattle ranchers are

1. The Mainstreaming Biodiversity in Sustainable Cattle Ranching Project (GCS Ganadería Colombiana Sostenible) promotes the adoption of environmentally friendly silvopastoral systems (SSP) that enhance farm productivity, natural resource management and the delivery of environmental services. Project partners are the GEF, Department of Business, Energy & Industrial Strategy (UK), The World Bank, Fedegan, The Nature Conservancy, CIPAV and Fondo Acción. This initiative seeks to scale up SSP and integrate them with ecological conservation and restoration in five Colombian landscapes: Cesar River valley and lower Magdalena in the dry Caribbean region; Andean Oak Corridor in Boyacá and Santander; the Coffee Ecoregion and the eastern Andes foothills in Meta department. Pilot farm owners work actively in farmer to farmer training and therefore play a key role in scaling-up the adoption of SSP and ecological restoration practices, and in promoting cultural change towards sustainable livestock production.

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Silvopastoral Heirs at Nirvana Reserve (Palmira, Valle del Cauca, Colombia).

worried about transmitting not only their lands, but also their productive projects and values to the next generation, against accelerating trends of urbanization and youth migration. These landowners face the great challenges of enhancing the sustainability and resiliency of their farming systems while conserving habitat patches, restoring degraded lands within their properties and motivating their sons and daughters to envision a rural future. Such complex challenges demand not only unique skills and knowledge but also a deep appreciation of the land and of rural culture.

The 2018 version of the *Silvopastoral Heirs* workshop brought together two generations of farm and nature reserve owners to discuss the intergenerational continuity of family farming, restoration and conservation initiatives. Course participants included 15 adults and teenagers who work actively in training other farmers and collaborate with their local communities in different types of restoration and sustainable farming activities in Colombia and other South American countries. The event was scheduled to precede the *IV International Agroecological Restoration Field Course*, and to prepare all participants to attend this other event.

Objectives

The main objective of this workshop was to bring together two generations of farmers, silvopastoral cattle ranchers and private reserve owners, to motivate them by highlighting their families' commitments to sustainable production and restoration, and to facilitate the exchange of ideas between them. Some specific objectives were:

- To prepare the participants to attend the *IV International Field Course on Agroecological Restoration*.
- To reflect on the human values that nourish sustainable farming, restoration and conservation.
- To provide course participants with tools to undertake their own inter-generational projects.
- To consolidate the Colombian Network of Silvopastoral Heirs.

Field-course format

Field trips to two contrasting silvopastoral farms were complemented with group discussions that explored four key aspects of sustainable farming and conservation: agroecological products, ecological restoration,



Field trip to Lucerna Farm.

community participation and ecotourism. Exercises and discussions focused on the principles, values and identity issues that enable inter-generational exchange. The workshop also provided the opportunity to explore the role of folk music in rural sustainability.

Day 1

The first day began with a talk in which Enrique Murgueitio (CIPAV's executive director) explained the philosophy of the Silvopastoral Heirs movement and the workshop's objectives. All course participants introduced themselves and their families' sustainable farming and conservation projects. After that, the group travelled to Lucerna farm, located at the municipality of Bugalagrande. Once the largest dairy farm in Colombia, with more than 6000 cows, Lucerna is an iconic property and an international reference for organic milk and sugar cane production. Course participants observed the complex, 28-year old silvopastoral systems that form a wildlife friendly agricultural matrix, and analyzed the role that functional biodiversity and animal welfare play in the efficient milk production of these systems.

During the afternoon, the group visited a small farm in the mountains of Buga, owned by a widow who works to recover her degraded land with a combination of sustainable farming and restoration practices. Three years ago, ELTI alumna and farm owner Sandra Carbonell started to recover the riparian forest in her property through a combination of assisted natural regeneration and enrichment planting. She also joined all forest fragments through small corridors and planted native bamboo in the natural drainages. At the same time, she transformed her treeless pastures into intensive silvopastoral systems by managing tree regeneration and planting fodder shrubs for the cattle. The adoption of silvopastures, soil conservation practices and organic fertilization accelerated the recovery of the degraded land.

After visiting a large farm with consolidated sustainable ranching practices, and a small one with young silvopastoral systems, course participants analyzed the common principles and values illustrated by these contrasting farms.



Eight course participants.

Day 2

All course participants presented the history, evolution and current state of their family projects, which include nature reserves and silvopastoral farms. After listening to each other's stories, the group was subdivided into four sub-groups, each of which discussed two of the following key issues: agroecological products, ecological restoration, community involvement and tourism.

Participants

The individuals selected to attend this workshop included 12 adults and 3 teenagers from Colombia, Venezuela, Chile and Argentina.

Instructors

- Enrique Murgueitio, CIPAV, Colombia
- Adolfo Cardozo, CIPAV and CENDI, Venezuela
- Juan Fernando Suárez, Lucerna farm
- Sandra Carbonell, Los Chagualos farm
- Zoraida Calle, ELTI (Colombia Program) and CIPAV, Colombia

Outcomes and Follow-up:

This workshop helped to consolidate the Silvopastoral Heirs movement that had been established in the 2017 event. Group discussions were useful to complement the mission statement, principles and values stated by the participants of the previous workshop. These were the main conclusions.



Photo: Enrique Murgueto

Los Chagualos farm.



Photo: Enrique Murgueto

Cesar and Adolfo Cardozo from Venezuela.



Photo: Enrique Murgueto

Los Chagualos farm.

Agroecological products

This discussion focused on some ethical and economic issues related to food production. Participants acknowledged their responsibility in promoting healthy food in their communities as a basic human right, and rewarding farm workers for their contribution to high-quality products.

They agreed that reducing intermediation and gaining access to special markets are essential for securing the financial viability of their farms. Differentiated marketing is more easily achieved when farmers focus on quality instead of high yield, communicate the special attributes of their products and dedicate time to building direct relationships with their clients. Export markets are not a realistic option for all producers because standards related to aesthetic quality, volume and stability of supply are difficult to meet sustainably. Instead, participants recommended focusing on local or regional markets strengthened through social networks and customer education.

Ecological restoration

Why is restoration important for an intergenerational project? Participants acknowledged ecological restoration as part of their responsibility to the land. They considered that rural families should learn about ecological restoration by practicing it. Restorative activities such as planting trees strengthen the bonds of children and youth to the land. However, this sensitivity and intergenerational communication should be nurtured gently, without imposing activities on the young.

Most rural properties face different restoration challenges but have very limited resources. Farm-scale restoration can be designed to enhance sustainable farming practices through biological pest control, pollination and other environmental services. Such synergies between restoration and sustainable agriculture are highly desirable. Habitat connectivity should also be considered when establishing restoration priorities.



Barriers to restoration should be viewed as new challenges and opportunities for a dialogue of knowledge. Innovations are required to cut down the costs of farm-scale restoration. Farm owners should be open to new methods and techniques, and should monitor their restoration initiatives. In the face of limited resources, some restoration innovations will have to be disruptive. This will probably mean questioning a few current paradigms. In this context, “failing gracefully” translates into “failing at a low cost and rapidly incorporating the lessons learned”.

Community work

Most course participants work in projects that involve other members of their communities, peasants or indigenous people. Although local identities have been strongly affected by globalization and government policies, most participants envision interesting opportunities for building fair relationships between urban and rural people. However, some participants mentioned that administrative management is a significant weakness in most community processes.

Participants agreed on the importance of developing solutions with the local people instead of applying more traditional top-down approaches to development. Rural communities need different types of leadership to develop healthy relations with other communities, with the government, with private companies and with the rest of society.

Tourism

All participants have tried ecotourism or agritourism as a complementary source of income for their farms and reserves. The group discussion focused on a few principles and lessons learned. A fundamental question when planning tourism at a farm is: what do we have? Each family or community should agree on what type of tourism is adequate for their area; they should clearly identify what they can offer, and establish which places should become available for visitors. Each farm or reserve should focus on a few activities, selected according to the identity of each place. The seasonality of farm activities must be considered when planning agritourism. Participants mentioned examples of periods in which farm visits should be avoided because they interfere with harvests or cattle herding.

Many participants agreed that agritourism should be interactive. Visitors should participate in activities such as harvesting coffee grains or milking, and they should understand why each of these activities needs to be done in a certain way. Tourism should be a complementary activity, rather than completely replacing farming as a source of income. This is the reason why it is so important to define a certain farm identity. Finally, ecotourism and agritourism should contribute not only to the transmission of knowledge, but also of values.