

## Responsible Sourcing of Agricultural Commodities: the way ahead in Brazil





The responsible sourcing of agricultural commodities is, we believe, the greatest conservation opportunity of our time. Given the link between tropical deforestation and carbon emissions, it is also a pressing climate change priority. Brazil is the key country to work this strategy. In this short briefing paper, we build on our long experience in Brazil to explain why we think this, and give our take on what needs to be done.



## The global context: new market pressures for environmental responsibility



Being associated with deforestation is bad business. Food companies, retailers, agribusiness and the financial sector with which they are all entwined are responding to regulatory and consumer concerns about climate change. This opens up new opportunities for the greening of corporate supply chains and capital flows in the tropics. A combination of circumstances in Brazil is transforming the country into a laboratory for intensifying production on converted land and channeling it away from native habitat – minimizing the environmental costs of agricultural expansion.

Creating disincentives for environmental irresponsibility in the supply chain is a key role for regulatory bodies and campaign organizations. We focus on the next step: ensuring large-scale supply of responsibly produced commodities in Brazil, especially soy and beef.

## Brazil as a responsible producer: the legal framework



Burning rainforests and grasslands retreating before the plough are not the whole story in Brazil. Brazil's Forest Code imposes unique obligations on agricultural producers that in theory would make them the most responsible agricultural producers in the world. It obliges farmers and ranchers to preserve “areas of permanent preservation” on their properties: riparian forest, for example. In addition, it obliges producers to keep a certain percentage of their land in native vegetation. If farms have already been converted beyond that limit, various forms of off-farm compensation through the conservation of native habitat elsewhere are possible.

We use the Forest Code as a compliance framework. Most farmers in Brazil are not in compliance with the Forest Code. But the heart of our strategy is the idea that they could be, if they had the right incentives to get into compliance.

## Incentives for responsible production

The classic incentive for compliance with anything from the perspective of a producer is a price premium. We do not believe that is a viable strategy for Brazil for the foreseeable future. There are many sources of supply in global markets, and traders and retailers will find cheaper alternatives, making a price premium uncompetitive. A more realistic incentive is a guarantee of market access: to a reliable trader in the first instance and a reliable market in the second. But that alone is not enough unless reinforced by additional incentives. These include:

- clear rules of the game: producers need to know exactly what is being asked of them so they can weigh the costs and benefits of compliance.
- access to lines of credit with differentiated interest rates that amortize the costs of compliance to a low level over a long period. To be successful, they must be accessible to the producers whose compliance is strategically critical: large-scale deforesters. They tend not to be small family farmers. The first of these lines, a US\$150 million 'Forest Compensation Fund' was created by the BNDES, Brazil's national development bank, in 2009, after three years of dialogue with Conservancy experts. We are now working to spread the mechanism into private sector lending in Brazil.
- help to get the monitoring systems necessary to guarantee no-deforestation pledges on properties up and running at minimum cost.
- plugging monitoring systems for land-use change at farm level into state property licensing systems, thus protecting producers from corrupt enforcement practices.
- hooking compliance activities into emerging markets for environmental services, such as carbon.



© Leandro Baumgarten/TNC

### Greening through monitoring

The key to active management of supply chains to avoid deforestation is cheap and effective monitoring at the farm level. Farms and ranches have their perimeters recorded on GPS units and then entered into a georeferenced database. Plotted onto annually updated satellite images, a range of actors – companies, public agencies, civil society bodies – can track land use change and have the information they need to micromanage against deforestation linked to ranching and agriculture. These technologies are increasing in sophistication and getting cheaper every year. They are also a tool for large-scale conservation. By permitting the calculation of offset obligations of large numbers of producers across a landscape, they allow the cutting of large-scale compensation deals by groups of producers wanting to get into compliance.

### Working to scale

It is important to work on a scale commensurate with the threat. In Brazil, that effectively means having a direct impact on tens of thousands of ranches and farms producing millions of tons of soy and beef, and on capital flows measured in billions of dollars annually. It follows that field projects must demonstrate a concept in practice in order to leverage it on a much larger scale. The concept we work to prove is that Forest Code compliance is cheap, practical, and brings concrete benefits to producers, traders and regulators. That it also has collateral benefits in the governance of agricultural frontiers and for climate change is important, but is not the selling point to producers and traders, who have more immediate concerns.

- technical assistance, extension support and subsidized credit for farm strategies that ease the path to compliance, such as intensifying production systems rather than extending them.
- marketing, media and publicity support to reward compliant producers with important but often underestimated non-material incentives: political prominence, local fame and increased self-esteem.

## Brazil as an agricultural superpower

Brazil's importance to conservation is so well known it needs no repeating here. But the extent of Brazil's rise as an agricultural superpower is less well known. In 2008 Brazil was the world's largest producer and exporter

of coffee, sugar, sugarcane ethanol and frozen orange juice. It was the second largest producer and exporter of soybeans, beef and poultry. Brazil's agricultural exports have not been dented by recession. Beef, easily the most important driver of deforestation in the Amazon, is a case in point. In possibly the least favourable quarter for world trade since the 1930s, beef exports from the Amazon actually increased in the first quarter of 2009 compared to the first quarter of 2008.

## Certification issues, commodity roundtables and getting deforestation down

A widespread social and environmental certification system for responsible commodity production, akin to the Forest Stewardship Council (FSC) certification in the forestry sector, is an ideal. But experience with palm oil and soy roundtables suggests the pattern is years of effort resulting in a voluntary code of practice. This is not nothing, but is not a certification system along FSC lines either. For beef, the main driver of deforestation, efforts to agree certification criteria in Brazil are only now getting off the ground. Irresponsible producers, the main drivers of deforestation, have alternatives: soy can be sold to China instead of the European Union, the largest importer of Amazon beef is Russia. Even a fully functioning certification system will have limited market penetration in a global commodity market.

In the short to medium term, then, we believe

stressing Forest Code compliance in supply chain management, and focusing on maximizing returns for responsible commodity producers, is the missing link in a broader strategy to contain deforestation. This broader strategy would also include better regulation, targeted enforcement and better governance on agricultural frontiers. It is therefore essential to generate a portfolio of large-scale field projects that embody the suite of strategies and incentives summarized here, in order to demonstrate technical and economic viability in the only place it matters: on existing farms and ranches in high conservation value landscapes. These projects need to have replication to scale embedded in their design from the outset. After careful analysis of what other players are doing in Brazil, this is what the Conservancy in Brazil has focused upon for several years.



© André Vilas Boas/ISA



© Alexander Rose/TNC

## Climate change and REDD implications

With 3-5% of global carbon emissions coming from deforestation in the Amazon, and most forest burning being driven by ranching, responsible commodity production in Brazil offers opportunities for climate change mitigation and REDD. Forest Code compliance often involves reforestation of degraded areas of permanent preservation with native species, and working to scale involves bundling hundreds, potentially even thousands of producers together, reforesting and engaged in collective offsetting: the municipality of Lucas do Rio Verde in the state of Mato Grosso is a concrete example of the latter. Generating extra revenue for producers through carbon markets could be an important additional incentive for responsible commodity production.

The regulatory framework for avoided deforestation has yet to be fully defined, in Brazil as elsewhere, but it will become clearer through 2010. There is field evidence from responsible production projects that have been running

for some years in the Amazon that having a group of producers under intensive monitoring and a deforestation freeze has a dampening effect on deforestation in an area as a whole, rather than only on the farms involved. The table on page 11 shows deforestation levels in the municipalities of Santarém and Belterra in the central Amazon, where the Conservancy has been involved in a partnership with Cargill, from 2005 to 2008. Correlation is not causation, but the data is suggestive.



© Scott Warren



© Scott Warren



© SECOM-MT

## Working in the most strategic places

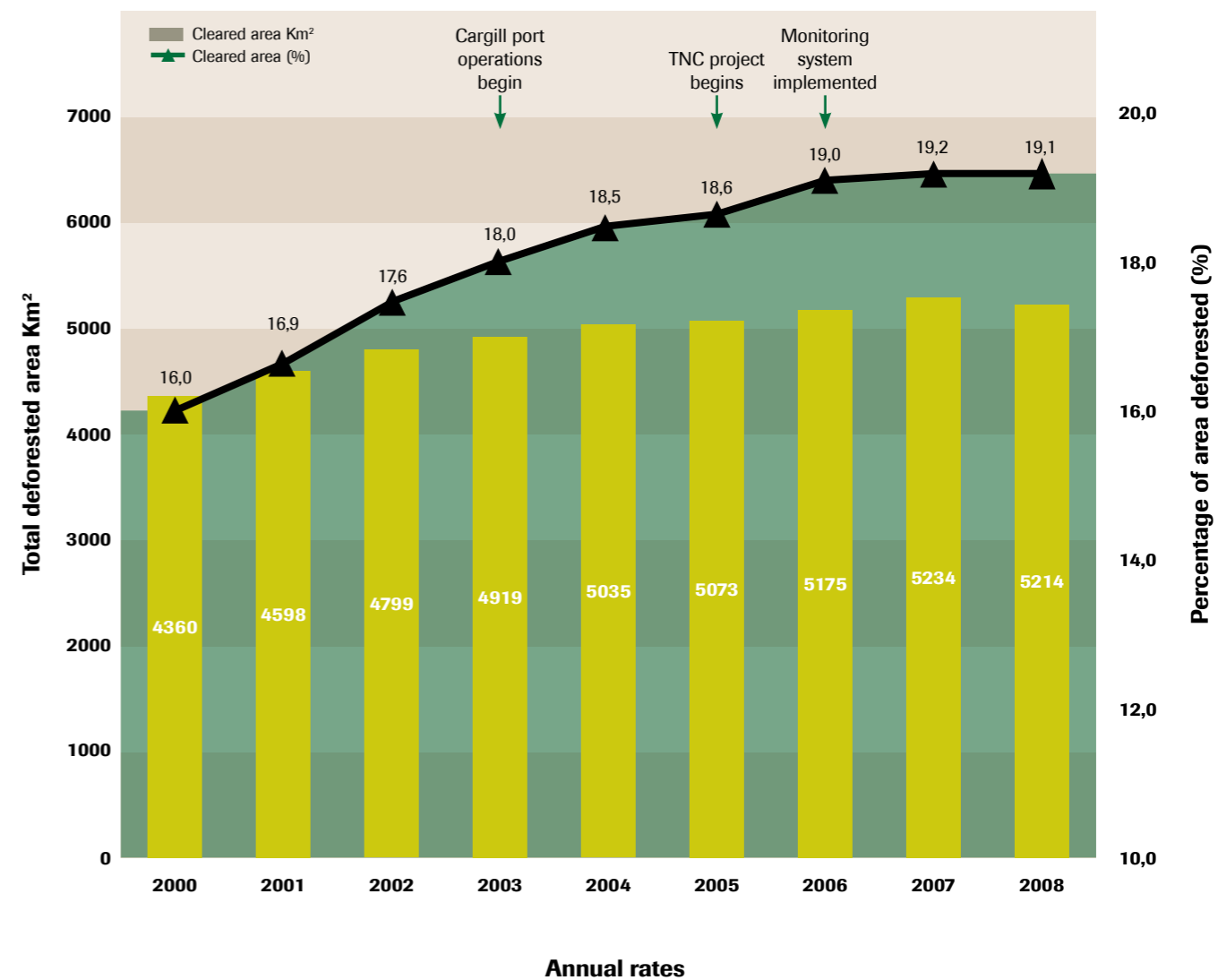
Identifying the most strategic places to get deforestation rates down is easy. Since 2007 the Brazilian government has published an annual “black list” of municipalities with the highest deforestation rates: the 2009 edition named 43. These municipalities are subjected to a range of fiscal and political penalties that focus local minds on compliance issues. We ensure our field projects focus on “black list” municipalities and their neighbors for maximum impact on cutting deforestation.



© Marcos Vergueiro/SECOM-MT



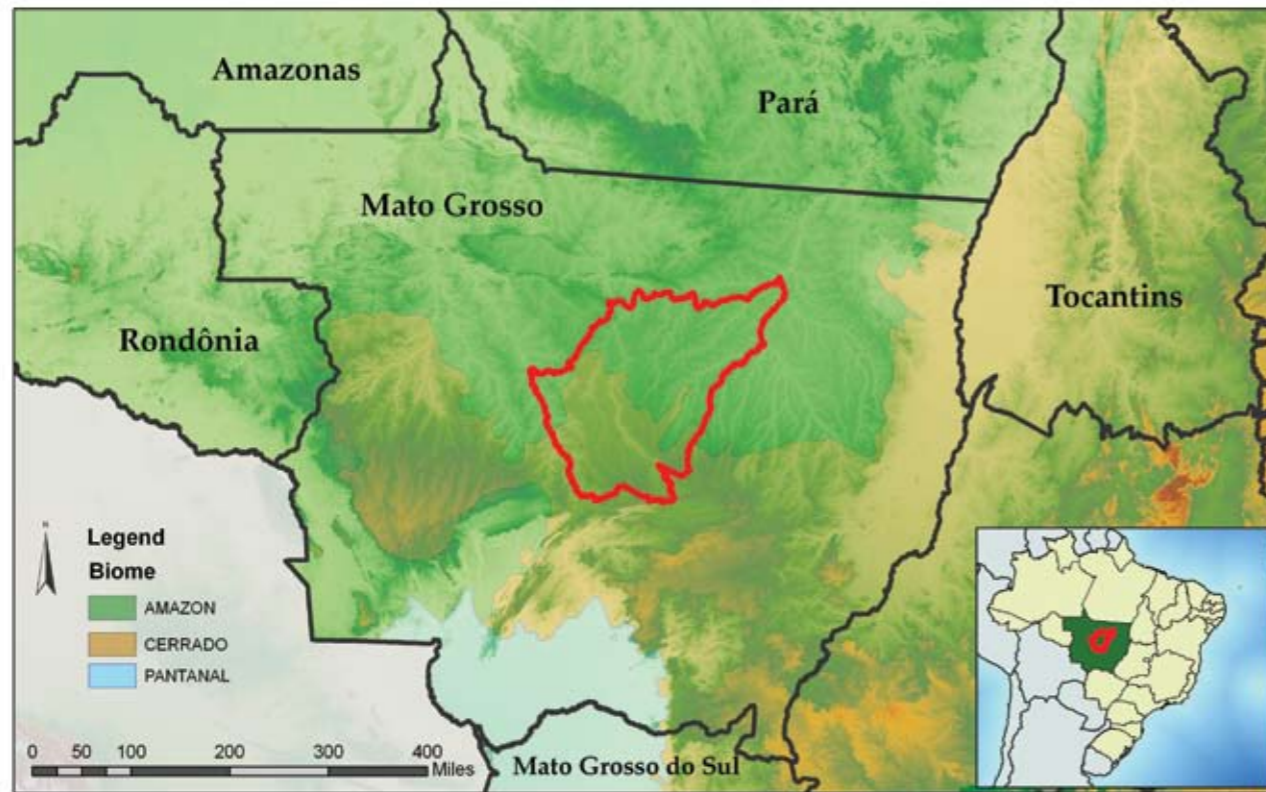
© Edson Rodrigues/SECOM-MT



**Deforestation Dynamics in Santarém and Belterra municipalities where 90% of the responsible soy project soy farms are concentrated (Source PRODES-INPE)**

Places like this, where a relationship between the start of environmentally responsible commodity production and a decline in deforestation can be documented, are obviously interesting places from a REDD standpoint.

## Microregion Alto Teles Pires - Brazil



### A proof of concept for the soy industry: the upper Teles Pires

A complex of 13 municipalities straddling the forest-savanna boundary between the Amazon to the north and the Cerrado grasslands to the south, this area of 20 million hectares covers the headwaters of one of the Amazon's southern tributaries and borders the Xingu Indigenous Park, the largest complex of indigenous reserves in South America. The upper Teles Pires contains large areas of highly biodiverse forests, grasslands and rivers, and because it is a transitional zone between the Amazon and the Cerrado – the ecological boundary between the two bisects it – it boasts very high levels of endemism. But it is also one of the most dynamic agricultural frontiers in Brazil, responsible for 10% of the country's soy production, and around 8 million acres of forests and grasslands have already been cleared.

In one municipality, Lucas do Rio Verde, we have been working since 2006 with a range of local partners, including agribusiness companies, banks and the state government, to get all 680 farms in the municipality compliant with Brazilian environmental law and positioned

to sell to companies requiring responsibly produced commodities. This process culminated in 2009 with a deal to compensate past deforestation with the purchase of 91,000 acres of inholdings in Araguaia State Park by Lucas producers, with backing from public agencies. We are now working to train this experience on the other municipalities of the upper Teles Pires, bringing over 3,000 more farms and ranches into Forest Code compliance. If we succeed, most of the remaining 12 million acres of natural habitat will be protected, whether on public or private lands.

## Microregion São Félix do Xingu - Brazil



### A proof of concept for the beef industry: São Félix do Xingu, an Amazon ranching frontier

São Félix is a single municipality in the southern Amazon, but is larger than South Carolina. The top third of the municipality is an indigenous reserve, the bottom third is a complex of protected areas, almost all of which is intact rainforest. But the middle third is occupied mainly by ranchers, and here deforestation is proceeding apace. Ranching has historically driven about four-fifths of deforestation in the Amazon, and on past form it is only a matter of time before the ranching frontier starts to move into the forests to the north and south.

Working with the municipal government, ranchers, bankers and beef buyers, especially the major Brazilian companies Bertin, Frigol and Minerva, we are betting that signing up ranchers to supply slaughterhouses pledging a deforestation freeze will hook them into markets demanding responsibly produced beef in Brazil. Simultaneously hooking these ranches into state property licensing systems will protect them against corrupt enforcement practices, at the same time as technical assistance and subsidized credit can help them

to intensify their production systems and improve returns per unit area. Deforestation can be braked and channeled away from protected areas and indigenous reserves. If we succeed, the future of 10,000 square miles of rainforest will be assured. But even more important is the creation of a model for how to intensify a ranching frontier instead of having it penetrate further into the rainforest. It would have implications for everywhere ranches threaten forests.

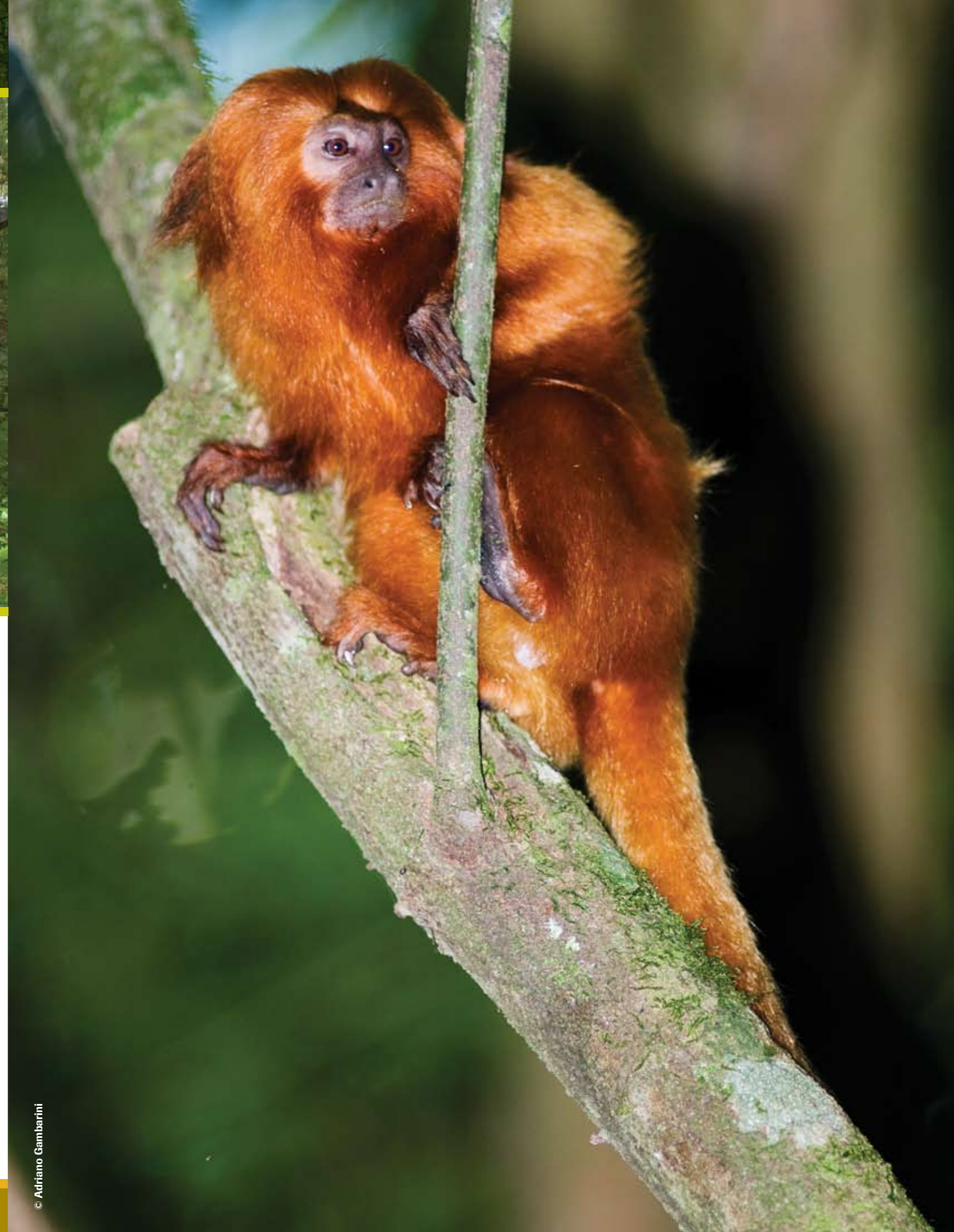


© Zé Paiva

## Future lines of action

In addition to the projects and policy work detailed above, we see the following issues as strategically vital and will be focusing our efforts on them.

- helping extension agencies and others “go viral” with strategies that can increase returns to farmers and ranchers but also channel development away from native habitat: intensifying livestock production systems, creating synergies between livestock and agricultural production systems
- leveraging out existing projects of greening soy and beef supply chains of major trading companies (Cargill, Bertin and Frigol, with Marfrig and Bunge in the pipeline) from municipal level to states (initial priority to Mato Grosso and Pará) and eventually nationally
- helping financial institutions deal much more systematically with assessing and monitoring environmental risk, and building local and regional deforestation moratoriums into lending practices
- tracking development of carbon markets and avoided deforestation issues to work payments for environmental services into compliance incentives for farmers and ranchers
- broadening the scope of monitoring and licensing systems from local projects to robust statewide systems



© Adriano Gambarini



## OFFICES

### Brasília/DF

SRTVS Quadra 701, conjunto D, bloco B, loja 246  
Brasília/DF 70340-907  
(61) 3421-9135

### Cuiabá/MT

Av. Historiador Rubens de Mendonça, 1894, Centro  
Empresarial Maruanã, salas 1004 e 1005  
Cuiabá/MT 78050-000  
(65) 3642-6793

### Belém/PA

Avenida Nazaré, 280  
Belém/PA 66035-170  
(91) 4008-6200

## Credit

**Cover page:** Zé Paiva (01), Reinaldo Lourival/TNC (02), Adriano Gambarini (03), Steve Niedorf (04), Scott Warren (05), Reinaldo Lourival/TNC (06); SECOM-MT (07)

**Last page:** Adriano Gambarini (01), Reinaldo Lourival/TNC (02), Reinaldo Lourival/TNC (03), Benito Guerrero/TNC (04), Pio Stefanello (05), Edson Rodrigues/ SECOM-MT (06)

**Concept and writing:** David Cleary

[brazil@tnc.org](mailto:brazil@tnc.org)



The Nature  
Conservancy   
Protecting nature. Preserving life.™

[nature.org/brazil](http://nature.org/brazil)

SELO FSC