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THE STORY OF A PROJECT THAT BRINGS TOGETHER THE BEEF VALUE CHAIN AND WWF-BRASIL IN AN EFFORT TO PROMOTE THE SUSTAINABLE DEVELOPMENT OF THE BIOME

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10 YEARS OF SUSTAINABLE BEEF PRODUCTION IN THE PANTANAL (2004 – 2014)

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10 YEARS OF SUSTAINABLE LIVESTOCK

In 2003, the WWF-Brazil initiated a pioneer work with sustainable livestock in Pantanal. The region, considered one of the major floodplains of the world, thus receiving the title of "kingdom of the waters", has the livestock as its main economic activity.

The partnership with the productive sector is of fundamental importance to reach our goal of producing in harmony with nature, guaranteeing social, environmental and economic sustainability for the present and future generations.

Our vision of conservation for Pantanal is to try to maintain, to the greatest extent possible, the biological biodiversity and the ecological processes throughout the Upper Paraguay River Basin while promoting sustainable development opportunities for the region, turning it into an example of rational use of humid areas for the world and allowing regional culture to be valued.

Through the Cerrado Pantanal Programme, the organization has supported the certification of 140 thousand hectares with sustainable livestock in Mato Grosso do Sul produced with social and environmental responsibility criteria, and rewarding the production that complies with those values in Pantanal.

In addition, the organization supports livestock associations in market analysis and research, good production practices, articulation with the bovine meat chain segments and promoting the product as an alternative for healthy eating.

It is important to spread these experiences, so the work initiated in Pantanal is expanding toward the Cerrado, Amazonia and beyond the frontier: Bolivia and Paraguay.

In this publication called "10 years of Sustainable Livestock in Pantanal", we show how the work between the years 2003 and 2014 was carried. It is a report on the project that embodies the production chain and the participation of WWF-Brazil in the sustainable development in the biome. It is a summary of our work and presents discussions concerning the criteria of activity development in every link that builds its chain, as well as testimonies of the people who participated in the construction of this work.

> Julio Cesar Sampaio WWF-Brazil's Cerrado Pantanal Programme Coordinator



INTRODUCTION

The Pantanal is the Planet's largest wetland and an immense reservoir of fresh water that plays an essential role in climate stabilization and soil conservation.

Covering an area of 210,000 km², the biome stretches across the States of Mato Grosso do Sul (65%) and Mato Grosso (35%) in Brazil, extending to the north of Paraguay and west of Bolivia, where it is called Chaco.

Studies by the Brazilian Agricultural Research Corporation (Embrapa) show that there are various types of Pantanal: eleven in all, each with their own soil, vegetation and climate characteristics.

The Pantanal is extremely rich in biodiversity. Over 4,700 species have been registered here, including: 3,500 species of plants, such as the buriti palm and the natural grass *capim-mimoso*; 659 bird species, including emblematic species such as the macaw, falcons and the jabiru, a large stalk that is the symbol of the region; large mammals, like the jaguar and marsh deer; and large reptiles such as the anaconda and jararaca. Not to mention that there are more species of fish in the Pantanal than in the whole of Europe; the largest of its 263 species is the jau, a giant catfish that can reach one metre in length and weigh up to 120 kg.

The Pantanal harbours various threatened species, such as the maned wolf, alligator and blue hyacinth macaw, the latter of which is the focus of a conservation project implemented by the WWF-Brazil supported Instituto Arara Azul.

The water level of the Pantanal's rivers rises during the rainy season between December and January causing flooding across the region. Due to the flat terrain, the water is retained by the flood plain and because of its low permeability the soil is unable to absorb the vast quantities of water, meaning that 80% of the Pantanal is flooded, forming lakes, bays, marshes and swamps connected along the courses of the rivers.

The gradient of the floodplain is so gradual that the waters that form the headwaters of the River Paraguay take up to four months to complete their winding path across the Pantanal.

The volume of water is incredible: during the flooding season, 180 million litres of water pour into the Pantanal's rivers, including the Rivers Cuiabá, São Lourenço, Aquidauana and Paraguay, which make up the La Plata River Basin.

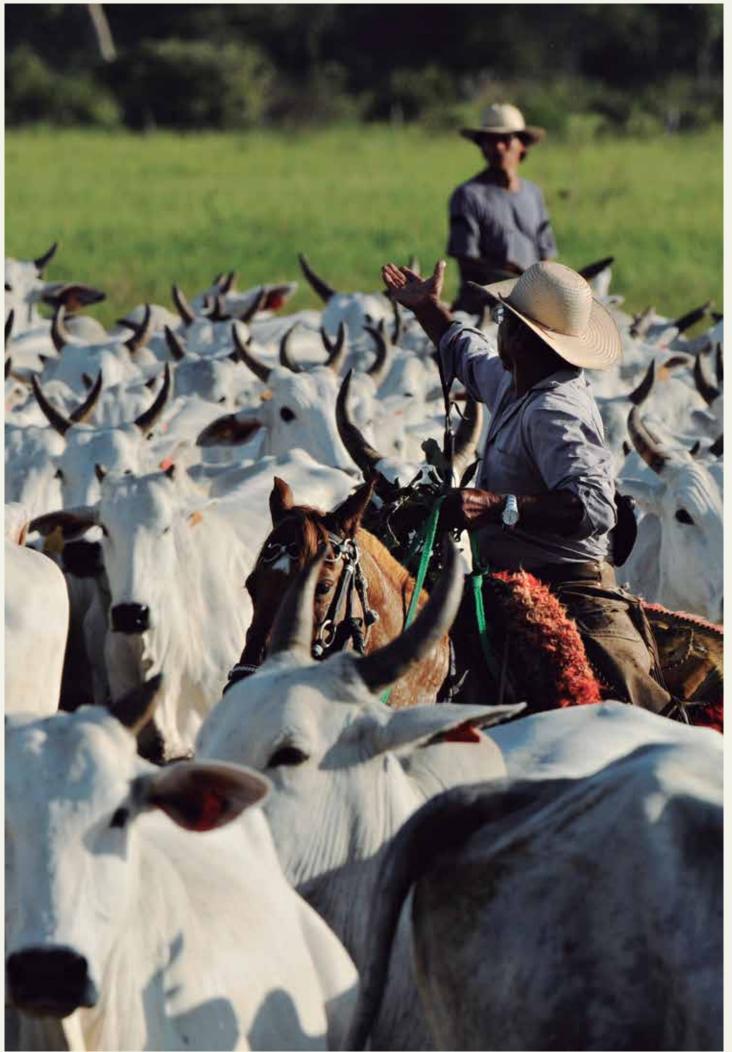
Due its natural grasslands and the fertility of its soils – that receive a layer of organic matter mixed with sediment transported from the surrounding highlands by the floodwaters – the Pantanal has attracted cattle farmers since the 18th century, and cattle ranching is now the main economic activity of the region.

Historically, cattle ranching in the Pantanal was characterized by extremely low stocking rates (0.33 head of cattle per hectare) and low environmental impact. As a result, the activity has become uncompetitive and at the turn of the last century families who had been raising cattle in the region for the last 200 years began to leave the region, opening the way for cattle farmers from other regions who use aggressive practices in a sensitive ecosystem.

In the 21st century, Brazil's cattle herd became the second largest in the world, only behind India, and the country became the world's leading beef exporter. National per capita meat consumption has also increased and is currently around 38 kg. With 21 million head of cattle, the State of Mato Grosso do Sul accounts for approximately 10% of the country's cattle population, while the State of Mato Grosso has the largest cattle population in the country, with 28.3 million head of cattle (IBGE – PPM 2013).

Despite being designated a World Heritage Site and Biosphere Reserve by UNESCO, only 4.4% of the biome, including the surrounding highlands where the sources of its rivers are located, is conserved under protected areas (parks, reserves and private reserves).

Since 2004, WWF-Brazil has been working with beef farmers through its Cerrado Pantanal Programme to develop sustainable beef value chains and preserve the parts of the biome that are still intact. This publication describes the involvement of a conservation NGO in a sustainable beef project that is currently expanding both inside and outside Brazil.



LEARNING TO SPEAK The Farmers' Language

"How would you convince cattle farmers to work with you turning up dressed in a Panda T-shirt?". This was one of the questions posed during a recruitment interview for a post in WWF's office in Campo Grande, capital of the State of Mato Grosso do Sul, to test candidates' ability to work in the field side-by-side with cattle farmers from the Pantanal.

The vet, Ivens Domingos, immediately thought of a phrase he had heard from a farmer: "people are just like horses, you've got to approach them from the right side". Those who know how to ride a horse know that you should carefully approach the animal from the side, normally from the left.

Domingos had no experience of working with beef farming or livestock. He had just left the army, where he worked with wild animals, and had been living for some time in Campo Grande. As an army vet in a training camp on the borders of the Pantanal, he began to get to know the local culture and worked as a volunteer in the in the Project Instituto Arara Azul.

Despite his lack of experience with farm animals, the use of the farmer's saying showed that he understood the direct, frank, and often untrusting manner of the people from the region, colloquially known as *pantaneiros*. His technical background and legitimate interest in conservation ensured he got the job and he was hired by WWF-Brazil in December 2003 to coordinate a pioneering project involving sustainable beef.

What is the Market Transformation Initiative? (MTI)

We are an organisation that works to conserve and preserve biodiversity. To do this, we focus on the world's most important habitats. Places like the Amazon, Great Barrier Reef, Indonesia, the Congo Basin and the Arctic. Parts of the planet that are critically important to reaching our goal of preserving nature.

If we look at the main threats facing these places, we can see that the majority are connected to the production of food and agricultural commodities and consumer goods like paper and fibres.

We mapped the places that we want to protect and listed the most serious threats. The picture shows that around 15 commodities provoke deforestation, habitat destruction or loss of natural resources. Commodities such as meat, soybeans, palm oil, timber, paper pulp and paper, sugarcane, cotton, and fish farming involving certain wild species.

So we attempted to discover the type of commodities connected to specific places and sought to engage the private sector to command changes; because change can take place swiftly when initiated by companies and their value chains. In certain cases, it is very difficult to change policy, but by working directly with companies you harness their potential to generate rapid change.

It is also in their own interest - particularly those companies that deal directly with consumers - to be seen as being responsible, both from a reputation and brand point of view. Being recognised as a supplier of sustainable products is good for business. Companies want to be portrayed as doing the right thing.

We carried out an analysis and discovered that the global commodity trade is dominated by around 100 companies and their value chains. We realised that if we worked with these companies we would have a good chance of reducing environmental impacts.

Over the last seven years, WWF has had success working with large global companies, such as Unilever, Procter and Gamble and McDonald's, and with traders such as Cargill. This success comes from stimulating change, getting these companies to commit themselves to using sustainable raw materials, and helping them to form round tables to bring together the actors involved in the value chain and develop global production standards and product certification.

There are over one billion farmers around the world. Therefore, we have to be quite strategic in the way connect with them at the beginning of the value chain. We cannot work with everybody, but we can establish strategic partners and develop models of collaboration. This is important, not only for building WWF's credibility, but also for truly understanding the changes that need to be made on the ground.

Understanding the realities of farmers also teaches us to understand the changes that we should strive for from an environmental point of view in order to make production more sustainable.

We have been criticised for working with cattle farmers in Brazil, the United States and Australia. Some environmentalists say that meat will never be sustainable. However, these people are looking at things purely from a greenhouse gas emissions and resource use perspective. People will go on eating meat and the beef industry is not going to disappear overnight. Eating meat is a personal choice.

Furthermore, a lot of cattle is raised on land that is not suitable for agriculture and is unlikely to become forest or parks. It is privately owned. Surely it makes more sense to promote the sustainable use of such lands and create environments where birds and other herbivores can live. Cattle farms have the potential to conserve and enhance biodiversity. I saw alligators in a lake on a cattle ranch in the Pantanal.

The Pantanal Programme, apart from being our longest standing programme involving the beef value chain, is a good example of how we can work with the beef industry to develop sustainable production practices, help to improve working conditions and at the same time protect a critical ecosystem.

Alexander Bjork Manager, Agriculture Supply Chains The Market Transformation Initiative – WWF-US

IN CERTAIN CASES, IT IS VERY DIFFICULT TO Change Policy, but by Working Directly with Companies you harness Their Potential to Generate Rapid Change



Some years before, in 1998, WWF-Brazil created the Pantanal forever Programme, which had a broader action plan involving the Upper Paraguay River Basin, covering an area of 624.330 km²: around 61% in Brazil, including areas of Cerrado in the States of Mato Grosso and Mato Grosso do Sul; 20.4% in Bolivia; and 18.6% in Paraguay.

The programme was ambitious and was intended to be long term, hence the name "forever". Bernadete Lange was the programme coordinator and remembers the partnerships established to stimulate actions such as the production of fish leather, environmental education and local awareness raising. However, since the main activity in the region is cattle ranching, it would be impossible to reconcile development and natural resource conservation without including this activity.

"We believe in research into the application of certified organic beef production as an alternative to achieve this objective", Lange wrote in an article in May 2004. "Certified; because being organic is not enough". With certification, it is possible to track the meat back to the farm where the animal was raised and know its origin.

Lange affirms that is impossible to mention the Pantanal without mentioning the partnership with Embrapa Pantanal, a unit of the Brazilian Agricultural Research Corporation located in the biome, which has been researching the environmental importance and the productive potential of the region since 1975, focussing on beef production and pasture management.

Environmental conservation, animal well-being and adequate working conditions were the three pillars adopted by the partners that formed the foundation of all sustainable and organic beef protocols adopted thereafter.







STRUCTURING The beef value chain

WWF-Brazil's first partners were Homero Figliolini, founder and president of the Brazilian Association of Organic Beef Farming (*Associação Brasileira de Pecuária Orgânica* - ABPO), created in 2001, and Arnaldo Eysink, leader of a group of organic beef farmers in Tangará da Serra, Mato Grosso. Eysink worked for *grupo JD*, owner of Fazenda São Marcelo, the country's first certified beef farm.

The partnership with the farmers extended to Embrapa Pantanal, through a project designed to determine the necessary conditions for and assess the feasibility of organic beef production in the Pantanal.

These days, as Senior Environmental Specialist at the World Bank, Bernadete Lange remembers the debate between conservation organisations and the region's beef farmers regarding the benefits of beef farming in the Pantanal and how to harmonise beef production with conservation.

"Organic beef was always the backdrop to this debate, both in the partnership with Embrapa Pantanal and with the cattle farmers", says Eysink.

Embrapa Pantanal carried out the first study to identify certified organic beef breeding stock in the Pantanal and discover where throughout the Pantanal's different micro biomes organic cattle ranching was likely to be most profitable. The organisation also investigated the ideal age for slaughter in the Pantanal to achieve best returns for farmers.

The ABPO had already managed to convince the Banco do Brasil to create a specific line of long-term credit for organic beef called *Pró-Natureza*, which still exists today. Figliolini's farm, Fazenda Eldorado, with 5,000 head of cattle, was the first farm in Mato Grosso do Sul to obtain organic certification, granted by the Biodynamic Institute (*Instituto Biodinâmico* - IBD), which at the time was the only organic beef certifying organisation in the country.

With the support of the Mato Grosso do Sul Agriculture Association (*Federação de Agricultura de Mato Grosso do Sul* - Famasul), WWF contracted the services of a company certified by the IBD to provide capacity building in organic beef production for members of key organisations involved in the Pantanal beef value chain.

As a promoter and catalyst of sustainable development, WWF-Brazil established what would become long-standing partnerships as farmers began to change their view of the NGO.

The *pantaneiro* João Ildelfonso reminds us that at the time "the *pantaneiros* had certain reservations about dealing with the NGOs working in the Pantanal. Homero convinced me about the project and I started to talk with various *pantaneiros* and explain the advantages and benefits of receiving professional training and support from an NGO".

Figliolini has a degree in economics and is concerned with the decline in competitiveness of beef farming in the Pantanal. Farming families who lived in the region for over 200 years are leaving the Pantanal because they are unable to maintain profitability, and are being replaced by farmers "who are not committed to preserving the landscape and beauty of the Pantanal."

The solution he came up with to value the culture and traditions of the *pantaneiros*, who have always lived in relative harmony with nature, was to convince meat processing plants to pay a premium for certified organic beef, to compensate the decline in competitiveness.

"I did some studies and realised that there were two major opportunities for the Pantanal: organic beef and ecotourism. But tourism can only be done on the borders, because it would be very expensive to transport tourists by plane to the middle of the Pantanal, or very time consuming depending on the time of year."

Urbano Gomes de Abreu, researcher at Embrapa Pantanal, explains that grazing activities are an important part of the culture and traditions of the pantaneiro. Due to the periodic floods and droughts, herdsman have to frequently move cattle to different pastures, which hinders intensive beef farming and helps to preserve the Pantanal. Cattle are driven to farms in the uplands for fatting before slaughter.

The floodplain cannot stand intensive beef production and certain modern technologies, such as the introduction of African grass species: "the use of exotic pastures by farmers is recent and causes ecological imbalance because it is not just the cattle that eat grasses in the Pantanal", says Julio Sampaio, the current Coordinator of the Programme that is today called the Cerrado Pantanal Programme.

According to Ivens Domingos', valuing culture and traditions is important to the conservation of the region: "the search for improved efficiency in partnership with Embrapa Pantanal, and later Embrapa Beef, and the implementation of best practices, have helped to increase respect for the environment and maintain the Pantanal's traditional cattle farmers in the region."

Figliolini explains that in the beginning it was relatively easy to attract people to join ABPO. Being an economist, his argument was particularly persuasive: if they managed to maintain the costs of production and obtain a premium of 10% for organic beef, profits would double.

It was more difficult to persuade ABPO members to accept WWF's support: "Beef farmers, particularly the *pantaneiro*, are set in their ways, averse to change. NGOs were a bit at fault because they caused problems for the *pantaneiros*; but with time we managed to show them that partnership yields fruits".



Adriano Gambarini / WWF-Brasil

DUE THE PERIODIC FLOODS AND DROUGHTS, HERDSMAN HAVE TO FREQUENTLY MOVE CATTLE TO DIFFERENT PASTURES, WHICH HINDERS INTENSIVE BEEF FARMING AND HELPS TO PRESERVE THE PANTANAL

VALURING CULTURE AND TRADITIONS IS IMPORTANT TO THE CONSERVATION OF THE PANTANAL



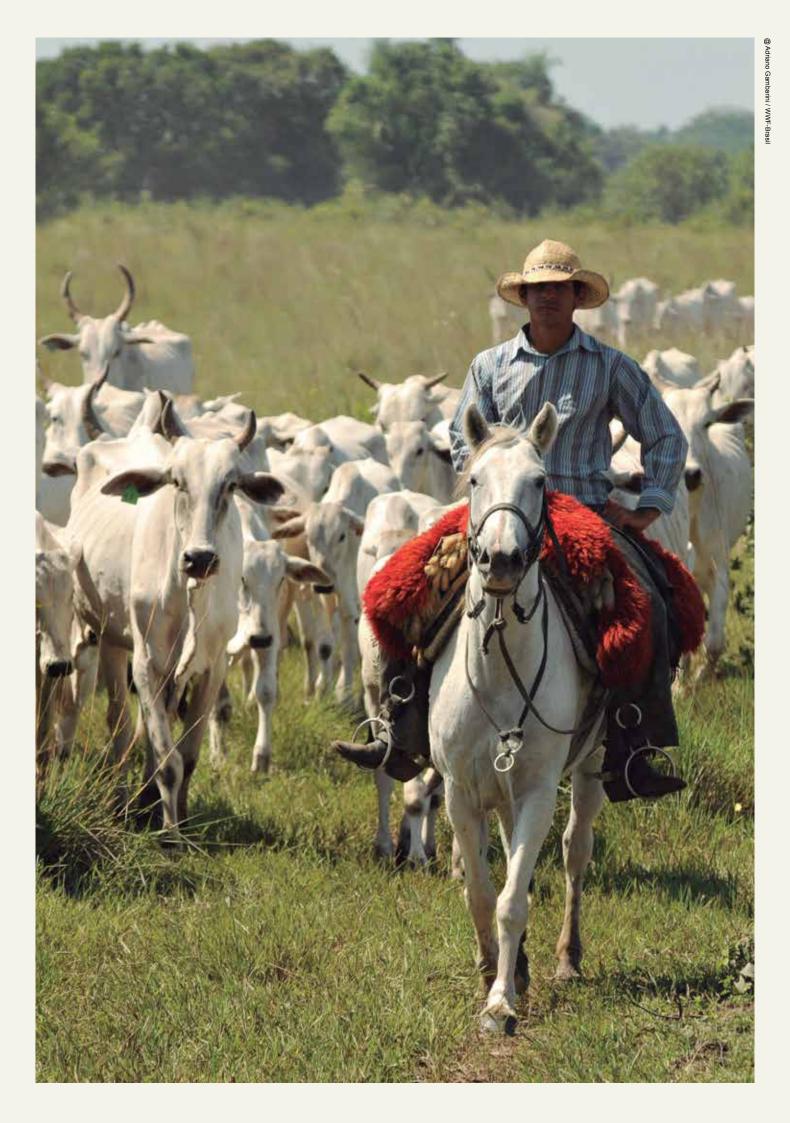
Leonardo de Barros, current president of ABPO, says Figliolini is a visionary: "He thought: my beef is the most sustainable in the world because it preserves the region's native vegetation; and nobody pays me anything for this. Quite the contrary, I am penalised: transport is expensive and my collaborators don't have access to hospitals or schools. I have to sell my cattle for a lower price because they are a long way from the consumer. He envisioned a consumer market interested in sustainable products".

According to Alexander Bjork, from WWF-US, one of the main lessons learned from the Cerrado Pantanal Programme that helped the organisation approach farmers in the United States "is that we have to establish long term relationships. And these relationships must begin with mutual trust".

Bjork, who visited the project two years ago with members of the Roundtable for Sustainable Beef, realised that Domingos "speaks the farmers' language" and, after seeing him interacting with them, he affirms that trust is the key to success of partnership and structuring of the Pantanal organic beef value chain.

"To be lasting, change must be led by the farmers", says Bjork. "And there is another important lesson: farmers learn from farmers, and beef farmers learn from other beef farmers". Since producers are not always that open to listening to what NGOs have to say, the ideal situation is that of the Brazilian Pantanal, where it is possible to find farmers who are interested in innovating and learning to share best practices. "So we can commend and applaud the good things they are doing, knowing that other beef farmers will learn from them".

In 2005, with institutionalized partnerships and fully operational, ABPO ended the year with approximately 60,000 certified hectares and 16 members. In the same year, the group led by Eysink created the Brazilian Association of Organic Livestock Producers (*Association Brasileira de Produtores de Animais Orgânicos* - ASPRANOR), which had begun to take shape behind the scenes of the First Seminar on Certified Organic Beef, and, as the name suggests includes pork, lamb and poultry. The new association ended the year with 24,700 certified hectares in Mato Grosso alone located within the Upper Paraguay River Basin.



THE STORY THROUGH THE EYES OF The actors involved in the process

Beef farmer: Homero Figliolini

Few modifications were necessary to adapt the 15,000-hectare Fazenda Eldorado to organic beef production. It was very easy.

The most difficult part was changing the mentality of the farmworkers; but we managed over time. Animal well-being is one of the main principles of organic beef production and shouting and poking animals has to be a thing of the past. We sought to use calmer methods.

The second problem was the very restricted use of veterinary products. Over time we adapted and instilled a new work culture.

Embrapa Pantanal also helped a lot. They managed to prove that certain procedures – and products prohibited by our certifier, the Biodynamic Institute – did not cause harm to the animal or to the environment.

One of our major achievements was obtaining permission to give a 1 ml dose of Ivomectin, an antiparasitic drug, to newborn calves, which helps prevent infection of the navel.

Studies showed that the drug did not harm either the insects attracted by still watery calf faeces or the soil. Embrapa made a recommendation supporting the liberation of its use as part of certified beef production practices.

Embrapa also helped to show the feasibility of the project. We attended the BIOFACH in Nuremberg annually. I gave talks all over Brazil.

People were very curious about organic beef, but the financial side was still a bit complicated. We didn't have finished cattle. I mean cattle ready for slaughter.

The owner of the *Independência* processing plant was an organic beef fan. Cattle finishing and the final step of production was carried out on a farm in Nova Andradina, in Mato Gross do Sul.

Then I was introduced to Ivens from WWF. He was very active in the development of the Upper Paraguay River Basin and already had a partnership with people from farms owned by Carrefour in Mato Grosso.

For the first time, we began to talk to an environmental NGO, addressing not only the conservation aspect, but also feasibility for the producer. This changed people's perceptions and farmers began to look at WWF differently. It was a milestone.

Before, it was a full on fight. Farmers didn't want to know about conservation NGOs because they thought that all farmers were "predators". Nobody understood one another.

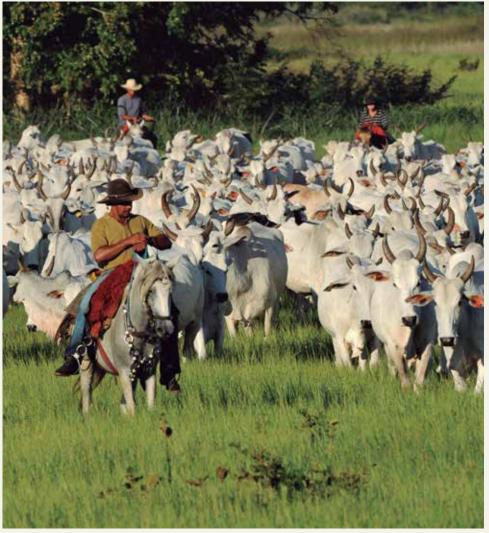
It was the first time that an NGO had looked at the profit side; at farmers' survival.

The partnership with WWF was also important to the project in terms of international credibility, together with the IBD label.

We wanted to export and a Dutch distributor, Quality Meat Market from Devon in the United Kingdom, contacted us. They distributed organic lamb throughout Europe at the time. But the deal came up against sanitary barriers and ended up falling through (Mato Grosso do Sul was still not free from foot-and-mouth disease and the European Economic Community had imposed a ban on beef imports from the region).

We started to negotiate with JBS, but my brothers decided to sell the farm after the death of my father and we changed our line of business. Today we work with English schools in Campo Grande and Leonardo de Barros assumed the presidency of ABPO.

> Homero Figliolini Former beef farmer and founder of ABPO



Beef farming has been in my family for four generations. I'm from the third. The Pantanal has always been ideally suited to sustainability. It comprises vast tracts of land that does not need to be cleared because of the native grassland.

The region's low population density, its remoteness, and the tradition of conserving the environment means that few changes have been made to the physical landscape.

I became interested in organic certification seven or eight years ago, when we realised it could differentiate our product, because there were, and still are, consumers that are interested in goods whose production process involves greater respect for the environment and social issues.

I owned a group of farms with my brothers with over 15,000 head of cattle. The first to obtain certification was Fazenda Estância Carolina. It worked and we soon certified the rest.

I spoke to Homero, ex-president of ABPO, and he told me that he thought he could double profitability, that was low at the time, with certification and the organic label.



We did actually manage to add value to the product, but never more than 10%. Certification generates costs in the first two years due to the paper work and major changes necessary to the production process.

And eventually, if you manage to form a marketing alliance, which is the final stage of ABPO's work, you begin to make money.

But it was a long and hard road. What we value in the product is the premium paid by meat processing plants.

We have formed another alliance with retailers now and we are in negotiations with supermarkets.

It wasn't an ideological decision. Any type of green revolution in beef production has two aspects: business, where there will always be an alliance between production and commercialisation; and consumer choice. This is extremely important: if I do not have a marketing alliance within the beef value chain, the consumer is not informed and cannot distinguish between what is sustainable and what is not sustainable, so in this case it is useless to talk of sustainable beef.

WWF-Brazil works with both aspects, supporting the organisation and strengthening its negotiating power by standing by the product and saying it supports the sale of organic and sustainable meat produced by ABPO. WWF-Brazil affirms the credibility of our product and we open the gates of our properties to the NGO so that it can be certain that we are acting correctly.

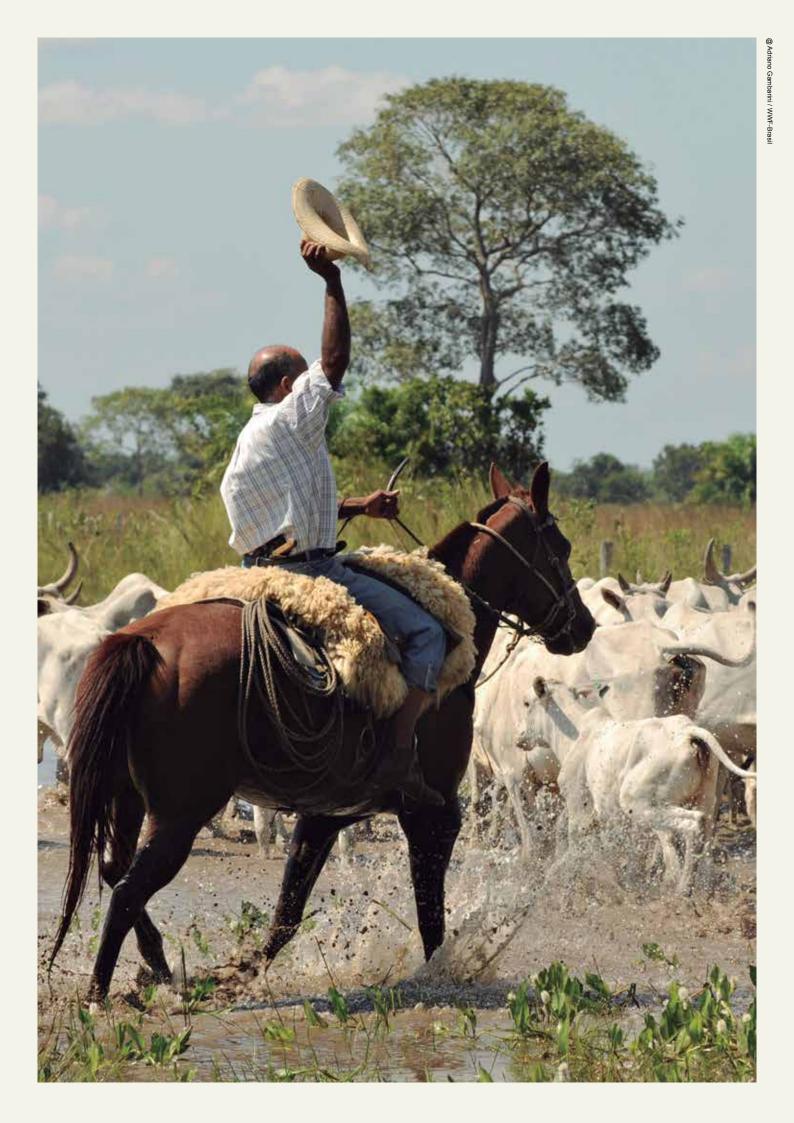
The ABPO was just getting started and it needed institutional support. The partnership continues today because we respect each other's differences.

WWF-Brazil decided to work with the beef value chain to understand each segment and try to foster sustainability in all stages of the process. This is much more difficult; but, on the other hand, it is much more effective.

I believe that we are going to revolutionise this area, provided the consumer participates. For this to happen, the consumer needs information, which is communicated through the label.

Leonardo de Barros President of ABPO

µuel Brunelli D'Avila



FORGING PARTNERSHIPS

In 2005, Embrapa Pantanal carried out the first economic and productive feasibility study on Figliolini's farm. In 2011, Embrapa Beef joined the partnership and, together with WWF-Brazil, produced educational booklets on best practices for sustainable beef, providing guidance on breeding, raising, and fattening, nutritional management, livestock management, environmental and economic management at farm level, animal comfort and well-being, and employees' legal duties and responsibilities under the employment law.

In 2009, 30 representatives from civil society organisations, producer organisations, universities, research centres, and state governments gathered at a workshop to debate best practices for beef production to ensure minimum environmental impact and increase the efficiency of the production process. Sixteen good practices were selected by consensus and 12 themes were prioritised, which formed the basis for the production of booklets and implementation of on-the-ground pilot projects.

According to the president of Embrapa Beef, Cleber Soares, the actions directed at sustainable production effectively contributed to the production of better quality food: "With respect to meat, greater tenderness of the meat, succulence, and more flavour".



Best agricultural practices:

A set of norms and procedures for making the production system more efficient and cost-effective and ensuring that the consumer receives sustainably produced food, free of chemicals or other types of contamination.

Sustainable beef production in the Pantanal is environmentally friendly, respects labour laws, preserves the soil, strives for efficiency in the use of natural resources such as water, and ensures animal comfort and well-being.

WWF-BRAZIL STIMULATED AND SUPPORTED VARIOUS MEETINGS WITH THE AIM OF STRUCTURING THE ORGANIC BEEF VALUE CHAIN

Soares highlights that in working together, WWF-Brazil provides comprehensive, clear and easily understandable technical information to producers "which facilitates the application of knowledge". Evidence of this is the adoption of the best practices outlined in the educational booklet produced and distributed between 2005 and 2006 on 40 farms up to 2015.

In addition to educational booklets, two best practices demonstration units were implemented between 2010 and 2014 (on Fazenda Millenium, located in Maracaju in the uplands, and Fazenda Vó Teresa, in Rio Verde situated in the flood plain) to evaluate rotational grazing management strategies and agroecological methods, involving improvements in grazing infrastructure and nutritional, health and reproductive management. Preliminary results are currently being compiled and show major gains in specific areas: on Fazenda Millenium, for example, the cost of health management based on the use of homeopathy and phytotherapy was R\$2.00 per head of cattle, compared to a national average of R\$15.00 on conventional beef farms that use conventional medicines.

Another priority in 2005 was to help producers find a market for their qualitatively differentiated product. WWF-Brazil commissioned the first and only market study of organic beef produced in the Pantanal, conducted by the consulting firm AgroSuisse. The study concluded that 65.4% of interviewees did not know what organic beef was. In retail outlets, there was an insignificant difference in prices of cuts of conventional and organic meat, while the price of special cuts of conventional beef was generally higher than the same cuts of organic meat.

WWF-Brazil stimulated and supported various meetings with the aim of structuring the organic beef value chain. During one of these meetings - held in parallel with the BioFach América Latina, a trade fair for organic products - ABPO, ASPRANOR, the Carrefour Group and JBS-Friboi agreed the basis of a contract to supply meat to JBS, which would be marketed as "Friboi Organic Beef".

WWF-Brazil was the first environmental NGO to participate in the BioFach América Latina. Its stand displayed the work of the Cerrado Pantanal Programme in support of certified organic beef production and the conservation of the Pantanal, and the promotion of certification of non-wood forest products through its Amazon Programme.

Also in 2007, producer associations from the Upper Paraguay River Basin reached the milestone of 100,000 hectares of certified areas.

WWF contracted another NGO, *Aliança da Terra*, to conduct an assessment of the certified farms over the course of the following two years to provide the basis for socioenvironmental monitoring.

The assessment included georeferencing the farms and degraded areas, identification of areas contaminated with fuel residues, and a socioenvironmental evaluation of each farm.

"This type of tracking allows us to prove to the consumer that he/she is not just buying meat, but also the conservation of the Pantanal. The more information you have of the farm, the more consistent the relationship, explains Michael Becker, who coordinated the Cerrado Pantanal Programme between 2008 and 2012.

The exclusivity agreement made with JBS lasted until 2010 and *Pão de Açúcar* was one of the supermarket chains to sell the organic beef. Gaining a premium of 10% to 18%, ABPO's producers slaughtered up to 1,000 head of cattle a month.

Leonardo Barros, from ABPO, remembers that he asked for WWF's help during the negotiations with the world's largest meat processing company. "WWF played a key role. It was a very difficult negotiation. We sat down at the table with a powerful company like JBS, but we had a powerful NGO behind us saying to JBS: buy this meat from ABPO, a small association. They (WWF-Brazil) did an exceptional job".

100.000 Hectares of Certified Areas

IN 2007, PRODUCERS Associations reached The Milestone of 100,000 hectares of Certified areas

WWF's varied agenda for the Pantanal region included mapping the native vegetation cover of the Upper Paraguay River Basin. Becker remembers: "sometimes there was friction; however this matured into good learning. It was worth it, because at the end of the day we managed to work with the beef farmers and help them look for new forms of marketing and give visibility to their product. It was worth the effort".

Around 2009, ASPRANOR experienced an internal crisis and ceased to operate, while in 2013 JBS failed to renew its contract with ABPO. The company charged a premium for prime cuts, but sold the front quarter at the same price as conventional meat.

Barros believes that when "organic beef" was launched there was a lot of publicity about deforestation in the Amazon and the role of cattle ranching in inducing deforestation. "They needed to say that they had a sustainable product in their portfolio. But the group is very large; it had other priorities when the contract expired".

What does sustainable beef production in the Pantanal entail?

- Only organic fertilisers are used on the pastures;
- The addition of urea to salt is prohibited (urea is derived from petroleum and contaminates the soil);
- Only plant-based feed supplements are used, 80% of which should be from organic sources;
- Health management is based on the use of homeopathy and phytotherapy. The use of allopathic medicines is restricted;
- The use of fire for pasture management is prohibited;
- Official vaccinations are mandatory;
- Animal well-being must be ensured;
- Beef farmers must comply with labour and employment laws;
- Beef farmers must comply with environmental legislation (Forest Code).

After a difficult period, in which some members gave up organic farming because they believed that JBS's departure would mean the end of the project, and in which those that remained were forced to sell organic beef for the same price as conventional meat, Barros celebrates a deal reached after two years of negotiations with a new partner that, apart from supplying products to major supermarkets throughout the country, has its own retail shops and will be responsible for the slaughter process.

Korin, known for selling free-range chicken and eggs, launched its "Sustainable Beef Produced in the Pantanal" in 2014 and announces the future launch of "Organic Beef Produced in the Pantanal" in 2015.

"10 producers are joining at the moment, making a current total of 26 producers. We were more experienced and this allowed us to reach new markets. We are in the middle of restructuring and I am leaving after my mandate ends to open the way for a new, younger president" the ABPO president celebrates.

The consultant, Fabio Ramos, who has worked with sustainable beef production for over 30 years, believes that the new partnership is going to "take off". Korin has an unblemished reputation, "you can't say anything against the company and it has already captivated a niche of consumers who are looking for quality natural products".

This time without an exclusivity agreement, and already with 100,000 hectares under certification and prospect of expanding this area to 200,000 hectares by the end of the year, ABPO already has another major retail partner in its sights.

The buyer - Reginaldo Morikawa

Korin is known for launching the antibiotic-free chicken label in Brazil and working with natural foods and small farmers. Today it has a suite of 80 of its own products.

"We had our first conversation with ABPO in 2012 and we conducted a survey of consumer habits related to meat in Brazil. We follow the philosophical teachings of Mokiti Okada, a philosopher who founded the Messianic Church and teaches respect for all living beings.

Korin is the first company in Brazil to obtain an animal welfare label for its poultry products. Organic meat is a delicacy, a premium food product. Today the average Brazilian consumes 111 kilogrammes of beef, chicken and fish per year.

Tastier more nutritious meat that preserves the environment, helps prevent the rural exodus, makes a social and environmental contribution, and is good for the health because it doesn't contain any chemicals, means you don't have to eat as much. Not least because it is more expensive, so you eat less.

But it's not very expensive. It's costs 20% more than vacuum packed beef, considered to be of higher quality. We want to reach a rate of 400 animals per week; between 1,500 to 1,600 heifers a month.

The typical age of slaughter of cattle - all cows - under the organic production system is two years and eight months. Our protocol requires cows aged up to three years. And we pay the same price for cows that we pay for bulls, which are usually 10% to 15% more expensive. There is also the social aspect, the producer aspect, and female animals have more tender meat.

These animals are raised in the Pantanal and are then driven by the herdsman for 12 to 15 days, the son following the same traditions that his father followed before him. His profession as a herdsman is preserved. When the cattle arrive at the finishing farm, they spend four months feeding on silage made from 65% grass-based green mass and 35% grain (maize and soy beans).

This is where the difference between sustainable and organic comes in. If conventional grains are used, it is sustainable; if organic grains are used it is organic.

We slaughtered a truck of 22 heifers a month over the last year. The normal number of animals is 26 per truck, but there is the issue of animal well-being. With 22, there is enough space for the animals to stretch their legs more and not fall over. But I lose 20% of the capacity of the truck. The cattle are slaughtered using an air gun that fires a metal bolt into the brain of the animal to ensure a painless death.

We are gradually increasing numbers; we have already reached 132 heifers a month and expect to reach 400 a month within the next three years.

Korin's goal is to produce sustainable and organic foods. I don't want, and don't really need, publicity. What I need is competent organisations like WWF, which give consistency to the project. It's not about greening the image. WWF-Brazil, the Working Group on Sustainable Beef, ABPO, Embrapa Pantanal, are all reputable partners and therefore give the project consistency and seriousness".

> **Reginaldo Morikawa** President of Korin



Paulinho de Jesus



THE ENTIRE VALUE CHAIN (GTPS AND GRSB)

The first country to gather representatives from the entire beef value chain around the same table was Brazil. The Working group on Sustainable Beef (*Grupo de Trabalho da Pecuárua Sustentável* - GTPS) was the result of pressure brought upon the banking sector to not finance the expansion of large meat processing companies.

"At the time, the Bertin meat processing company still existed and had plans to expand, but was taken over by JBS. The NGOs pressured the organisations by demanding to know whether the increase in production would come from productivity or an increase in deforestation. The IFC (a branch of the World Bank that finances the private sector), Santander and Rabobank promoted a discussion about the need for better governance of the chain of custody," explains the president of GTPS, Eduardo Bastos. Forecasts had already shown that the demand for beef in Brazil would double – which is what happened.

The three banks called WWF and two other NGOs, producer associations and federations, and the country's three largest meat processing companies and started a dialogue.

The Brazilian Roundtable for Sustainable Beef, which brings together representatives from the entire value chain – the processing industry, producer organisations, retailers, input suppliers, the financial sector, civil society and academia – was officially created only two years later. Its objectives are to develop sustainable beef, which is socially just, environmentally friendly and economically viable.

Membership has grown from 17 to 75 organisations and eight observing organisations.

This Brazilian initiative has been replicated in the United States and Canada and similar round tables are currently being discussed in Mexico, Paraguay, Argentina, Colombia, and Australia.

In 2010 the Global Roundtable for Sustainable Beef (GRSB) was created, which brings together heavy weights such as McDonald's, the world's largest purchaser of beef, Walmart, JBS and Cargill. WWF is represented by a Brazilian, who is also a member of the Board of Directors.

Carlos Saviani, Vice President of Animal Protein at WWF-US, laughs at the initial reaction of people who discover that he works with animals from the food chain in a conservation NGO. "People are surprised and ask me whether WWF defends farm animals", he says. "So I have to explain that we also work with the cause of the problem, hence sustainable food. And that beef has a large impact on conservation".

However, that is not the only thing that puzzles people who do not deal with these issues on a daily basis. Many people do not understand the terms "organic", locally produced" and "cause of deforestation".

Not even the specialists have reached a consensus on what is sustainability when it comes to the global beef value chain. The GRSB has just defined five principles and 29 criteria so that countries can create their own indicators to monitor the sustainability of beef production.

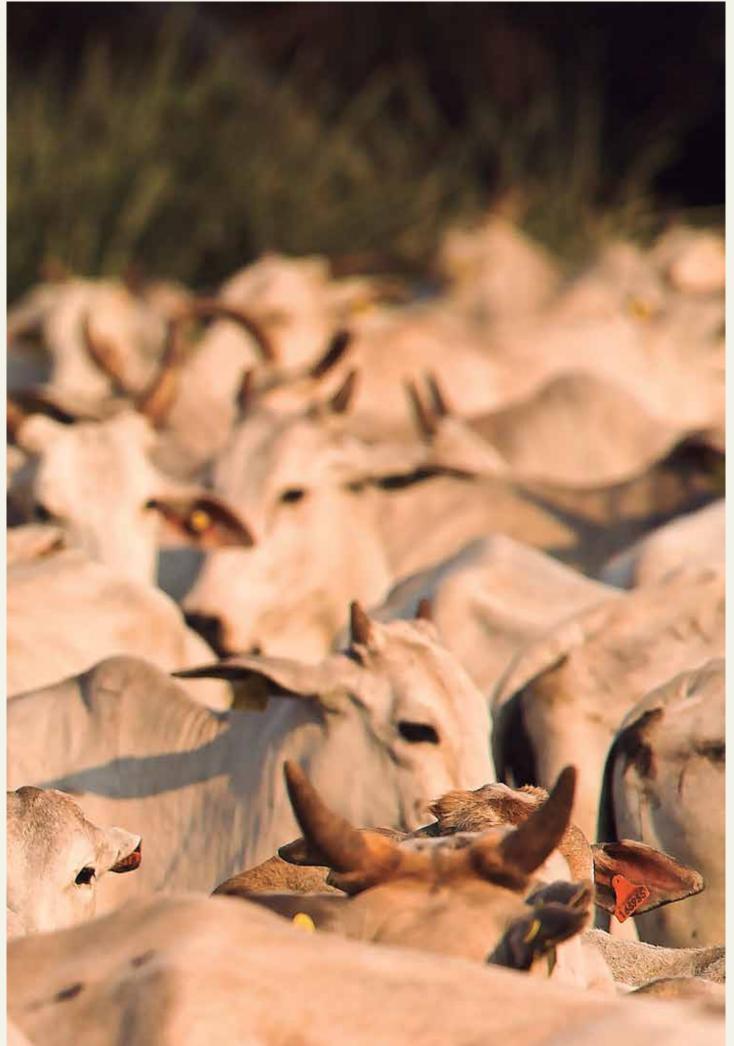
Brazil is one of the countries that is evaluating adherence on the ground to the principles and criteria defined by the GRSB adjusted to those previously developed by the GTPS. One of the projects designed to test these indicators involves two farms in the Pantanal owned by members of the ABPO.

The results will enable the creation of a Brazilian standard for sustainable beef later this year, which will include indicators for each segment of the beef value chain.

As a founding member and stimulator of the round tables, WWF-Brazil has actively contributed towards developing principles, criteria and indicators and sought to guarantee the application of effective socioenvironmental indicators across most of the beef value chain.

WWF-Brazil is also actively participating in the elaboration of GTPS' Guide to Sustainable Beef, which should be published later this year.

BRAZIL WAS THE FIRST Country to gather Representatives from The entire beef Value chain



EXPANSION TO THE REST OF LATIN AMERICA

In 2009, WWF-Brazil began to work with WWF-Bolivia to expand the actions developed in the Brazilian Pantanal to Bolivia and Paraguay. The following year, beef farmers from the Bolivian Pantanal visited farms in Brazil and began an exchange of experiences with ABPO farms.

The aim was to take the best beef production practices developed in the Brazilian Pantanal across borders. Brazilian producers also went to Bolivia to give talks and provide technical demonstrations at the *Instituto de Investigación da Bolivia*.

The project, developed by WWF-Bolivia, started with six beef farmers from the San Matías region on the border with Mato Grosso, in the Pantanal in a region in the north of Bolivia covering an area of 25,000 hectares. The Bolivian government joined the project and is developing best practices in more than 40 farms.

"WWF-Bolivia continues to participate developing best practices guidelines. They (the government) have a more general vision of the production side. We are working alone on the first four farms, which will be the pilot projects. The Santa Cruz government will not have to start from zero," says project coordinator Victor Hugo Magallanes.

The current aim is to strengthen the environmental component of the government project and seek support to expand actions.

It was a long process however. The majority of beef farmers in the Bolivian Pantanal have between 500 and 3,000 head of cattle and are considered medium size farmers.

According to Magallanes, "10 years ago we were seen as the enemy and coming here to talk about best practices was considered an act of suicide". It has been a long process involving building relationships of trust. The first partner was the San Matías Beef Farmer Association in a region which is considered Bolivia's largest beef producer.

According to Magallanes, the farmers practiced a "very basic" form of beef farming: "they weren't registered, they had no kind of control system and the bulls were mixed together. They didn't use vaccines for disease prevention and they treated their farm hands practically like slaves". Apart from the project, the political context in Bolivia has changed a lot over the last decade, with the election of the country's first indigenous president, Evo Morales, and significant improvements in working conditions.

Large farmers are an exception to the rule in technical terms, but this group makes up less than 3% of the total.

The preliminary results of a study commissioned by WWF that compares the adoption of best practices in six farms over a period of three years show that two farms are in the advanced stages and differences can already be felt in terms of profits, a reduction in mortality rate, an increase in calving rate and earlier maturing in cows.

The next step is to scale up the project based on the results of the pilot studies and create a Working group on Sustainable Beef, drawing on experiences in Brazil. "we joke that we are one sole programme with activities in different countries", Magallanes adds.

The Bolivian *pantaneiros* have not yet found a retail partner. McDonald's, which participates in the Global Roundtable for Sustainable Beef, is the leading buyer of the beef exported by Bolivia. Magallanes says that "our doors are open" to the fast-food giant, which has pledged to make its hamburger supply chain sustainable.





NEXT STEPS

Based on the success of its regional partnerships, WWF is coordinating the development of a regional best practices strategy by a team made up of WWF-Brazil, WWF-Bolivia, WWF-Paraguay, the Argentine Wildlife Foundation (*Fundacion Vida Silvestre Argentina* -FVSA), and the Wildlife Conservation Society (WCS) Paraguay.

WWF-Brazil, Paraguay and Bolivia have the potential to develop very similar low-impact beef production models. An event due to take place later this year in Brazil aims to design a model that can be implemented in the Southern Cone, a region encompassing the south of Brazil, north of Argentina and Paraguay. The idea is to adapt best practices to other biomes like the Cerrado and Pampas.

WWF is also widening its partner base both inside and outside the Pantanal. In Mato Grosso do Sul, for example, WWF-Brazil is already in talks with the Early Maturing Steer Association (*Associação do Novilho Precoce*), which is adopting the best practices developed by the project.

BRAZIL, PARAGUAY AND BOLIVIA HAVE THE Potential to develop Very Similar Low-Impact Beef Production Models

Apart from fostering and consolidating the use of best practices, another priority is to stimulate and assist producers to register their properties in the Rural Environment Registry (*Cadastro Ambiental Rural* - CAR) and include the value chain in the debate about payment for environmental services, in order to value conservation, stimulate income generation and ensure a concrete commitment to the environment across the entire value chain.

Timeline

2004

- WWF-Brazil holds the First Seminar on Certified Organic Beef Production in the Pantanal, in partnership with ABPO and supported by the Biodynamic Institute (IBD) and Federation of Agriculture of the State of Mato Grosso (Famasul);
- The Brazilian Association of Organic Livestock Producers (ASPRANOR) is created, bringing together producers from the Tangará da Serra region in the State of Mato Grosso;
- A strategic partnership is established with Embrapa Pantanal to work with certified organic beef and the ABPO.

2005 and 2006

- Programa Pantanal para Sempre torna-se Programa Cerrado Pantanal;
- The Pantanal Forever Programme becomes the Cerrado Pantanal Programme;
- Researchers from Embrapa Pantanal carry out the first economic and productive feasibility study in Fazenda Eldorado, the first certified farm in Mato Grosso;
- The first lot of ABPO organic cattle is slaughtered at the Independência processing plant;
- A consolidated organic beef market still does not exist in Brazil;
- WWF carries out the first market study of organic beef produced in the Pantanal;
- WWF launches the first publication on organic beef: Overview of Certified Organic Beef Production in the Upper Paraguay River Basin, written by Ivens Domingos;
- The first 10 farms in the Pantanal are selected in partnership with ABPO to receive WWF-Brazil support to adapt beef production processes and obtain organic certification.

2007

- WWF-Brazil começa a estimular e apoiar reuniões para estruturar a cadeia produtiva de carne orgânica;
- WWF-Brasil begins to stimulate and support meetings to structure the organic beef value chain;
- WWF is the first environmental NGO to have a stand at the BioFAch América Latina, the region's largest organic products trade fair, where it publicises the work done to promote certified organic beef and the conservation of the Pantanal, and certification of non-wood forest products promoted through its Amazon Programme;
- The first 100,000 hectares are certified in the Upper Paraguay River Basin by ABPO and ASPRANOR.

2009

- The Working Group on Sustainable Beef (GTPS, acronym in Portuguese) is officially created;
- WWF-Brazil holds "Workshop to Define Best Beef Production Practices for the Cerrado and Pantanal", bringing together NGOs, producers, academics, and representatives from research centres and state government;
- WWF–Brazil actively participates in the first discussions regarding principles, criteria and indicators of the GTPS and chairs the Principles and Criteria Commission;
- WWF–Brazil participates in the "First Global Conference on Sustainable Beef" held in Denver and supported by WWF-USA. Brazil sends one of the largest delegations, including various members of the GTPS and two representatives from WWF-Brazil.

2010

- WWF-Brazil, WWF-Bolivia and their relevant strategic partners (ABPO and EMBRAPA Pantanal in Brazil, and the San Matias Beef Producer Association (*Associacion de Ganaderos de San Matias* AGASAM) and CIAT in Bolivia) begin to exchange experiences in sustainable beef production;
- WWF-Brazil provides the necessary support for ABPO to use a socioenvironmental monitoring and assessment tool created by the NGO *Aliança da Terra*. Assessments are conducted in 100% of the certified farms;
- Pilot projects to evaluate best practices are implemented in two farms located in the Upper Paraguay River Basin;
- WWF-Brazil establishes a strategic partnership with Embrapa Beef;
- WWF-Brazil launches the educational booklet "Conserving Water and Soil: beef production in the Cerrado", produced in partnership with Embrapa Beef;
- Organic beef is included in school meals in municipal schools in Campo Grande.

2011

• WWF holds event during the BioFach Nuremberg, the largest organic products trade fair in the world, together with ABPO and the consultancy firm *Planeta Orgânico*, to present organic beef produced in the Pantanal to potential European clients;

- WWF-Brazil supports ABPO to approach potential clients in England and Italy, including Marks & Spencer and Slow Food;
- WWF-Brazil is the first NGO to participate as an exhibitor in the Dinapec -*Dinâmica da Pecuária* (the dynamics of beef production), a major technology development and dissemination event held by Embrapa Beef, and presents the results of the pilot projects to evaluate sustainable beef production best practices.

2012

- Organic beef tasting event is held for representatives of the Slow Food Movement and local authorities in the Abruzzo region in Italy;
- WWF-Brazil and its strategic partners are invited by the Santa Cruz government and WWF-Bolivia to contribute towards the discussion about organic beef in Bolivia and participate in the launch of the Santa Cruz government's Best Beef Production Practices Programme;
- WWF-Brazil launches the educational booklet "Conserving Pastures and Landscapes: beef production in the Pantanal" produced in partnership with Embrapa Pantanal;
- Project to develop best beef production practices in the Grande Sertão Veredas-Peruaçu Mosaic begins with the selection of a farm to implement a demonstration unit;
- WWF-Brazil establishes a strategic partnership with Embrapa Cerrado.

2013

- WWF and partners begin efforts to build the Latin American Best Beef Production Practices Initiative involving Brazil, Bolivia, Colombia, Argentina, Paraguay and Costa Rica;
- Dissemination of best practices in two federal technical colleges (*Institutos Federais de ensino Técnico* IFet) in Arinos and Januária in the north of the State of Minas Gerais;
- Beginning of negotiations between ABPO and Korin to promote "Sustainable Beef Produced in the Pantanal". Launch forecast for 2014;
- Building on experience gained over the last 10 years, the Cerrado/Pantanal Programme begins to actively support other WWF-Brasil projects involving cattle ranching implemented through the Amazon Programme and Brazil Water Initiative;
- WWF-Brazil signs a Technical Cooperation Agreement with Embrapa *Nacional*, which will serve as a basis for agreements with local units across Brazil;
- ABPO attracts new members and reaches 120,000 certified hectares.

2014

- "Sustainable Beef Produced in the Pantanal" is launched;
- Partnership with ABPO leads to the certification of 140,000 hectares in the Pantanal for organic beef production;
- WWF-Brazil and the Working Group on Sustainable Beef, made up of representatives from the different segments of the beef value chain, participate in the Global Conference on Sustainable Beef, promoted by the Global Roundtable for Sustainable Beef.





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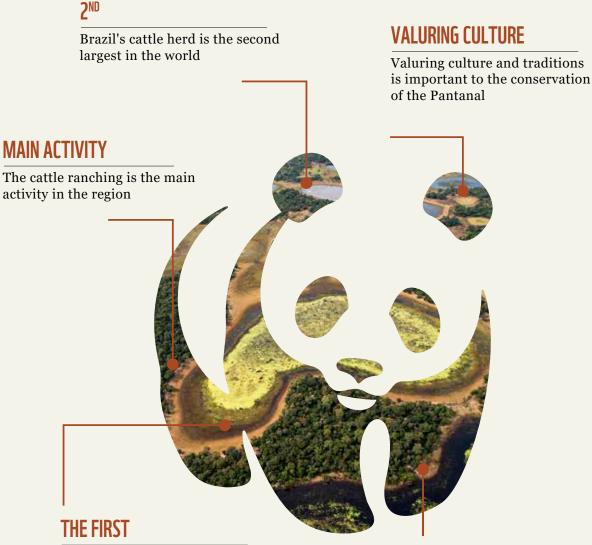
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10 Years of Sustainable Beef Production in the Pantanal (2004 - 2014)



Brazil was the first country to gather representatives from the entire beef value chain

140,000 HECTARES

140,000 hectares in the Pantanal for organic beef production



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