











# Land Use Dialogue in the Rota da Ferradura region Conceição and Jabuti River Basins: localities of Jabuti, Boa Esperança, Buenos Aires and Cachoeirinha - Guarapari - ES

Field Dialogue - Co-Chairs' Summary Report

November 29th and 30th, 2023

In-person

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#### Introduction

The Capixaba Forest Forum (FFES) is one of the seven regional <u>Forest Forums of the Brazilian Forests Dialogue</u>, representing the focal point of support for the conduction of the Land Use Dialogue in Rota da Ferradura, which covers the Conceição and Jabuti river basins. Founded in 2008, FFES is an advisory and deliberative space dedicated to forest discussions, operating throughout the state of Espírito Santo territory by means of 20 institutions. Its main objective is to provide a democratic environment for reflection, dialogue and liaison, seeking to promote synergies and inspire transformation in the links between forestry production, ecosystem conservation and community participation.

The region chosen for the Land Use Dialogue is the Guarapari region, namely Rota da Ferradura, with its characteristics further detailed in a previously shared document, the <u>conceptual note</u>. This is a very relevant region due to its scenic beauty and its role as a water source for the public supply of the municipality of Guarapari, ES.

Guarapari has a population of 128,500 inhabitants (IBGE 2021). In summer, the population increases by more than 100%, due to the tourists who visit the municipality. It covers a territorial extension of 589,825 km², with the land being used largely for the development of agricultural and livestock production activities.

<sup>&</sup>lt;sup>1</sup> Members of the Advisory Committee who were present at the field dialogue.



As for the area's environmental aspects, the study developed by Associação Ecológica FORÇA VERDE (2012) - <u>Diagnóstico do Rio Conceição</u>, described the poor conditions of the river and its surroundings. In 2015, Cedagro indicated that there are more than 4,000 ha of Permanent Preservation Areas (PPA) to be restored in the municipality, a considerable liability that corresponds to approximately 7.7% of its total area.

The river basin region called Guarapari is made up of a group of adjacent watersheds. Preliminarily, the territory selected as the object of this first stage of the Land Use Dialogue (LUD) comprises the geographic limits of the Conceição and Jabuti river basins, in the municipality of Guarapari, ES, which total approximately 13,000 ha.

The main challenge in this landscape is the establishment of dialogue channels to discuss land use practices that are appropriate to the region's characteristics, respecting cultural values, the conservation of local species and maintenance of water recharge areas along the Conceição and Jabuti rivers. At the same time, establishing these channels of dialogue also addresses preliminarily raised challenges such as deforestation, illegal land subdivision with soil and water pollution from domestic effluents and public water supply insecurity, among others. Furthermore, the landscape has tourism potential due to its scenic beauty.

Due to the context presented above, the area described was selected as a case study for the first Land Use Dialogue in the state of Espírito Santo. Held in Guarapari on June 30, 2022, the first stage – the <a href="mailto:scope dialogue">scope dialogue</a> - included the participation of rural producers and other representatives of the productive sector, civil society organizations, government institutions and teaching and research institutions. Based on the scope dialogue, the following challenges were defined in order of priority:

- 1. Disorderly occupation of the territory / Create conditions for orderly land subdivision / Reduced land subdivision / Disorderly occupation;
- 2. Disposal of sewage and wastewater / Domestic sewage dumped in the river / River cleaning;
- Decrease in water volume and quality / Increase water availability/absorption and water reserves / Irregular water flow with floods and droughts.

The Land Use Dialogue in the region of Guarapari, state of Espírito Santo is promoted by the Capixaba Forest Forum, CEDAGRO and Associação FORÇA VERDE, with the support of the Brazilian Forests Dialogue and The Forest Dialogue initiatives.

### **About the Land Use Dialogue**

The Land Use Dialogue (LUD) is a multi-stakeholder initiative that aims to gather knowledge and lead processes that drive responsible businesses, improve territorial governance and promote inclusive development in relevant landscapes.

Several editions of the Land Use Dialogue have already taken place around the world, such as in Brazil, Ghana, Uganda, Democratic Republic of the Congo and Tanzania. In Brazil, it was carried out in 2016 in the Alto Vale do Itajaí region, in the state of Santa Catarina, with six initiatives currently underway in the country.

The initiative's Dialogue phase comprises three stages:



- Scope Dialogue;
- Field Dialogue and
- Conclusion Workshop.

### The main expected results include:

- Creation of an environment of trust among local leaders;
- Promotion of multi-stakeholder engagement, including decision makers;
- Creation of an environment conducive to the creation and/or promotion of platforms led by local actors (forums, alliances, coalitions, etc.) and
- Impact on local and regional public policies.

### **Objectives**

The main objectives of the second stage (Field Dialogue) of the Land Use Dialogue in Espírito Santo were the following:

- Promote experiential learning through the conduction of field dialogues focused on aspects related to the challenges envisioned in the <u>previous scope dialogue stage carried out in Rota</u> <u>da Ferradura</u>;
- Talk to landscape stakeholders to better understand their experiences connected with the dialogue's focus area.

### Methodology

Following the operating principles of a Land Use Dialogue, according to the <u>LUD Guide</u>, the meetings were held over two days and included presentations by facilitators, field visits, group work and plenary discussions, as follows.

### **Discussion about challenges**

Participants validated the points below as priority challenges:

- Disorderly occupation of the territory / Create conditions for orderly land subdivision / Reduced land subdivision
- Disposal of sewage and wastewater / Domestic sewage dumped in the river / River cleaning
- Decrease in water volume and quality / Increase water availability/absorption and water reserves / Irregular water flow with floods and droughts

### They also highlighted:

- The importance of participation of the municipal government and local communities;
- The need to regulate the use of land for crops through an agricultural land use plan;
- The need to consider the Municipal Development Plan (MDP) with studies on the impact of surrounding areas for the region's context, integrating LUD discussions into this process.

The importance of the private sector in the design of solutions was also highlighted, considering that growth is unstoppable and needs to be solution-oriented, with a view on how to protect the region's water resources.



## **Summary of field visits**

On November 29th, the following field visits were carried out:

Location 1: Cervejaria Esperanza: this location was selected because it provided a broad view of the surroundings, informing discussions about land use in the landscape. It was possible to observe the significant proportion of rocky outcrops in the region, and areas used as pasture for sheep. The pastures were degraded, with laminar and furrow erosion resulting from overgrazing, that is, animals in quantities above the pasture's support capacity. It was mentioned that 30% to 40% of the state's pastures are degraded, and the importance of planning actions considering the areas' suitability according to slope with technical assistance for pasture management, in addition to actions such as fertilization, respect for support capacity and use of appropriate grasses. Erosion causes soil particles to be carried into rivers, leading to siltation and consequent soil impoverishment - low soil fertility in high areas. Other causes of observed siltation were soil deposits on river banks and irregular earthworks. As possible solutions, the need to improve the quality of activities was highlighted, minimizing the negative impacts of road construction/grounding, carrying out correct drainage, using techniques such as physical barriers to retain sediments, and adopting good practices and appropriate planting techniques, such as contour planting and selection of appropriate plant species.

Location 2: Recently carried out earthworks: the selected intervention was carried out without the adoption of environmental measures, with consequent erosion and materials carried into the watercourse. The importance of civil society engagement - through dialogue – was highlighted, to correct errors and protect slopes. The problem is not what is done, but how. The lack of planning was identified as one of the main reasons leading to incorrectly executed interventions, generating negative environmental, social and economic impacts.

Location 3: Bridge in Vila Anunciata: location that allows a comprehensive view of significant silting in the watercourse channel. This location shows an interface between cause and effect, with earthworks and erosion in pastures, urban densification and tourist facilities (residential condominiums, bars, restaurants, etc.)

Along the Rota da Ferradura, it was also possible to see irregularly subdivided land, with areas below the minimum subdivision size and in violation of the Land Law. This action results in potential contamination of the groundwater table caused by domestic effluents. Further along, another project was seen in the community of Buenos Aires, with an intervention carried out without the adoption of environmental controls, with consequent erosion and the transport of materials into the watercourse. There was talk of the importance of bringing the state government's reforestation program (Reflorestar Program) to the region, which enables Payments for Environmental Services (PES) with support for those who conserve or recover forest areas or make use of sustainable plantations and production systems, in addition to the importance of streamlining its implementation.

On November 30th, the following locations were visited:

Location 1: Area with intervention for the construction of a hotel: intervention in a Permanent Preservation Area (PPA), where it was possible to verify the absence of environmental controls, with possible consequences for water sources, among others.



Location 2: Landscape viewing spot: with identification of rocky outcrops, topographical configuration of the valley, possible implications regarding heavy rainfall, and analysis of the importance of water infrastructure works (dams), mainly for water supply and flood damping. In this location, there are records of waterspouts that destroyed houses, indicating the importance of dams.

Location 3: CESAN dam used to capture water and supply the city of Guarapari: the importance of infrastructure was discussed as another water security strategy; silt has built up in the dam at the site, significantly reducing its flow regulation capacity and consequent water security. During the LUD field visit, participants saw locations where the transport of soil particles from roads has caused silting, demonstrating the importance of correct road construction and maintenance. The importance of riparian forests to contain siltation was also highlighted. It was mentioned that in December/2021, FORÇA VERDE and the CDL, together, sent a letter (021/2021 - CDL) to Governor Renato Casagrande with a technical study supporting the implementation of a dam to mitigate the consequences of water insecurity in Guarapari. A Technical Note was drafted on 01/24/2023, in relation to which the authors await approvals for decision-making at the government level. It was also highlighted that at FORÇA VERDE's request, on 08/11/2022, AGERH (the water resources agency) carried out an inspection visit at the region, and recorded the capture of 100% of the water stored in the dam by the CESAN pipeline, with a report available here.

Location 4: Significant land parceling, earthworks and deforestation were visualized through Google Earth. These types of interventions directly impact local water resources.

At the end of the field experiences, the following issues were raised:

- The lack of care reflects life in the city;
- Expectation of publication of a concise document that helps solve some of the problems seen;
- Importance of discussion with society.

## Creation of a common vision for the landscape

By consensus, participants created a vision of a sustainable and prosperous landscape for the next 10 years:

"A region with diversified tourist activity in a scenic landscape, with sustainability, restored riparian forests, sustainable construction and maintenance of roads, earthworks respecting environmental measures, 100% treated sewage, adequate use and occupation of land and water conservation and reservation".

The creation of the landscape vision above resulted from guided reflections during plenary discussions, field dialogues and the analysis of the image that reflects land use in the region (appendix 1).

### Projects and actions underway in the landscape

Main projects and ongoing actions:

- Socio-economic and tourist diagnosis of Rota da Ferradura; Land Use Dialogue;
- Effective operation of the management group for the Rota da Ferradura region in the MDP;



- Focus on tourism (media/news stories, presence of SENAR, ADERES, workers' union);
- Expanding gastronomic hub (restaurants);
- Brewery hub;
- Força Verde delivered in December/2023 the results of the "Collaboration Agreement no. 001/202" ADERES, process E-DOCS: 2022-CDTLV, (Tourist and economic diagnosis, identification of Rota da Ferradura's tourist potential, contracted by ADERES, in the approval phase;
- Recovery of degraded area in the Topo do Céu Valley project together with Topo do Céu Institute, with the implementation of Bosque da Memória on 03/31/2022, an initiative of Rede da Mata Atlântica RMA and Reserva da Biosfera da Mata Atlântica RBMA, as well as an agroforestry project developed by CEDAGRO. There is an ongoing process of implementation of an Environmental Education area, a Reception and Rehabilitation Center for wild animals and transformation of part of the property into an Private Natural Heritage Reserve (PNHR). As soon as these projects are operational, FORÇA VERDE will apply to the RBMA National Council for the implementation of an RBMA Outpost, an RBMA / UNESCO initiative.

Among the actions that need to be carried out in the region, the following were listed, in order of priority:

- Dams to conserve river water / Seek information about rules and programs that support river basins/micro basins / Develop a water conservation and preservation plan;
- Call for the implementation of the Reflorestar program and increase participation in the program;
- Basic sanitation / Develop a plan for the appropriate disposal of domestic effluents;
- Comply with the Land Law (Estatuto da Terra in portuguese);
- Preservation of the scenic landscape and landscaping of the Rota da Ferradura route / Develop a landscape plan;
- Training of the workforce through partnerships;
- Tourism communication and marketing plan and shaping of an identity for the region;
- Forest restoration and reforestation projects;
- Ecological tourism training courses and others;
- Share information generated by the Land Use Dialogue with environmental and tourism councils:
- Expansion, intensification and qualification of Technical Assistance and Rural Extension.

The importance of engaging the following actors was also highlighted:

- Productive sector
- IDAF
- Incaper
- Dairy sector (Carminati producers of milk, cheese, among others)
- Breweries
- Commerce sector
- SENAR
- Agribusiness women
- CESAN
- Governments



The participants also mentioned the commitments made, to be shared with the group, to support the achievement of the landscape vision:

- Collect information from AGERH on the pro-river basins program, dam planning;
- Share LUD results with the environmental and tourism councils and municipal and health departments within the scope of the Municipal Master Plan (Plano Diretor in portuguese), in addition to state councils and Rota da Ferradura's management group;
- Collect information and promote the presence of Reflorestar program in the region;
- Develop a plan for the disposal of domestic effluents, and a communication and marketing plan for the tourism sector.

### **Field Dialogue Schedule**

#### **November 29**

9am – 12:10pm: Sítio Raio de Luz (Estr. Rota da Ferradura - Boa Esperança, Guarapari - ES, Brazil).

- About the Land Use Dialogue, challenges envisaged in the previous stage and reasons for landscape selection;
- Discussion on main challenges identified;
- Creation of a vision of a sustainable and prosperous landscape in 10 years.

12:30pm - 2pm: Lunch at Pereira restaurant.

2pm – 5pm: Departure for field dialogues. Visit to areas showing disorderly occupation of the territory, land subdivision and its consequences such as deforestation.

#### **November 30**

9am: Departure for field dialogues (meeting point at Sitio Raio de Luz). Visit to areas that inform discussions on decrease in water quantity and quality, followed by a visit to a restoration project.

12pm: Lunch

2pm: Sítio Raio de Luz (Estr. Rota da Ferradura - Boa Esperança, Guarapari - ES, Brazil).

- Presentation of the summary of the landscape visions created on Day 1;
- What are the challenges for the achievement of this landscape vision?
- Discussion of solutions and strategies to achieve the landscape vision;
- Priorities and recommendations.

5pm: Closing.

### **Financial Support**



Fernanda Rodrigues (Brazilian Forests Dialogue) and Frederico Raposo (CEDAGRO, Capixaba Forest Forum) contributed as facilitators of the Field Dialogue event.



# **List of Participants**

Name	Organization
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Aguinaldo Ferreira Junior	CDL Superintendent of Guarapari
Albert Falcão Azevedo	GS - Gestão de Negócios
Alcenir Rocha	FORÇA VERDE Ecological Association
Celso Maioli Junior	FORÇA VERDE Ecological Association
Daniel Bermond Marques	Sítio Vale Realeza
Fabiana Gomes Ruas	INCAPER
Fabrício Zanzarine	SEAG (State Secretariat for Agriculture, Supply, Aquaculture and Fisheries)
Fernanda Rodrigues	Brazilian Forests Dialogue
Frederico Raposo	Cedagro
Geovane Bermond Marques	Sítio Vale Realeza
Gilmar Dadalto	Cedagro
Janaina R. Oliveira	Topo do Céu
Jonas Ferreira Barbosa	Rural Owner - Sítio Recanto da Pedra
Lucia Novaes	Federation of Popular Associations of Guarapari
Oldair Luiz Gonçalves	Federal Institute of Espírito Santo
Paulo Henrique Radaik	Peroá Institute / Agroecologist
Zeneide F. Cruz	Força Verde Ecological Association
Walter Batista Junior	AGERH (State Water Resources Agency)
Weber Alves da Rocha	Força Verde Ecological Association



# **Photos**















Annex 1: Overview of land use and occupation in the Jabuti and Conceição river basins.

