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**STEEL AND VEHICLE
MANUFACTURERS FINANCE THE
DEVASTATION OF THE AMAZON**

The link between the SUDAM Mafia,
the death of Sister Dorothy
and the illegal charcoal trade

**THE FOREST UP IN
SMOKE**





FOREWORD

Environmental devastation in the steel production chain

In June 2004, the Social Observatory Institute published historic research on the existence of slave labor in the steel production chain. At that time, major steelworks sited at the steel hub of Carajás, Pará state, were identified as financial backers of facilities that used slave laborers in charcoal-making, a key input for the production of pig iron and steel.

Until then, steelworks had denied the existence of the problem and refused to review their production processes. However, the impact of the research on public opinion generated strong pressure within the country and abroad, including among these companies' customers in Europe and the United States. In Brazil, after the information was made public, pressure from the trade union movement and civil society organizations led the companies in question to recognize the problem and sign the National Pact for the Eradication of Slave Labor. This was a watershed that contributed decisively to the amelioration of the problem, inasmuch as hundreds of companies publicly committed to taking action in their production chain.

At about the same time, the creation of the Charcoal Citizenship Institute contributed substantially to the promotion of social responsibility and to the fight against slave labor in the region.

Seven years later, the Observatory

returns to the subject of steel, showing that steelworks continue having problems in their production chain in the very same region. They are now benefiting from predatory processes that ensure the supply of charcoal produced with wood extracted from environmental protection areas.

The scheme is only possible thanks to the involvement of irresponsible politicians and corrupt public employees, who guarantee this predatory flow by forging documents and putting pressure on authorities. They go as far as deciding on the suspension of inspectors who refuse to join the scheme.

The Social Observatory Institute is publicizing this information with the expectation of alerting society and the business sector as to the serious violations of the environmental and labor legislation that are occurring in the region. In this day and age, the existence of predatory economic activities that do not take account of ethics and of the social and environmental values necessary to the construction of a fairer and more sustainable world, is inadmissible.

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2003

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2006

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Journalism Prize for Amnesty and
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2008

Special Human Rights Prize of the Rio
Grande do Sul State Bar Association and
the Justice and Human Rights Movement.

2009

Honor of Merit - Esso Journalism Prize,
Scientific, Technological and Ecological
Information category.





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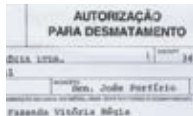
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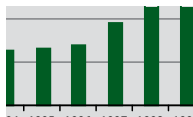
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**STEEL AND VEHICLE
MANUFACTURERS
FINANCE
DEVASTATION
IN THE**

In Pará state, global giants of the iron and steel sector finance criminal groups that produce charcoal using slave labor and causing environmental devastation. Gerdau, Vale, ThyssenKrupp, Nucor Corporation, NMT, Ford, General Motors, Toyota and Nissan are linked to an illegal production chain that takes no account of human rights, labor laws and the environmental legislation.



This report will explain the operation of a criminal group based in the interior of Pará state, which supplies illegal charcoal to the global steel industry. This crime syndicate is made up of businesspeople, politicians and corrupt public servants, who have come together to pillage the Amazon's natural resources. In parallel with the narrative that unveils this crime syndicate, the report will show that three facts that are dealt with separately should actually be seen as part of the same scheme:

1. The embezzlement of R\$ 132 million [c.US\$ 78 million] by the "SUDAM Mafia", which in 2002 led to the arrest of Senator Jader Barbalho and imploded the presidential candidacy of Governor Roseana Sarney;
2. The 2005 murder of nun Dorothy Stang, shot six times inside an area of land misappropriated by Jader Barbalho's right hand man in his SUDAM dealings;
3. The scheme that supplies the international steel market with charcoal tainted with slave labor and devastation is headed by the politician and entrepreneur Laudelino Délio Fernandes Neto. This man is the link between

the three stories: he is one of the bosses of the SUDAM Mafia, the chief of the criminal charcoal consortium and back in 2005 he sheltered in his home the man who ordered Sister Dorothy's killing, minutes after the crime was committed.

**By Marques Casara
and Sérgio Vignes**

In the following pages, you will find out how the scheme operates and understand that it only exists owing to a well-established network of corruption in Para state's environmental protection agencies. Officials who hold key posts in the public administration and ought to look after the Amazon's environmental assets instead facilitate all sorts of illegal acts: crimes against human rights, against the environment and against the economy.

Environmental depredation and slave labor contaminate the steel production chain from its base to the final consumer. This means that upon buying a car or home appliance, the consumer finances this "devastation steel". With the rise in demand, the business sector faces the dilemma of producing more or producing only what nature's resources are capable of withstanding.

**Yard of illegal
sawmill – Marabá
(Pará state)**



FISCALIZAÇÃO
IBAMA

BACKGROUND TO THE DEVASTATION

Pará state inspectors and businesspeople joined forces to launder illegal timber

These are companies with fixed addresses that only exist thanks to the connivance of state officials and to the corruption promoted by entrepreneurs of the sector

The lumber sector in the Amazon region has declined substantially in activity over the last few years. Production has fallen by over 50% since 2004. Companies have been hit hard and have shed thousands of jobs. Many have shut down altogether.

According to research funded by the federal government and made public in 2010 by Imazon (Amazon Institute of People and the Environment), log consumption fell from 24.5 to 14.2 million cubic meters.

The news cheers environmentalists, for it is estimated that over half the timber that leaves the Amazon is either illegal or fraudulently laundered.

According to the Imazon research, the decrease in production took place due to more rigorous monitoring of felling and processing. Such rigor does not mean that illegal extraction has ended; it remains strong.

In June 2009, the article “Devastação S/A”, published in issue 15 of Revista do Observatório Social, showed that the world’s largest flooring companies finance the deforestation of the Amazon and buy wood of illegal origin. This is then laundered through fraudulent processes involving export companies and a criminal gang, as yet not dismantled, that operates inside the Pará State Environment Department.

The article by the Observatory

showed, for example, the link between Pampa Exportações, Pará’s largest wood export business, and “ghost” lumber companies, i.e., companies with no accounts or tax records and that operate with 100% illegal timber. These are companies with fixed addresses that only exist thanks to the connivance of state officials and to the corruption promoted by entrepreneurs of the sector, as is the case of Pampa.

The impact of the story abroad made some major European companies announce cuts in suppliers and changes in the monitoring protocols of the production chain. Within Brazil, little has changed. The president of Pampa, Demorvan Tomedi, denied involvement with shell companies or illegal timber.

Tomedi persisted with his denials even after being confronted with photos of wood marked with Pampa’s logo stockpiled in the yard of ghost sawmill in the town of Anapu (Pará state).

Tomedi sits on the sustainability council of Santander/Real Bank. The bank published a statement in defense of the entrepreneur: “Mr. Demorvan Tomedi explained to the bank that the official information about the supplier was in line with the principles of the company and did not raise suspicion”. The supplier in question, Rio Pardo Madeiras, which according to the bank did not raise suspicion, did not even have a CNPJ (company registration number), let alone a felling license. ■

Ibama checks timber load seized in the vicinity of Altamira



ENVIRONMENTAL IMPACTS

Why millions of hectares go up
in smoke every month in Pará state

The pig iron production chain in Pará state is among the most environmentally aggressive. It is estimated that over five million cubic meters of native forest are felled annually in the state to produce charcoal.

The production of one ton of pig iron requires 875kg of charcoal. In order to produce this much charcoal 2,600kg of dry wood (with an average density of 360kg/m³ in native forests) are needed. In other words, this amount of raw material makes it necessary to deforest an area of at least 600 square meters.

The charcoal acquired by manufacturers to fuel their blast furnaces may have three different origins:

1. Native wood: extracted through the felling of native trees in forest management projects authorized by the IBAMA federal environmental agency. These projects are part of the expansion of the agricultural frontier in the region. The percentage of deforestation per rural property authorized by IBAMA varies: 20% in the Atlantic Forest and 65% in the cerrado biome. Such projects last two years and are renewable with IBAMA's authorization;
2. Sawmill waste: waste from the milling process (20-40% of the total) is used for charcoal production. Usually, the charcoal is made on site.
3. Reforestation: timber from reforestation projects, i.e., eucalyptus plantations in estates owned by manufacturers.

According to the Minas Gerais Forestry Association (AMS), in 2007 alone charcoal consumption in Brazil hit 9.2 million tons, over 90% of which went to the steel sector. And according to parameters of the Ministry of the Environment (MMA), 48 trees are needed to produce just one ton of charcoal. So, put differently, in that year, more than 440 million trees found their way into kilns. The AMS

estimates that approximately 50% of what is consumed at present comes from native forests, while the other half comes from reforested areas. The notorious existence of a significant illegal trade that operates beyond the reach of the State's control calls into question any more assertive data regarding these percentages.

In 2007, the state government testified that there existed some 25,000 charcoal works, a figure that helps one imagine the number of people involved in the activity. "In Açailândia [town in Maranhão state where five steelworks are sited], there are whole neighborhoods that live off charcoal," says Xavier Plassat, coordinator of the national campaign against slave labor of the Pastoral Land Commission (CPT).

The workforce is largely made up of landless workers who survive doing odd jobs in agriculture and forestry on a temporary basis. However, there are other situations as well, including land reform settlers recruited for the activity.

IBAMA's inspections of charcoal works were concentrated in Dom Eliseu, Paragominas, Rondon do Pará and Ulianópolis. These municipalities are responsible for almost all the charcoal supplied to the steelworks of Marabá, and for much of the charcoal consumed by the pig iron facilities of Maranhão state.

Forest
fire in the
Amazon
region

Between 2000 and 2007, surveys indicated the burning of 21 million trees in charcoal kilns for pig iron production.

In April 2007, IBAMA's Operation Apiti found that steelworks acquired charcoal from companies that defrauded the forestry control system. There were also signs that Authorizations for the Transport of Forest Products (ATPFs) stolen from IBAMA headquarters in Marabá had been used in the sale of charcoal to pig iron producers. Companies such as Cosipar were embargoed, but managed to reopen. For the lawsuits to be dropped, the company paid a fine of R\$ 65 million [c.US\$ 38 million] and signed a Conduct Adjustment Stipulation (TAC) in January 2008. This laid down that Cosipar had to plant native tree species in an area of 32,000 hectares.

The environmental operation prompted Vale (called Companhia Vale do Rio Doce at the time) to issue

an ultimatum to pig iron producers, making them prove they were in line with the environmental and labor legislation. The company wrote to its pig iron producing customers in the states of Pará, Maranhão and Minas Gerais informing them of its decisions regarding the supply of iron ore and promising to suspend deliveries to pig iron smelters that failed to prove their compliance with the legislation.

Among the recipients of these letters were Pará-based companies Ibérica, Cosipar, Usimar, Simasa and Simara.

In 2007, by means of operations Kayapó, Cumaru, Sem Fronteiras, Aço Preto, Urucuré and Lago – all in Pará state –, IBAMA raised some R\$ 60 million [c.US\$ 35 million] worth of fines, resulting from 121 Infringement Records (AIs), 106 Apprehension and Deposit Terms (TDAs) and 11 Embargo/Interdiction Terms (TEIs). One company was embargoed and six were notified. In

the six operations, there were seizures of 2,399,601 cubic meters of wood, over 105,000 cubic meters of charcoal, 37 chainsaws, 68 vehicles and 102 wild animals; more than 33,000 hectares of cleared land and 363 charcoal kilns were also embargoed.

In 2008, IBAMA and the State Environment Department (SEMA) unleashed operations that proved that major steelworks in Pará received charcoal made from timber illegally extracted in the Amazon region. This conclusion was based on surveys conducted between 2005 and 2008 about the use of charcoal in the Marabá steel hub. In lawsuits filed in September 2007 against four companies sited in the town, IBAMA pointed out that the volume of charcoal declared by the companies was incompatible with the energy demand necessary to produce the amount of pig iron informed by them. Together, ten steel plants from



*According to the
Ministry of the
Environment, 48
trees are needed to
produce just one
ton of charcoal*

Forest fire on the
banks of River
Tocantins in
Marabá (Pará)

Marabá declared to SEMA in January of that year that they possessed 211,170 cubic meters of charcoal that originated from companies based in the states of Maranhão and Pernambuco. According to SEMA, the latter companies were not legally in operation at the time.

In the accounting of the environmental agency, for each ton of iron manufactured, about two cubic meters of charcoal are consumed. For example, Cosipar (Pará Steel Company) declared that between 2000 and February 2007 it produced 2.2 million tons of pig iron and used 1.7 million cubic meters of charcoal.

According to IBAMA, for such an amount of iron, 4.4 million cubic meters of charcoal would be needed. IBAMA said it also found “incompatibilities” at three other companies in Marabá: Simara Marabá, Siderúrgica Ibérica and Usimar.

More recently, in November 2009, IBAMA once again fined companies accused of buying illegal charcoal in the state. Cosipar, Sidernorte and Sidepar were caught by IBAMA inspectors buying 1,520m³ of illegal charcoal – equivalent to 26 truckloads – from a shell company created just to trade in forestry credits. According to the agency, the companies had their access to SISFLORA (system that controls the flow of wood and other forest products) blocked. The steelworks had their irregular stocks apprehended.

The scheme to sell credits to the steelworks was uncovered by an audit of SISFLORA. The system is managed by the State Environment Department. A single company, LA Baseggio, created within SISFLORA in June 2009, drew the attention of IBAMA inspectors, for it sold 9,000 cubic meters of wood and charcoal with 39 companies in just three months. ■





CRIME SYNDICATE

Criminal group linked to the SUDAM
Mafia supplies illegal charcoal for
steel production

Charcoal obtained by predatory activities and using slave labor enters the production chain of major steel corporations and carmakers

Timber turns to dust at a charcoal works in Marabá (Pará state)

The environmental problems of the Amazon region are far from over. Perhaps they have not even begun in their most devastating guise. The likely robust economic growth of the next few years will have a direct impact on the Amazon biome. And the next big thing is called charcoal.

This input is fundamental to the steel industry. Its obtainment in the Brazilian Amazon follows a script starred by devastation, the use of slave labor, corruption of public officials, influence-peddling and the connivance of the world's major steel and vehicle corporations.

In the Amazon, businesspeople, politicians and public servants have formed a crime syndicate to circumvent the law and devastate natural resources. It is an inside-out public/private partnership: it fails to take into account the environmental, social and cultural heritage of the Earth's most biodiverse region.

The problem begins in the depths of the rainforest and ends at the doorstep of major car and truck assemblers in Brazil and the United States. These are big corporations that upon buying steel produced with illegal charcoal, finance devastation and encourage slave labor in the Brazilian Amazon.

In spite of there being a complex web involving companies, politicians and government bodies, everything can be summarized in a single sentence:

charcoal obtained through predatory activities and with the use of slave labor enters the production chain of large steel companies and of the world's main vehicle manufacturers.

In between the worker who produces the illegal charcoal in the heart of the forest and the luxury car that transits in urban highways there are global giants of the mining and steel sectors, as well as Pará-based steelworks.

The bosses of the scheme are businesspeople that work in harmony with corrupt officials of the Pará State Environment Department. The latter are inspectors who use their positions to forge documents and launder charcoal obtained by the burning of logs taken from indigenous people's land and environmental preservation areas, often with the use of slave labor.

Along the way, the process is made possible thanks to the dirty work done by large steel companies located in the Amazon. For all of this to work, a key ingredient is needed: corruption. It lubricates the path from the depths of the forest to the car dealership round the corner.

The scheme is made feasible by the crime syndicate cited here, which operates in the recesses of Pará's public administration and business circles. It is this criminal consortium that facilitates environmental devastation. It only exists because mining companies, steelworks and car-makers feign

PROFILE

Regional politician and businessman, Délio Fernandes is little known nationally, which does not mean he is unable to head up this and other gangs that operate in the Amazon. The SUDAM scandal remains shelved and has not had any consequence for the politicians involved. As vice-mayor of Anapu, Délio is among those who have carried on with public life.

Employee of a charcoal works in Marabá.

ignorance. They pretend not to see what goes on in their own production chain. It is these global companies, these corporate giants, that finance the production of “deforestation charcoal”, of “slave labor charcoal”.

THE FRONT MAN

The head of the scheme is businessman Laudelino Délio Fernandes Neto, vice-mayor of Anapu and one of the leaders of the so-called SUDAM Mafia, that embezzled millions from projects that should work in favor of the Amazon’s development but ended up in the pockets of businesspeople and politicians, among them Délio himself and his main ally in the SUDAM scheme, former senator Jader Barbalho.

Before joining the illegal charcoal business, Délio was one of the protagonists of the mega-frauds at SUDAM, the development agency for the Amazon region. The gang in question embezzled at least R\$ 132 million from

projects financed by the government. It is the same scandal that in 2002 led to the arrest of former senator Jader Barbalho and imploded the presidential candidacy of the current governor of Maranhão state, Roseana Sarney, after the famous photo of a pile of money on a table was made public.

The charcoal-laundering crime consortium is so strong that in 2009 the governor of Pará state, Ana Julia Carepa, sent a letter to the then President of IBAMA, Roberto Messias Franco, asking him to suspend the official who denounced the syndicate’s existence.

The governor’s intervention before the federal government was requested by Délio Fernandes himself. He presented Ana Julia with a simple equation: “either they let us work or pig iron exports to make steel will cease”. Délio’s arguments were used by the governor. In her letter to IBAMA she alleged that the official who had revealed the existence of the criminal



consortium, the then IBAMA delegate in the town of Altamira, Roberto Scarpari, was “against the development of the region”. She also wrote that “the activity of the IBAMA office in Altamira contributes to nothing happening”. The letter asking for Scarpari’s suspension was sent to the president of IBAMA on October 9, 2009 and is kept in the Pará state file with number 662/09-GG, and in the IBAMA file with number 10100.004528/09-02.

The governor’s request was answered. Scarpari was transferred to Marabá. This meant that the consortium continues operating unhindered in the interior of the Amazon region.

Scarpari’s removal from Altamira was celebrated with a barbecue held in the courtyard of Délio Fernandes’ company, Agropecuária Vitória Régia S/A. It is headquartered in Anapu and lies at the heart of the criminal scheme.

After spending SUDAM’s money under the protection of the high clergy

of Pará state politics, Délio went on to new challenges: he set up a consortium to launder illegal charcoal and finance the export of pig iron to major steel-makers in the United States. To this end, he partnered up with 33 charcoal-producing companies in Marabá and neighboring municipalities. These, in turn, began

supplying pig iron producers that get their iron ore from Vale and mix the two basic inputs in their blast furnaces.

Délio also organized a partnership with corrupt elements within the Pará State Environment Department, who started forging documents according to the syndicate’s needs. ■

Délio Fernandes Neto, linked to former senator Jader Barbalho, Délio embezzled the following SUDAM resources:

Issued a check to himself worth R\$ 530,000 [c.US\$ 312,000]. The money should have been invested in development projects in the region. The check was traced and the funds were shown to have been diverted;

Misappropriated R\$ 440,000 [c.US\$ 259,000]. This money should have been invested in an agricultural project, but was used to buy an apartment in Vila Velha, Espírito Santo state;

Misappropriated R\$ 201,000 [c.US\$ 118,000]. This money also should have been invested in an agricultural project, but was used to buy 5,000 cases of beer and 5,000 cases of soda;

Bought a Toyota Hilux with money that should have financed cattle-rearing.



**SEMA**

Secretaria de Estado de Meio Ambiente

Relatório de Totalização de Entradas e Saídas

Empreendimento: **2283 - AGROPECUÁRIA VITÓRIA RÉGIA S/A - 34683656000178**Documento: **Todos os documentos**Operação: **Todas as operações**Período: **/ / a / /**Categoria: **Todas as categorias**Produto: **Todos os produtos**Detalhar: **Sim**

ENTRADA

Nº:	ORGÃO AMBIENTAL						CNPJ/CPF:
Autorização de Crédito de Produto							
Produto	Kg	St	m3	Unid	L	MDC	
Resíduos Florestais	0,00	1.238.147,39	0,00	0,00	0,00	0,00	
Subtotal - 3 documentos							
Autorização de Crédito de Tora							
Produto	Kg	St	m3	Unid	L	MDC	
Toras de Madeira Nativa	0,00	0,00	70.272,19	0,00	0,00	0,00	
Subtotal - 1 documento							
Madeira total por Empreendimento	0,00	1.238.147,39	70.272,19	0,00	0,00	0,00	
Total - 4 Documentos de Entrada							



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do Meio Ambiente
e dos Recursos Naturais
Renováveis

AUTORIZAÇÃO PARA DESMATAMENTO

NÚMERO

34055 *

SÉRIE B

NOME DO PROPRIETÁRIO DO IMÓVEL

AGROPECUÁRIA VITÓRIA RÉGIA LTDA.

CGC/CPF

34.683.656/0001-78

ENDEREÇO

Região do Rio Bacajá

CIDADE

Sen. José Porfírio

MUNICÍPIO

Sen. José Porfírio

CEP

UF
Pa

AUTORIZAÇÃO VÁLIDA ATÉ

11.03.1999

DENOMINAÇÃO DO LOCAL DO IMÓVEL ONDE SERÁ EFETUADO O DESMATAMENTO

Fazenda Vitória Régia

ÁREA TOTAL DO IMÓVEL (EM HECTARE)

6.000,7199 ha

ÁREA A SER PRESERVADA (EM HECTARE)

3.000,7199 ha

ÁREA AUTORIZADA PARA ESTE DESMATAMENTO (EM HECTARE)

3.000,00 ha**Regularização**

MATÉRIA-PRIMA A SER EXTRAÍDA (TORA, PALMITO, LENHA, CARVÃO, etc)

Regularização de área de 3.000,00 ha junto ao IBAMA/Pa, para fins de implantação de trabalhos de recuperação e pastagens numa área de 1.490,00 ha.

Não existe matéria prima florestal.

IMPORTANTE:

O PROPRIETÁRIO DO IMÓVEL DEVERÁ OBSERVAR AS DISPOSIÇÕES LEGAIS, BEM COMO PRESERVAR A ÁREA CITADA NESTE DOCUMENTO, SOB PENA DE CASSAÇÃO DA PRESENTE AUTORIZAÇÃO, ESTANDO ANDA SUJEITO ÀS PENALIDADES PREVISTAS NA LEI 4.771, DE 15/SETEMBRO/1965, E DEMAIS NORMAS VIGENTES.

PROCESSO DE ORIGEM Nº

0100/98-03/SUPES/PA

ESTA AUTORIZAÇÃO DEVERÁ SER ACOMPANHADA DE:

- CROQUI/PLANTA DA PROPRIEDADE EM 2 (DUAS) VIAS
- AVERBAÇÃO DA ÁREA DE PRESERVAÇÃO EM CARTÓRIO DE REGISTRO DE IMÓVEIS.

LOCAL E DATA

Belém-Pa, 11.03.1998

CARIMBO E ASSINATURA DO REPRESENTANTE DE COMPETENTE

José Mariades S. Adelha
Coordenador Técnico

THE CRIME, STEP BY STEP

Syndicate operatives find ways to legalize the supply of charcoal to pig iron producers

The system set up by Délio and the rotten apples of the State Environment Department (SEMA) is much more efficient than simply selling illegal charcoal, as was the case until not so long ago. Now the product receives some “makeup” and takes on a legal appearance.

At the Environment Department, the operatives of the crime consortium manage feats of biblical proportions. Turning water into wine would be child’s play for them.

Example: as if by magic, they “gave birth” to over one million cubic meters of wood ready to be fried up in the kilns of 33 companies linked to the criminal consortium.

If you’re thinking that “giving birth” to one million cubic meters of wood from a grain of sand is nothing, wait for the miracle: it was 100% legal wood, sustainable, removed in environmentally correct fashion and, furthermore, wood whose exploitation played a “social role” by freeing up a degraded area for food production. This is what is written in an official document of the Environment Division of the Pará State Environment Department. It is in this division that the public employees who serve the consortium work.

All of this is false, forged, invented. And it only “works” because the Environment Division acts as the guarantor of the process. Timber extracted from conservation and indigenous areas gets laundered and acquires the appearance of legality.

It happened as follows:

1. Agropecuária Vitória Régia, Délio’s company, obtained from SEMA an authorization to remove so-called “steriles” (wood scraps) from an area in Anapu, in the Altamira region. We are talking about dozens of double truckloads of wood;
2. This wood got sold to 33 charcoal producing companies in the Marabá region;
3. The wood never left Anapu. It went on a merely virtual trip. In fact, it “left” conservation areas much closer to the charcoal producers, but gained SEMA’s seal of approval as if it were from the authorized area in Anapu.

Why does this happen? In the case above, it happened because it was necessary to find a way to legalize the supply of charcoal to pig iron companies. To this end, various schemes were used, such as an authorization to remove timber in Anapu that had expired over ten years before. With this expired authorization, the wood was transferred virtually to the charcoal producers. It never got to them. They used timber from illegal deforestation.

How can one tell that it never arrived? The transport documentation contains the number-plates of the trucks allegedly used. But in actual fact, they are not all number-plates of trucks. They are number-plates of motorcycles, cars (some of which stolen) and even of vehicles that do not exist. And some are number-plates of trucks.

What proves the virtual transfer? The moving of the wood was permitted by SEMA on the basis of an IBAMA authorization issued last century. In SEMA’s name, the authorization bears the signature of official Marcelo Silva Auziel. He validated deforestation authorization number 34055, which is part of process 100/98-3/SUPES PA, and was issued on March 11, 1998. Its validity expired one year later.

The wood was no longer there when Auziel authorized the use of the expired document. So, any old number-plate would do in order to document the transfer, since it never happened. The crime syndicate basically operates in this way in its various transactions, varying slightly according to momentary needs. ■

(top)
SEMA document confirms the use of illegal credits. The amount is equivalent to over five thousand truckloads.

(bottom)
IBAMA document that expired in the 20th century used by SEMA to validate the scheme.



CORPORATE RESPONSIBILITY

The production chain of illegal charcoal goes through five stages before arriving at the carmakers and steel giants.

STAGE 1: CHARCOAL PRODUCTION

1. Timber is removed illegally from environmentally protected areas and indigenous lands;
2. Inspectors from the Pará State Environment Department, in partnership with the crime consortium, produce the paperwork that gives the wood a legal appearance;
3. Hundreds of charcoal works burn the illegally removed timber; many of these use slave labor, according to the public prosecution service for labor matters (Ministério Público do Trabalho – MPT).

STAGE 2: CHARCOAL ARRIVES AT THE STEELWORKS

1. Charcoal is transported to large steelworks located in Marabá (PA). According to IBAMA and the Federal Prosecution Service (MPF), companies know that they are buying charcoal that comes from deforestation, because year after year they are consistently fined for environmental crimes;
2. The main steel companies involved in deforestation and slave labor, according to several complaints by the MPT and the MPF, are as follows:
 - Cosipar – Companhia Siderúrgica do Pará S/A;
 - Siderúrgica Ibérica S/A;
 - Sinobras – Siderúrgica Norte Brasil S/A;
 - Viena – Siderúrgica do Maranhão S/A;
 - Siderúrgica Gusa Nordeste S/A.

The companies listed above are being officially investigated for slave labor, according to a document held by the report team, signed by an MPT official from Marabá, Edson Aires dos Santos.

Moreover, in recent years, several Conduct Adjustment Stipulations (TACs) were signed by steel plants. In these documents, signed with the Federal Prosecution Service, they acknowledge the problem and commit to changing their production processes. They also promise to invest in actions that minimize the damage already caused to the biome, thus recovering degraded areas.

The companies do actually deploy actions to restore degraded areas, but continue to use charcoal from deforestation and slavery. In other words, they have not changed the permissiveness of the production chain and the cycle of devastation has not stopped.

This could be avoided through the use of wood from their own tree plantations. However, this is more expensive than paying fines or signing TACs. Since the last century, these companies that have been fined systematically; they then make the same promises all over again, but nothing changes.

According to IBAMA and the MPF, steelworks know they are buying

Illegal wood
turns to ash

charcoal resulting from deforestation and slave labor. In the technical report “Diagnosis of the Steel Sector in the states of Pará and Maranhão” produced by IBAMA’s Directorate of Forests, four forestry engineers show the discrepancy between the charcoal that the steel plants declared and the amount that was actually used in production.

Based on the known amount of charcoal needed to produce one ton of pig iron (raw material for steel), the technicians calculated the conversion and obtained figures that were incompatible. In Pará, during 5 years (2000–4), an average of 65.1% of the charcoal used for metallurgical purposes in the Carajás hub was not declared.

The undeclared charcoal came from conservation areas or indigenous lands and some of it was obtained with the use of slave labor. The industries of the sector themselves acknowledged the problem in 2004 by signing the Pact to End Slave Labor in Charcoal Production. At the time, they were pressured by reports that showed how the steel industry purchased charcoal from companies that used slave labor. Much has improved since then, but the problem has not been eradicated.

Regarding the environment, the situation has worsened since 2004. Steelmakers claim that the procedures have changed and that they no longer buy undocumented charcoal. In practice, however, nothing has changed because the documents that make the charcoal appear legal are falsified.

With the entry of the crime syndicate, the scheme has been improved: corruption has increased in the environmental agency and the product now has an appearance of legality, a disguise that makes it seem sustainable.

STAGE 3: IRON ORE ARRIVES AT THE PLANTS

The companies involved with the crime consortium receive iron ore from Vale, which transports the product

along the Carajás railroad. Vale has a direct stake in the production chain of steel obtained with charcoal from deforestation and slave labor. Without the ore supplied by it, the production chain would not work.

Vale is a long-running supplier of these plants, even during the time when 65.1% of the charcoal used by them was illegal, as per the technical report cited above.

Steel production requires iron ore, supplied by Vale, and charcoal, provided by hundreds of charcoal works that exist within the forest. In this process, Vale’s participation in the supply of iron ore is full of contradictions.

In 2007, the company temporarily suspended the supply of iron ore to nine steelmakers, admitting that they were environmentally unsustainable and that they used charcoal from deforestation and slavery.

The companies negotiated. They promised to mend their ways for good and the supply was fully restored. In practice, however, nothing changed, not even after 2008, when Vale signed an agreement with the Ministry of the Environment, in which it undertook to sell iron ore only to steelmakers who use certified timber in their charcoal production. According to the document, steelmakers that the Ministry authorizes to operate are considered environmentally legal. There is, however, no mechanism to monitor the certification of timber. Without a mechanism to monitor the charcoal, nothing has changed.

Environment Minister Carlos Minc stated at the time: “The idea is to increase the supply of certified timber as a means of combating the illegal trade”.

On paper, the idea is great. When signing the document, Vale CEO Roger Agnelli said: “Everyone is responsible for protecting the environment. The forests are abused by lack of choice and opportunities of the people living in deforested areas.” In summary, Vale blames forest-dwellers for deforestation.

In the specific case of the steel

production chain, forests are not cleared because people living in them lack options. They are cleared because the global steel industry feeds off the native forest. The forest people have nothing to do with this issue. If the steelworks had their own tree farms and bought no charcoal from deforestation and slavery, none of this would be happening. It is a typical case in which the victim becomes the culprit.

Also, forests are cleared because the industry needs more charcoal than is produced sustainably. It is a matter of cost-benefit. The larger the amount of illegal charcoal, the cheaper the end product. Steelmakers do not calculate the value of non-felled forest. Their business is to produce steel. The cheaper the charcoal, the better, and sustainability becomes merely a marketing tool.

In Pará, medium-sized producers do the dirty work: they use charcoal from deforestation and slave labor, which is mixed with iron ore from Vale. Over 90% of this production is exported.

Large corporations such as Vale say they are concerned and have signed agreements, such as the one with the Ministry of Environment. But they continue to operate in environmentally unsustainable fashion.

In Pará, all the steelworks using iron ore from Vale are connected to the supply of charcoal that is laundered by the crime consortium led by Délio Fernandes, without exception, according

MPT document confirms the existence of slave labor in the production chain of six steelworks

to documents of purchase and sale of charcoal held by the report team.

It is a multimillion-dollar scheme, which only thrives because the state system of enforcement has been corrupted, as will be shown later. In practice, nothing has changed since the survey conducted by IBAMA in 2005, which shows that over 60% of charcoal is illegal.

The situation has only been perfected. From being illegal, the charcoal

has become “laundered”, disguised by forged documents.

As regards the production of charcoal in Pará state, the players who could change the scenario have washed their hands of the problem:

1. The Ministry of the Environment says it has signed agreements with steelmakers and that now they use certified wood;
2. Steelmakers say they have signed TACs and are replacing vegetation, but continue to receive fines, year after year, always for the same reason: the use of charcoal tarred with deforestation or slave labor;
3. Vale, the iron ore supplier, says that since the 2008 agreement with the Ministry of Environment, it only provides iron ore to companies



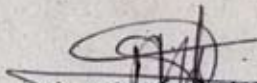
**MINISTÉRIO PÚBLICO DO TRABALHO
PROCURADORIA DO TRABALHO NO MUNICÍPIO DE MARABÁ**

Fl. CSI 31, Quadra 02, Lote 1, Altos - Nova Marabá
CEP 68507-540 - Telefone: (0xx94) 3322-1964 - Marabá/PA

**AÇÕES DO MPT EM FACE DAS SEGUINTE SIDERÚRGICAS ENVOLVIDAS DIRETA E/OU
INDIRETAMENTE COM TRABALHO ESCRAVO E OU DEGRADANDE (CARVOARIAS, FAZENDAS E
MADEIREIRAS):**

1. COSIPAR – COMPANHIA SIDERÚRGICA DO PARA S/A;
2. SIDERÚRGICA IBÉRICA S/A;
3. SIDERÚRGICA NORTE BRASIL S/A – SINOBRAS (antiga SÍMARA);
4. SIMASA – SIERÚRGICA DO MARANHÃO S/A;
5. VIENA – SIDERÚRGICA DO MARANHÃO S/A;
6. SIDERÚRGICA GUSA NORDESTE S/A;

Marabá-Pa, 04 de março de 2010.


Edson Aires das Santos
PTM/Marabá
Mat. 6003769-5

authorized to operate and that adopt sustainable practices – as if by the wave of a magic wand, the agreement became a fact;

4. The Pará government says steel-makers are sustainable, bring development and that production is within the law;
5. The Pará State Environment Department pretends it has nothing to do with the matter, but it is from within itself that the stamp is issued to disguise the illegal charcoal;
6. IBAMA, which ought to look after the country's natural assets, removed the official who denounced the criminal consortium that launders charcoal;
7. The CEO of Vale blames deforestation on forest peoples.

Vale reacts strongly whenever its environmental practices are put to the test. The company likes to say that the accusations against it are inconsistent and made by environmentalists and radical organizations whose arguments are more ideological than technical, and with no evidence.

This is not the case with this report. Everything is fully documented, including the documents concocted in the innards of the State Environment Department. Vale is part of the predatory and criminal supply chain that produces pig iron in the Amazon.

When asked about the iron ore supply to businesses that use illegal charcoal, Vale said the following in an e-mail sent by journalist Murilo Fiuza, from the press office: “Vale has no policing powers and has no way of monitoring whether firms that have up-to-date licenses are actually fulfilling them in reality. Therefore, Vale believes in the licenses granted by the competent bodies responsible for this monitoring.” The journalist also mentions the agreement with the Ministry of the Environment as an example of good practice adopted by the mining company.

The illegal charcoal only exists insofar as there is a supply chain that takes advantage of it to thrive. The modern practices of corporate social responsibility are clear: a socially responsible and environmentally sustainable company must monitor its value chain, which is the opposite of what Vale states when it counts itself out.

A socially responsible company should contribute towards the construction of a balanced planet. This goes far beyond obeying the law. The company must act to build a just and sustainable world.

In the case of Vale, the issue is further aggravated because of its attempt to cover up what actually happens in Pará. For example, on May 12, 2010, Vale's environment and sustainable development director, Vânia Somavilla, said to an audience of more than 500 people that the company no longer provides iron ore to smelters engaged in the use charcoal tainted by deforestation and slavery in Pará.

This information was voiced during the international conference of the Ethos Institute, at a workshop titled “New Leadership for a Green, Inclusive and Responsible Economy”.

The information passed on by Vânia Somavilla is false. In 2007, during a short space of time, the company did not provide iron ore, but this is no longer the case. The company uses the Ministry of the Environment's agreement as justification for the return of supply. The issue is that the agreement was not adhered to and the smelters are still stocked with illegal charcoal. Predatory practices are the norm in the production of pig iron in Pará. Vale adopts an ideological position, precisely the one it criticizes NGOs and environmentalists over. It is the game of counter-information: to discredit the plaintiffs and use the same tactics to make a true story false, even before an audience that is qualified, but unfortunately not

very well informed about what actually happens in the heart of the Amazon.

STAGE 4: PIG IRON PRODUCTION

Brazil produces the world's best pig iron in the region of Marabá (PA), where the abovementioned metallurgical companies are located. The quality of pig iron is achieved with the use of charcoal, which is much better than coal because it has low sulfur content. Because of this, it is currently one of the most predatory economic activities.

But this does not matter for the companies listed here. What matters is that the pig iron is good.

About 90% of the pig iron produced in Pará is exported to the United States.

In Brazil, charcoal has been used since the nineteenth century in pig iron production, where it performs two functions. The first is as a fuel for the blast furnaces and the second is as a chemical agent to remove the oxygen from the ore during the process.

Various sources consulted estimate that, in Brazil, more than 50% of charcoal used in the production of pig iron is predatory in origin. This is because charcoal is the most costly raw material in the production of pig iron. So as to reduce the cost, steelmakers buy deforestation charcoal. And then pay the fine because it works out cheaper that way.

Siderúrgica
Ibérica,
in Marabá

STAGE 5: EXPORT

The pig iron from deforestation and slave labor enters one of the most important supply chains in the international economy: steel produced in the United States, which supplies both the domestic market and countries that import goods produced in the USA: cars, appliances, hospital equipment, armaments etc.

Contrary to what Vale's CEO says, it is not the dwellers of the Amazon who are responsible for its deforestation. The beneficiaries of the devastation of the Amazon are the corporations that allow their supply chains to include Amazonian products taken in a predatory manner.

In their spreadsheets, the compa-

nies mentioned here do not take into account the value of natural resources. A socially responsible company would not allow products obtained in criminal and environmentally predatory fashion to enter its value chain.

The justification that they have no policing power to know who is operating within or without the law is no good in this case. Any bureaucrat with middling qualifications could unveil the problem without leaving the office, with four or five phone calls.

The pig iron produced in the Carajás Valley is predatory – it uses charcoal from deforestation and slave labor. Steelworks in the region have a long-running criminal record for assault to the biome. It is very convenient to transfer to the government a role that

also belongs to companies: monitoring the supply chain.

The export of pig iron is the final act of this surreal drama starring big corporations.

The following companies buy pig iron produced using deforestation and slave labor charcoal: Gerdau, Thyssen-Krupp, Kohler, Whirlpool Corp., Nucor Corporation and National Material Trading Co. They are the world's largest companies in their sectors. Of these, one is Brazilian, Gerdau. It buys pig iron from this devastation to supply its US plant, Gallatin Steel, a joint venture between itself and ArcelorMittal. This report has copies of US Customs documents showing transactions between Gerdau and pig iron manufacturers that fuel environmental devastation. ■



THE PIG IRON CONSUMER MARKET

See below the context in which each of the mega steel corporations enters the “devastation pig iron” production chain:

NATIONAL MATERIAL TRADING CO

NMT purchases more than 1,500 tons of Brazilian pig iron per year. According to the company’s website, it is the largest importer of Brazilian pig iron in the USA. NMT has 15 distributors in North America, and is the main supplier to large companies and suppliers of large companies such as Ford, General Motors and Kohler. NMT’s main supplier is Cosipar.

NUCOR CORPORATION

Nucor is the second largest US steelmaker and one of the largest consumers of Brazilian pig iron. Together with its subsidiaries, it is engaged in the manufacture and sale of steel and steel products in North America and internationally. The company operates through three segments: Steel Mills, Steel Products and Raw Materials, with different products. The company’s operations also include the purchase and sale of steel and steel products. Founded in 1940, the company is headquartered in Charlotte, North Carolina.

FROM THESE TWO DIRECT BUYERS OF PIG IRON, OTHER ENTERPRISES ARE INVOLVED IN THE CHAIN, ESPECIALLY OF STEEL. THE MAIN ONES ARE:

KOHLER:

Through National Material Trading, it buys pig iron from Brazil. It is used to make the base of bathtubs and kitchen sinks. The company also produces piping, generators and machinery.

INTERMET*:

Buys pig iron from NTM. Headquartered in Fort Worth (Texas), the company produces automotive components used in cars around the world, such as chassis, suspensions, brake controls, steering boxes, transmission components, fuel pumps and dashboard instruments. The components are used in various automobiles, from construction vehicles and farm equipment to heavy duty trucks and passenger cars.

THYSSENKRUPP:

Purchases pig iron that originates from deforestation to make automotive parts used by Chrysler, Ford, GM, Nissan, Toyota and Deere & Co.

WHIRLPOOL CORP:

Whirlpool Corp: Became the world's largest manufacturer of home appliances in 2006, after the successful acquisition of Maytag. Whirlpool Corporation sells its appliances in North America, Latin America, Europe, Africa and Asia. The company also sells equipment under a number of different brands, including KitchenAid, Bauknecht, Roper, Maytag, Magic Chef and Amana. Whirlpool products include washers, dryers, refrigerators, air conditioners, dishwashers, freezers, microwave ovens, air purifiers and garbage compactors. In 2008, Whirlpool reported sales worth US\$ 18.9 billion and had some 70,000 employees. Buys pig iron from NMT, mentioned above.

* The company was founded in 1971, and before the financial crisis, it employed around 1,700 people in the production of cast metal components for cars, commercial and industrial vehicles. It was significantly affected by the crunch. In August 2008, according to Modern Casting magazine, the company hoped that its filing for bankruptcy would allow it to continue normal operations while reorganizing its financial and operational structure. The funds that would come through this request would be needed to maintain uninterrupted production. On January 6, 2010, according to Crain's Detroit Business newspaper, the company closed its last two foundry units, requesting full bankruptcy to settle its debts.

The parts manufactured by the company were sold to major automakers such as Toyota, Nissan, General Motors and Ford.

SISTER DOROTHY

How long will the impunity for the scheme that murdered the nun last?



Some of those involved in the frauds at SUDAM and in the illegal charcoal crime syndicate paid for the murder of Sister Dorothy Stang, shot six times in Anapu in 2005. The links between the SUDAM Mafia and the nun's death are Regivaldo Pereira Galvão, known as Taradão, and Délio Fernandes, one of the SUDAM Mafia heads. Their names appear in both investigations.

Taradão was mentioned in six investigations as Jader Barbalho's right hand man in the embezzlement of development project funds. In the case of the investigation into Dorothy's murder, the link is between Taradão and Vitalmiro Moura, known as Bida, the intellectual author of the crime. For his part, Délio Fernandes entertained Bida at his home half an hour after the nun was killed. Bida telephoned his wife from Délio's house and asked her to send a car to pick him up as soon as possible.

Furthermore, in a dictated note, Bida himself confirms the existence of a consortium involved in funding the gunmen who killed the nun. This note is one of the main items of evidence against him. On the basis of this note, the investigation arrived at the consortium that funded Dorothy's killing, where there appear names linked to the SUDAM Mafia and to the sale of charcoal tainted by deforestation and slave labor to the iron and steel industry.

It is within this setting of organized crime, murders and corruption that the steel giants obtain charcoal, a fundamental raw material for the industry with its varied ends.

In Pará, the logic is more or less the following: I pretend not to do something and you pretend not to see what I in fact do. The organized crime of deforestation and illegal charcoal production only exists because conniving buyers have

relations with predatory, criminal and blood-soaked production chains.

For many years the iron and steel companies have used the rhetoric of "now we'll change", "we are no longer the way we were", "we're sustainable", "socially responsible" and so on. The point is that this has not yet gone beyond intentions and entered the realm of practice. And things will only change when the giants of the sector stop pretending and banish from their production processes – truly, with no exceptions – any financial link with deforestation, slave labor and corruption of public officials. So far, nothing has changed in the iron and steel sector in the Amazon region, despite all the good intentions and all the commitments signed with the government and with society.

WAS DOROTHY'S BLOOD SPILT IN VAIN?

The man who pulled the trigger and the landowner with the most direct interest in Sister Dorothy Stang's death were convicted. However, the criminal structure that executed the nun continues untouched in the hinterlands of Pará.

Dorothy was murdered on February 12, 2005 in Anapu, one of the most violent areas in the country. The region is controlled by the political group led by Laudelino Délio Fernandes, one of the bosses of the SUDAM Mafia and coordinator of the crime syndicate that supplies "deforestation charcoal" and "slave labor charcoal" to pig iron producers.

Two gunmen, one intermediary and landowner Vitalmiro Bastos de Moura, known as Bida, were tried and found guilty. Landowner Regivaldo Pereira Galvão, known as Taradão, also accused of having ordered the killing, remains free.

The criminal structure that eliminated Dorothy is above Bida and Taradão. As this report shows, the nun's death has direct connections with the SUDAM Mafia and with the devastation meant to supply the iron and steel industry with charcoal.

The problem will only be solved

when the Federal Government, the Public Prosecution Service and the Judiciary decide to take forward the investigation of the SUDAM Mafia, which embezzled R\$ 132 million [c.US\$ 78 million] that should have been invested in the Amazon's sustainable development. Jader Barbalho and Roseana Sarney, who fell when the scandal broke in 2002, managed to "smother" the investigation. The list of politicians involved in the scheme but who were not mentioned at the start of the investigation is much longer. The investigative bodies of the Federal Government are in possession of documents that involve major characters of national politics, bosses that today help support the political structure of the government and have enough power to prevent any initiative to unshelve the investigation.

In Anapu, where Dorothy was murdered, nothing has changed until now. Environmental devastation, illegal seizure of public lands and contract killings continue. Laudelino Délio Fernandes and his accomplices are untouchable. "It isn't poor settlers that are deforesting the region. It is a well organized group of people," says Antônio Ferreira, regional coordinator of the National Institute for Colonization and Agrarian Reform (INCRA).

In Anapu, well-meaning people are afraid to leave their homes, to speak out, to denounce. The voice of the pistol and of impunity is what counts here; the power of irresponsible politicians and of armed groups speaks louder. The current scenario conspires against the families that are fighting for their rights.

Could it be that Dorothy Stang's blood was spilt in vain? Could it be that the criminal gangs that rule this part of the Amazon region will win the battle against human rights and Justice? Until when will mafia types and white-collar murderers have the power to shelve investigations and decide on the path to be taken by environmental policy in the Amazon? These are as yet unanswered questions. ■

**Portrait of
Sister Dorothy,
drawn using
charcoal**

THE PIG IRON MARKET

The importance of the main input of the steel production process

Pig iron is the immediate product of the reduction of iron ore by coke or charcoal and limestone in a blast furnace. It normally contains up to 5% carbon, which makes it a brittle material without major direct uses.

As industrial processes go, pig iron is generally considered an alloy of iron and carbon, also containing other residual elements such as silicon, manganese, phosphorous and sulfur, among others.

Pig iron is poured directly from the crucible of the blast furnace into containers to form ingots, or used directly in its liquid state in steel melting shops. Ingots are then used to produce cast iron and steel, with the extraction of excess carbon as the first step.

Charcoal is used mainly in pig iron production and fulfils two functions: as a fuel to generate the heat necessary to the operation of the blast furnace and as a chemical agent to remove the oxygen from the ore.

The advantages of using charcoal (vegetable origin) as opposed to coke (mineral origin) are greater reactivity and purity, and lower sulfur content. In environmental terms, charcoal has the advantage of releasing oxygen and emitting less carbon dioxide into the atmosphere. Coke emits almost two tons of CO₂ per ton of steel produced.

Other advantages considered by the sector are the large number of low-skilled persons involved in the activity and the generation of income

in regions where employment opportunities are not particularly favorable to workers.

Pig iron produced in Pará is used in the production of steel and cast iron parts, especially car parts.

PIG IRON IN THE AMAZON

Pig iron production using charcoal as an energy input and reducer began in the 19th century and became consolidated in the 1930s. Even with the emergence and expansion of steelmaking using metallurgical coke, pig iron production with the use of charcoal carried on playing an important role in the Brazilian steel segment.

The development of this production was based on the establishment

Graph 1: Pig iron exports (Pará and Maranhão) - 1990 to 2008

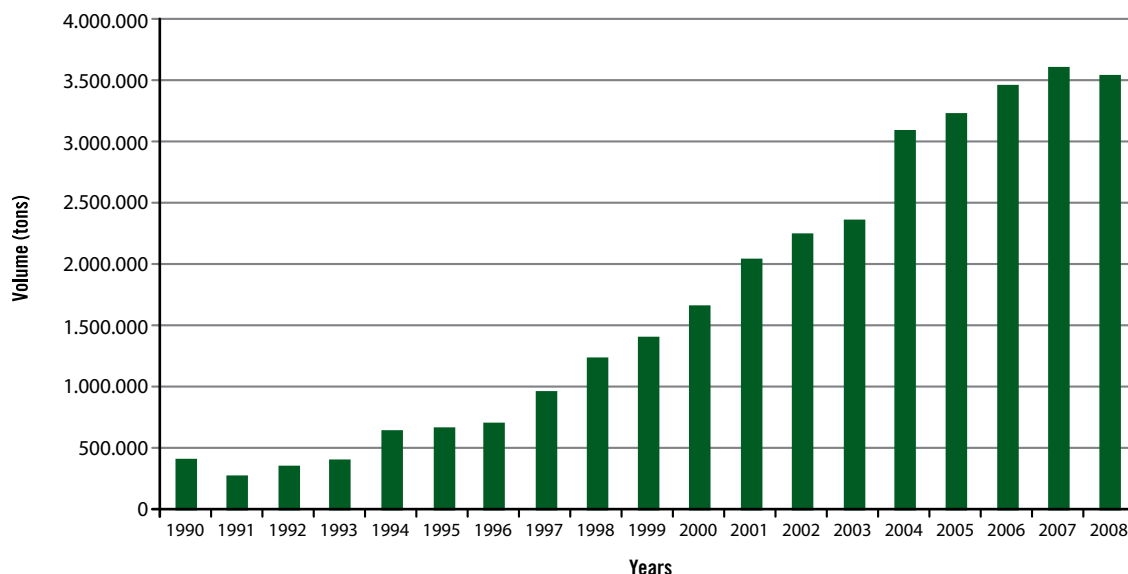
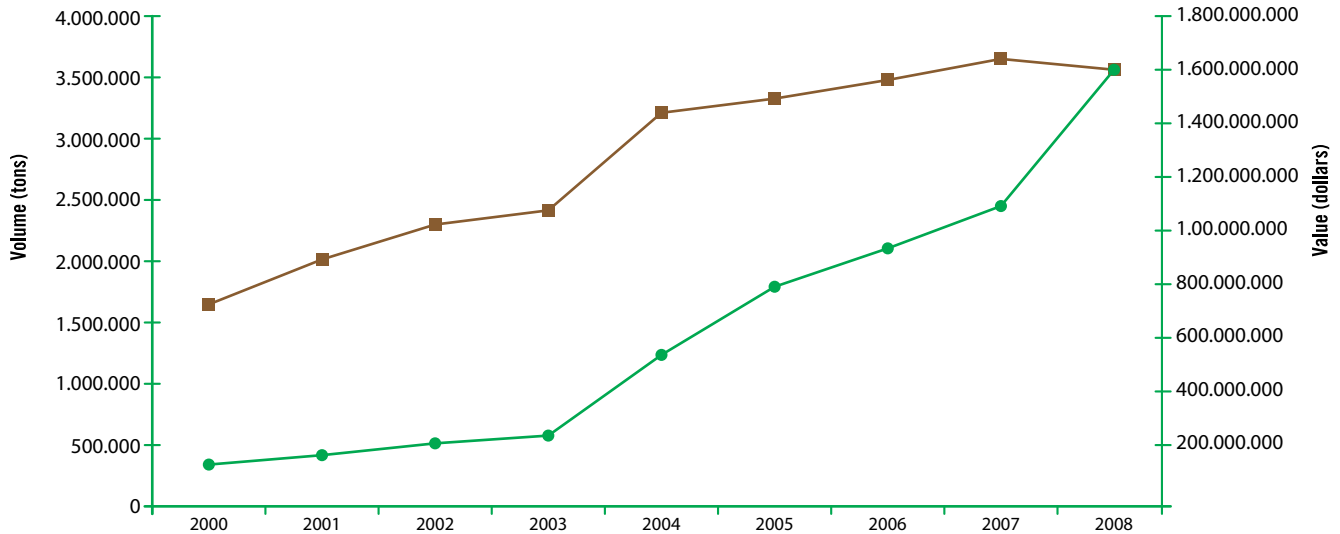


Gráfico 2: Evolution of the volume and value of pig iron exports (2000 to 2008)



of a production system in which two types of pig iron producers coexisted, integrated producers and independent producers. Integrated producers make pig iron in large-scale units that also make steel and other more sophisticated products. Independent producers, on the other hand, make pig iron alone and sell it on to foundries and steelworks.

In recent years, one finds among integrated producers a steady reduction in the use of charcoal for pig iron production, with metallurgical coke gaining ground. The trend is not replicated among independent producers, which are sticking to charcoal as a production input.

Until the end of the 1980s, pig iron production using charcoal was concentrated almost exclusively in Minas Gerais state. It was only in the following decade that an important regional shift took place, with the emergence of the first manufacturing units in the Eastern Amazon, in the municipalities of Açailândia, Maranhão state (Viena Siderúrgica and Cia. Vale do Pindaré), and Marabá, Pará state (Cosipar and Simara).

The geographic shift in pig iron production during this period is related to tax incentives granted by the regional development agencies SUDENE (Northeast) and SUDAM (North). These were offered by the federal government in the context of its so-called “Greater Carajás Program” and of the construction by Companhia Vale do Rio Doce of infrastructure to move iron ore from the Carajás mine by railway to the Ponta da Madeira port in São Luis (Maranhão state).

PRE-CRISIS ECONOMIC BACKGROUND

Though with a timid start – in 1990 it accounted for less than 5% of total Brazilian output –, pig iron from the Eastern Amazon has been gradually increasing its share of the country’s total charcoal-based production. In 2008, exports were over 3.5 million tons.

The crossing of data regarding the volume and value of pig iron exports between 2000 and 2008, as per the graph below, demonstrates that while the volume of pig iron exported (measured in tons) doubled in this period, the value

of the pig iron exported (measured in dollars) rose almost by a factor of ten, going from some US\$ 165 million in 2000 to US\$ 1.5 billion in 2008. This growth was made possible by a jump in the average price, which went from US\$ 99.60/ton to US\$ 445.60/ton over the same period.

The price of pig iron evolved in line with mineral commodity prices, spurred by soaring Chinese and Indian demand for iron and steel products and its impact on the world market. This meant exceptional results for pig iron producing companies sited in Pará and Maranhão. These allowed most such companies to invest in land acquisitions and in the modernization of labor relations in the supply of charcoal.

Another aspect that draws one’s attention when looking at these data is the fact that the effects of the economic crisis did not impact pig iron exports in terms of value until the end of 2008. A small reduction in the volume exported (just over 67,000 tons) was more than made up for by the value the exports fetched – US\$ 498 million higher than in the previous year. ■



PROSPECTS FOR INDUSTRY IN PARÁ IN 2011

The expectations of the Pará government for 2011 are optimistic. In 2010, the state overcame the 2009 crisis, which had a major impact on the steel sector. There is already talk of large-scale investments for 2011, which will certainly turn up the pressure on the biome.

The latest bulletin on the current situation published by the Pará Economic, Social and Environmental Development Institute (Idesp) points toward investments in steel and mining. The highlight is the construction of a steel industrial park in Marabá.

“Between public works (federal and state PAC – Program for the Acceleration of Growth) and private investments, the forecast is that the total level of investments in Pará will reach US\$ 52.8 billion in the 2010-14 period, which is indicative of good job creation and income generation prospects for the state’s population,” the study concludes.

According to data from the National Confederation of Industry (CNI), there are good prospects for an improved balance of trade result. Even with some oscillations, the general trend for exports in 2009 displayed a considerable positive slant by virtue

of the average growth in exports and the slower rate of import growth. The increase in this gap between exports and imports resulted in a higher trade surplus in 2010, indicating the turnaround in the economy.

For 2011, the scenario is one of optimism. On the export side, the signs of recovery displayed by the world economy improve the prospects for greater demand for Pará’s products, especially those connected with mining and steel. For example, Brazil’s number 1 trading partner China is set to grow by more than 8% in 2011, according to World Bank estimates.

The growth forecast for the world economy, particularly China’s, will certainly be conducive to a gradual increase in Pará’s trade surplus, assuming that Chinese demand for the state’s products runs in line with the country’s overall growth trajectory and that Pará’s appetite for imports remains moderate to low as in recent years.

The problem, obviously, is environmental sustainability. Pará grows inasmuch as its biome is devastated by production chains that fail to take into account the environmental legislation and the long-term economic cost of predatory activities. ■





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