

# Deep Sharing

A Vision for Serra do Brigadeiro State Park Region

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# Introduction

- The purpose of this report is to provide an external perspective for the potential future of the nine counties surrounding the Serra do Brigadeiro State Park in Minas Gerais.
- The overarching goal to contribute to a value shift towards ecological function is
- Research limitations

# Scenario Matrices

- We chose to focus on three important components that will support a value shift throughout the region.
- Our recommendations align with a vision for improved land use, increased government effectiveness, a high level of social organization, and a robust response to climate change.

# Land Use Approaches

- Extractive
  - Strong emphasis on economic growth through extraction of natural resources and industrial farming
- Productive
  - Focus on economic returns balanced by increased attention to social and economic needs
- Ecological
  - Ecosystem function more valuable than production of goods and services

# Social Organization

	Extraction	Production	Ecological Function
<b>Low</b>	<ul style="list-style-type: none"> <li>• High degree of competition amongst individual producers</li> <li>• Widespread degradation of natural ecosystems</li> <li>• Continued rural to urban migration</li> </ul>	<ul style="list-style-type: none"> <li>• High competition amongst producers</li> <li>• Moderate economic returns, moderate risk</li> <li>• Continued consolidation of holdings</li> <li>• Moderate diversification of large-scale farms</li> </ul>	<ul style="list-style-type: none"> <li>• Isolated ecological farms within a landscape dominated by traditional farming</li> <li>• Slow or limited proliferation of sustainable practices</li> <li>• Moderate slowing of pace of environmental degradation</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>• Social support for extractive activities (mining)</li> <li>• Dependence on corporate royalties and donations for provision of social services</li> <li>• Heightened participation in global export markets</li> </ul>	<ul style="list-style-type: none"> <li>• High participation in cooperatives and unions</li> <li>• High returns to farmers through increased horizontal and vertical integration of production</li> <li>• Emphasis on large-scale monoculture</li> </ul>	<ul style="list-style-type: none"> <li>• Heightened regional autonomy</li> <li>• Coordinated efforts for environmental protection</li> <li>• Increased collective management of natural resources</li> <li>• Network of highly diversified farms</li> <li>• Shift away from commodity-driven growth</li> </ul>

# Effectiveness of Government in Rural Areas

	Extraction	Production	Ecological Function
<b>Low</b>	<ul style="list-style-type: none"> <li>• Ineffective social services</li> <li>• Large-scale mining</li> <li>• Widespread ecosystem degradation and fragmentation</li> <li>• High dependence on mining royalties and employment</li> </ul>	<ul style="list-style-type: none"> <li>• Ineffective social services</li> <li>• Increased economic vulnerability</li> <li>• Minimal coordination between government and farmers</li> <li>• Short-term specialization</li> <li>• Fluctuating community demographics</li> </ul>	<ul style="list-style-type: none"> <li>• Limited technical and financial support and policies for ecological practices</li> <li>• Self-funded and autonomous producers</li> <li>• Slow transition from market-oriented to ecosystem-oriented production</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>• Large-scale mining</li> <li>• Low dependence on mining royalties and employment</li> <li>• Devolution of regulatory authority</li> <li>• High consolidation of landholdings</li> </ul>	<ul style="list-style-type: none"> <li>• High coordination between government and producers</li> <li>• Effective technical and financial support and policies</li> <li>• Effective social services</li> <li>• Improvement in infrastructure</li> <li>• Entrepreneurial activities</li> </ul>	<ul style="list-style-type: none"> <li>• Widespread technical and financial support and policies for ecological practices (pilot projects)</li> <li>• Effective and autonomous local government</li> <li>• Rejection of extraction oriented growth model</li> </ul>

# Climate Change Response

	Extraction	Production	Ecological Function
<b>Low</b>	<ul style="list-style-type: none"> <li>Widespread mining and industrial monoculture</li> <li>Accelerated rural to urban migration</li> <li>Increased economic and social vulnerability</li> </ul>	<ul style="list-style-type: none"> <li>Dependence on monocrop agriculture for exports</li> <li>Uncoordinated and isolated mitigation efforts</li> <li>Widespread deforestation and land degradation</li> <li>Increased economic and social vulnerability</li> </ul>	<ul style="list-style-type: none"> <li>Lack of coordination and planning for ecological activities</li> <li>Limited innovation and risk taking</li> <li>Moderately reduced economic and social vulnerability</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>Regulated mining and industrial agriculture with offsets</li> <li>High reliance on technology to offset negative environmental impacts</li> <li>Robust corporate social responsibility and conservation programs</li> </ul>	<ul style="list-style-type: none"> <li>Increased diversification using traditional farming methods</li> <li>Reliance on market-based mechanisms for reforestation and conservation (payments for environmental services, carbon trading)</li> <li>Integrated regional response</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive strategic climate change response</li> <li>Diverse production coexisting with healthy ecosystems</li> <li>Sustainable rural livelihoods</li> <li>Commitment to ecological and community values</li> </ul>

# Iracambi SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>· Local Brazilian leaders willing to engage with community/region</li> <li>· Provided support to improve livelihoods</li> <li>· Increased adaptability and mitigation of climate change</li> <li>· Willingness to innovate and take risks</li> </ul>	<ul style="list-style-type: none"> <li>· Conflicting perceptions of Iracambi in the region</li> <li>· Dependent on external funding</li> <li>· Over reliance on current management for international support (existing directors' network)</li> <li>· Centralized knowledge and limited number of bilingual (Portuguese and English) employees</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>· Establish relationship with local government</li> <li>· Partnership with local and international institutions (NGOs, Universities, etc.)</li> <li>· Increase support for local initiatives (i.e. entrepreneurial activities, ecotourism)</li> <li>· Secure sustained financial and human resources</li> <li>· Serve as a agro ecological model for the region</li> </ul>	<ul style="list-style-type: none"> <li>· Mining activities</li> <li>· Ineffective government</li> <li>· Lack of coordination with external actors (working in isolation)</li> <li>· Uncertainty of transition process (loss of existing networks, management consistency, drifting from core values)</li> </ul>

# Key Considerations

- Decentralize leadership and responsibility, and strengthen institutional knowledge by fostering a culture of organizational knowledge sharing
- Collaborate with local actors on entrepreneurial income-generating activities in order to diversify revenue streams and shift away from NGO model of dependence on external grants

# Key Considerations Con't

- Expand and enrich environmental education activities for middle and high school youth (e.g. IFET, APAE, etc.)
- Strengthen and establish relationships with universities around the world, particularly in Minas Gerais and Brazil; actively recruit researchers and technicians for better understanding of biodiversity and expected climate change impacts in the region (e.g. Faminas Muriaé, UFV, etc.)
- Iracambi as a community training center for information exchange and collaboration (such as hosting experts from the region to train local farmers)
- Facilitate knowledge sharing about climate change mitigation and adaptation methods (e.g. farm insurance, innovative agroecology practices such as biochar, biodigesters, mist nests)

Discussão

Obrigados

Thank You