THE STEEL OF DESTRUCTION

ILLEGAL CHARCOAL AND TAINTED IRON:
AMAZON DESTRUCTION AT THE ROOT
OF THE GLOBAL STEEL INDUSTRY
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SOCIAL OBSERVATORY MAGAZINE

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Deforestation and Slave Labor in the Brazilian Amazon

Agreements not kept, corruption and organized crime make iron ore production in Brazil a predatory activity that does not consider the cost of the natural resources that are destroyed in the Amazon to benefit businesses and politicians. U.S.-based companies are the main purchasers of pig iron that depends on charcoal produced from environmental devastation and slave labor.

by Marques Casara and Sérgio Vignes

Reporting for this article began at the heart of the Amazon, in the municipality of Nova Ipixuna (PA) in March 2011. While we were writing the text, on May 24, this unknown city exploded on the nightly news in Brazil and throughout the world with the assassination of José Cláudio Ribeiro da Silva and his wife, Maria do Espírito Santo, who were leaders of a community of settlers whose livelihood depends on the extraction of forest resources.

Since 2008, the couple had been denouncing the illegal deforestation and use of part of the wood to produce charcoal, later sold to iron mills in Carajás, one of Brazil’s most important iron producing regions. At the companies, charcoal from Nova Ipixuna is mixed with iron ore sold by the company Vale S/A to produce pig iron, an essential raw material for steel production.

In the Amazon, pig iron production is predatory and an accessory to the exploitation of slave labor and environmental devastation. Since 2004, when the report Slaves of Steel was published, which presented proof of involvement of iron mills with environmental and labor crimes, various actions have been taken to confront the problems. The companies changed their practices and came to monitor the production chain.

The companies created the Instituto Carvão Cidadão [Citizen Charcoal Institute] (ICC), which monitors the production chain. This was an essential step towards confronting the illegality. Since 2004, the iron mills have reported their charcoal suppliers to the ICC so that the institute could monitor working conditions and compliance with the Letter of Commitment to End Slave Labor in Vegetable Charcoal Production.

The purpose of our trip to Nova Ipixuna was to verify if the companies were in fact complying with the agreements and undertaking sustainable productive practices. By following the smell of burning wood, we found a vast illegal charcoal production complex with 500 furnaces that produce exclusively for the iron mills. The charcoal from this complex reaches the mills after its origin is falsified in fraudulent processes that involve the participation of politicians, business
leaders and employees of the Environmental Secretariat of Pará State (SEMA-PA), in addition to municipal authorities.

On the road, we spoke with the truck driver Neílson dos Santos Ferreira who transported a load of illegal charcoal to Cosipar, based in Marabá (PA), in a yellow Mercedes truck.

We also visited the Boa Esperança charcoal producing company in the neighboring municipality of Jacundá. On the day of our visit, 66% of the charcoal in the company yard did not have a declared origin and came from the illegal complex in Nova Ipixuna. Boa Esperança is one of the main suppliers of the Sidepar company, whose social responsibility report indicates that it monitors, via ICC, all of the charcoal producers on its list of suppliers.

Since more than 90% of all the pig iron produced in the Amazon is exported, the global steel sector becomes responsible for financing the predatory practices and for the maintenance of the degrading labor conditions.

The leading global traders in steel such as Thyssenkrupp, National Material Trading, America Metals Trading and the Nucor Corporation purchase thousands of tons of pig iron produced, for example, by Sidepar and Cosipar, companies that use charcoal from environmental devastation and slave labor. Automotive manufacturers such as Ford, General Motors, Nissan and Toyota are supplied by steel produced with the charcoal from Nova Ipixuna.

We went to the field to identify the quantity of pig iron produced with the charcoal from slave labor and forest devastation and to see if the monitoring conducted by the companies was in fact working. We found a situation of organized illegality, with methods, discipline, procedures and protocols used to falsify illegal charcoal.

The review of exclusive documents shows that at the largest iron mills in the Carajás region, 60% of the pig iron is produced without any control over the charcoal used in the process.

This is why Nova Ipixuna stands out and is at the focus of conflict that led to murder. The data analysis shows that 67% of the charcoal used by Sidepar is illegal, the same percentage of illegality found at its charcoal supplier Boa Esperança.

To obtain the data, we used the following methodology:

1. We obtained the list of all the suppliers who negotiated with the iron mills in 2010.
2. We calculated the maximum monthly and annual production capacity of each supplier.
3. We compared the maximum production capacity of each supplier with the real total of pig iron sold by the companies during 2010. Using the currently accepted average rate of 2.6 m³ of charcoal per ton of pig iron we determined how much charcoal each pig iron producer needed.
4. We reached an estimate of the amount of non-monitored charcoal and the amount that exceeds the maximum production capacity of the registered suppliers.

It should be remembered that purchasing charcoal from non-declared suppliers violates the central clause of the Letter of Commitment created by the companies and renders ineffective much of the structure assembled to monitor the production chain used since 2004.

By purchasing charcoal without controlled origin and from slave labor and environmental devastation, the iron mills are not complying with the agreement they created.

In addition, judicial agreements signed by the iron mills based in the Amazon determine that beginning in 2012 the sector will only use certified wood in its production processes. If this is complied with, it would be an essential step toward confronting the environmental crimes and slave labor in the region. Since the iron mills sprung up in Carajás in the late 1980’s, predatory and illegal processes contaminate the iron production chain.

With more than 60% of the charcoal used being illegal, and just a few months before certification of the production chain begins, there is great expectation to know how the companies will comply with the agreement.

Finally, the report will show how the State has become a partner in the organized crime that supplies the steel production chain. It finances projects, builds infrastructure, conceals loans and acts politically so that the charcoal continues to supply the blast furnaces that make pig iron.

Steel production generates revenue, jobs, taxes and campaign funds. The value of nature and the price of life do not enter the calculation. If they did, Nova Ipixuna would continue to be a small city lost in the middle of the forest.
The Privatization of Nature

The very mechanisms created to monitor and control the iron production chain are used to manipulate data and supply steel companies with charcoal produced from deforestation and slave labor. Businessmen, politicians and government employees organize to issue forged documents.

In the Brazilian Amazon, iron production is not a sustainable activity. In recent years, the iron mills at Carajás have signed various judicial agreements in which they agree to alter their operations. They have been systematically fined and accused of slave labor and environmental crimes, and held responsible for the devastation of one of the planet’s most important biomes.

The Amazon forest plays an essential role in controlling the temperature, humidity and rainfall of a vast region. The consequences of its destruction have a continental impact, given that it is a source of much of the humidity that equilibrates the climate in Brazil’s Southeast and Midwestern Regions, where much of the nation’s food is produced.

By using the forest in a predatory manner, without considering the social and environmental consequences, the iron industry privatizes natural resources and finances slave labor and the degradation of nature preserves and indigenous lands. This is bad business from the perspective of sustainability. On paper, however, it is a highly profitable activity, mainly because the value of nature is not considered. For the iron mills in the Amazon, two plus two equals five.

It is important to note that in recent years, there have been consistent advances in the fight against slave labor, at least in the legal control of the process, among charcoal producers monitored to control the production chain.

The new information presented here is that 60% of the charcoal used by some iron producers is illegal. There is no control over the origin of this charcoal, which reaches the companies without any monitoring of either environmental or labor conditions. In addition, it is a product that is closely linked to corruption and to criminal networks specialized in disguising the product and giving it an appearance of legality.

The bill does not add up. And when it does, it reveals that the very tools used to control the productive chain are deliberately manipulated to falsify the illegal charcoal. It’s like tightening a screw with the handle of a screwdriver: it’s the right tool, used incorrectly. And the companies know this.

Cheap and Illegal

Charcoal is an essential element in the steel production chain. In the Amazon, more than 90% of the charcoal produced goes to the companies located in the iron producing region of Carajás. The vegetable charcoal is used for two purposes in the iron mills. The first is as fuel to operate the blast furnaces. The second is as a chemical
agent to remove oxygen during the process, when the charcoal is mixed with the iron ore. In
the blast furnace, charcoal and iron ore result in pig iron that is later joined to other ores to
make steel.

The municipalities of Marabá (PA) and Açailândia (MA) in the Carajás region are home to the
highest concentration of iron mills that make pig iron from the charcoal from planted forests,
or removed legally and illegally from the forest or made from other sources such as the babassu
palm nut.

Charcoal is produced in thousands of rustic furnaces spread along the edge of the forest, most
of them at the periphery of cities located close to the iron mills. Production is sub-contracted,
but under the complete responsibility of the iron producers, who control price and demand.

The iron mills prefer to burn native lumber to make charcoal for a simple reason: it is cheaper
than planting eucalyptus and hoping that it will grow. Illegal charcoal is cheaper.

According to research coordinated by physicist José Goldemberg, from the Energy and Elec-
trotechnical Institute at the University of São Paulo, it is nearly 10 times cheaper to use charcoal
from deforestation to produce iron ore: “The price of vegetable charcoal from native wood
produced illegally varies between 10 and 12% of the price of vegetable charcoal produced from
planted forests. The use of vegetable coal is thus economically competitive, mainly considering
the recent price increases for coke and vegetable charcoal, triggered by the increased global
demand for iron” (table 1).

MANIPULATED DATA

Since the cost of destroying natural resources is not included in the bill, the iron mills get
cheap charcoal to increase their competitiveness in the global steel market. Brazil is thus able to
produce the world’s best pig iron at low cost. By exchanging coke (mineral coal) for vegetable
charcoal in the reduction of the iron ore, they are able to achieve a much higher quality ore,
without sulfur, and that can be used in so-called special steels, which have higher added value
and serve the automotive, aerospace, electronics and auto parts industries.

There are five ways to produce charcoal for iron production:

1. From wood from the iron producing companies own forests, which are planted
for this purpose.
2. From legal native wood, removed from authorized areas with an approved
management plan.
3. From the “coco” or kernel, or the husk of babassu palm nuts.
4. From sawdust and other residues.
5. From illegal wood, removed from protected forests and indigenous reservations,
often with the use of slave labor.

Until today, the participation of each one of these modalities was a mystery. The companies
played with the numbers and manipulated data in an attempt to raise a smoke screen over the
origin of the charcoal and impede monitoring and control by the environmental agencies. For
this reason, the percentage of illegal charcoal used in the Carajás iron mills was never known
with precision. There were only estimates, guesses and information that was difficult to confirm.

This is because the numbers presented by the pig iron producers do not reveal the contraband
charcoal that has false documents and was produced with charcoal from illegally destroyed
forests and slave labor. Today, with new data, it is possible to have an idea of the scope of the
problem, which is not small.
To confront the issue, the companies have advanced mainly in the monitoring of slave labor. Since the Amazon is the region that concentrates most of the cases of slave labor in Brazil, it is risky for the industry to have charcoal suppliers who use slave labor, because in recent years there has been considerable scrutiny of the practice.

The companies have developed rigid controls, such as direct inspections at the charcoal furnaces registered as suppliers. The big problem is the clandestine furnaces that are not registered and not monitored by the iron companies. The clandestine furnaces are unhealthy places that operate in violation of environmental and labor laws. They have been repeatedly found to use slave labor and the workers do not have protective equipment or suitable lodging.

The charcoal produced by these charcoal producers also reaches the iron mills, but on convoluted journeys. They use fraudulent schemes that allow more than half of the charcoal purchased by some iron mills to come from illegal sources. The fraud involves front companies that are created to falsify the illegal charcoal. These companies often operate in conjunction with government agencies, such as the Environmental Secretariat of Pará State (SEMA), which has been systematically involved in frauds linked to environmental crime.

The Pará State government, in fact, has become a partner in the scheme to disguise the charcoal, through extensive schemes to issue fraudulent documents and manipulate the inspection operations to assist the production of pig iron. The iron mills in Marabá generate revenues, taxes, jobs and campaign funds. They do not consider the socio-environmental damages. "It is practically impossible for a secretary who wants to work responsibly to remain more than two or three years in his job", said the former secretary of the environment in the state Walimir Ortega, who is now director of the Programa Cerrado Pantanal, of the Conservation International environmental group.

Investigations by the Federal Police found public employees – who should be protecting the environmental heritage – participating in various schemes used to falsify charcoal and commit other crimes. Indictments issued by the Federal Police reveal, for example, public employees who earn approximately R$2 thousand reals a month and have cars worth approximately R$ 120 thousand. The investigations also show ghost companies that receive environmental licenses that are used as a facade for predatory operations. There are not one or two cases. There are dozens.

Ortega, who worked in the administration of Governor Ana Júlia Carepa, is one of the few who speak openly about the problem. In general, a cloak of silence covers actions by the state environmental agency. During his administration, Ortega began a cleansing process, with the help of the federal environmental agency IBAMA and the Federal Police. Seventy state employees suspected of corruption were removed and the deforestation was reduced in the state. But he did not last long in the post and was removed for conflicting with the interests of superiors in state government: In Pará, it is suspected that 4 million m³ of illegal lumber generates between R$ 2,5 billion and R$ 3 billion, per year. Whoever handles this much money has a high power to corrupt."
Corruption in the Pará State environmental agency is common practice and known by the attorney general, Federal Police, the federal environmental agency (IBAMA) and the Ministry of the Environment. In recent years, SEMA employees have been arrested, secretaries were removed and jobs were shifted - but the fraud remains.

Various Federal Police investigations reveal crimes of illegal favors, fraudulent release of forest management plans, active and passive corruption, bribery schemes and production of fraudulent documents by high government offices. It is a well-organized and on-going racket. It involves companies, politicians and public employees.

The problems transcend governments and political parties. It is a State activity, practiced since the implementation of the iron mills in Marabá in the late 1980s.

In recent decades, the governors in the state have been Almir Gabriel, Simão Jatene, Ana Júlia Carepeba and once again Simão Jatene, who is now in command. During this period, the environmental problems have only worsened, while the confrontation of slave labor in the iron industry has had good results in recent years, at least in the legalized charcoal furnaces registered by some companies.

Governor Jatene was insistently sought to speak about his strategy to confront corruption in the state environmental agency that he oversees. Questions were sent after the presentation of the article A Floresta que Virou Cinza (The Forest that turned to Ashes) – which was also published by the Observatório Social, and during the course of the current investigation.

The Forest that Turned to Ashes shows how one of the many schemes of fraudulent legalization of charcoal from deforestation and slave labor operates. The actions involve politicians, businesses and government employees in Pará who organize to falsify documents and illegally sell hundreds of loads of charcoal destined for the steel mills of Carajás.

At first, Jatene agreed to answer four questions sent by e-mail. After repeatedly postponing the response date, his press spokesperson said that the questions would not be answered.

Here are the questions that the governor did not answer:

1. How do you evaluate the involvement of the Environmental Secretary in criminal schemes to sell illegal charcoal to the iron mills of Carajás?
2. What measures has the Pará government adopted to avoid that the iron producers of Carajás continue to use charcoal from illegally cut wood and from slave labor?
3. What measures will the government of Pará take to cleanse the state Environmental Secretariat, which has been systematically related to environmental fraud, even in reports by IBAMA and Federal Police investigations.
4. What strategies will you adopt, during your administration, to confront deforestation and slave labor in Pará?

In Pará, if corruption, environmental crime and slave labor were staunched overnight, the iron industry would collapse. This is because the quantity of illegal charcoal used by the companies goes beyond even the most pessimistic estimates, as will be seen below.
The scope of illegality

Charcoal furnaces presented as examples of social and environmental responsibility are used to falsify illegal charcoal. The iron mills do not comply with the agreement they created in 2004, which called for the sustainable production of pig iron, without slave labor and environmental destruction.

The use of deforestation and slave labor by the Amazon iron mills is historic and recurring. The challenge has been to know how much of the product used by the companies is in fact illegal. By means of new data obtained exclusively by the Observatório Social [The Social Observatory Institute], it is possible to identify the challenges that the sector faces.

Until this report, the most reliable study to determine how much charcoal is illegal was conducted in 2005 by the Forest Directory of Ibama called the Diagnosis of the Iron Industry in Pará and Maranhão States.

At the time, the agency requested that the companies present the following data: their total pig-iron production, the total amount of charcoal consumed and the sources of the forest products used at the charcoal furnaces, or that is, where did the wood and other products come from that supply the charcoal furnaces.

Twelve steel companies in Carajás were monitored. The purpose of the study was to prepare a method to estimate how much illegal charcoal entered the iron mills. This is the first and only in-depth study of the origin of charcoal since the iron industry was established in the region.

RECURRING PROBLEM

The main problem with the study conducted by Ibama is that the sources of vegetable charcoal declared by the companies were not inspected. Thus, the agency based its findings only on information supplied by the iron companies, without checking the locations indicated as sources of raw material. For this reason, it was found that the companies exaggerate some sources, such as the use of babassu, which do not require a permit for forest shipment, and therefore are not controlled by inspectors.

Even with its only sources of information being those supplied by the iron producers, the diagnosis reveals serious discrepancies between the total amount of charcoal declared, and the quantity of pig iron actually produced, given that there is a limit to how much they can exaggerate the use of babassu, sawmill waste and wood from the forest itself. It’s like lying on a tax declaration, people cheat a little here and there within limits that won’t call much attention.
Ibama’s study used the reference accepted at the time, which recognized that for each ton of pig iron produced, 611 kilos of charcoal were needed or 2,14 m³. Therefore, by comparing the total amount of charcoal declared with the real production of pig iron, one finds the amount of non-declared charcoal: the excess pig iron indicates the use of charcoal whose origin was not informed by the iron mills and shows, according to Ibama, the use of charcoal linked to environmental and labor crimes.

We will analyze the results at four of the largest pig iron producers in Carajás and that also appear in the current analysis conducted by the Observatório Social:

**COSIPAR:** This company did not present yearly data, only a global amount for five years, which resulted in a calculation that 80% of the charcoal did not have a declared origin. The diagnosis also points out that the company had declared that 51% of its sources are accounted for by babassu and sawmill waste. “It is important that more rigorous accompaniment is conducted to verify the fidelity and composition of these sources,” according to the authors. That is, not even the 20% declared were free of suspicion. In recent years, the fears have been proven: iron mills use babassu and sawmill waste to hide the illegal charcoal.

**SIDEPAR:** Because it began operating in 2005, no comparison was made with earlier data. Nevertheless, the company was visited in May of that year, a few months after it began operations. The authors of the diagnosis wrote: “They had great difficulty in presenting authorizations for the transport of forest products that entered on the days chosen for analysis.” The report also said that the company did not have records for the entrance of charcoal that was in the yard at that time: 1,300 m³, or that is, nearly 30 truckloads. The charcoal was seized and the company fined R$ 139 thousand. The company began its operations working just like the others: with a high degree of illegality and poor organization.

**GUSA NORDESTE:** The visit of the Ibama inspectors resulted in an immediate fine of R$ 44 thousand. The company was not able to indicate the source of the charcoal that was in the yard on that day. The diagnosis revealed that, based on the data supplied by the company, 78% of the production of the past five years did not have the source of its charcoal identified.

**MARGUSA:** The diagnosis found that only 9% of the charcoal did not have a declared origin. Of the declared charcoal, however, 51% came exclusively from babassu, a raw material which does not need documentation to circulate and which, as was discovered later, is used to camouflage the illegal charcoal. The low rate of charcoal without an identified origin gave Margusa, at that time, the status of a nearly 100% sustainable company. That was in 2005, the date of the study. Three years later, the truth appeared: the company was fined R$44 million, and accused of providing false information about forest restoration and its Annual Supply Plan. It was also accused of presenting fraudulent control documents and of not respecting its operating license.

Many things have changed since then and the most important has been the fight against slave labor. One year before the Ibama diagnosis, in June 2004, the Instituto Observatório Social had published the report Slaves of Steel, about slave labor in the sector. At the time, the iron mills denied the problem and refused to review their production processes. The impact of the report, mainly on the foreign purchases of iron ore, led the companies to act strongly against the problem.

**BUSINESS PACT**

Through the initiative of the Instituto Observatório Social and the Instituto Ethos de Empresas e Responsabilidade Social [Ethos Institue of Companies and Social Responsibility], the companies organized to sign a Letter of Commitment to End Slave Labor in Vegetable Charcoal Production. The document was signed by large iron mills and by labor unions and business associations such as CUT and FIESP. Later, the letter signed by the iron companies, the National Pact for the Eradication of Slave Labor in Brazil, included hundreds of companies, from all social sectors, to confront the problem. Slave labor began to be discussed by Brazilian society.

To address the issue, the iron mills organized the Instituto Carvão Cidadão [Citizen Charcoal Institute] (ICC), “to comply with the terms of the Letter of Commitment to end slave labor in vegetable charcoal production, and to dignify, formalize and modernize labor in the pig iron production chain.”

The Institute was based in Imperatriz (MA) and its activities include direct inspection of property at charcoal furnaces listed by the iron mills as suppliers. “We conducted auditing, we prepared reports, and we organized meetings with suppliers and workers in the sector,” explained ICC director Ornedson Canême. “We also provided this information to the government and to interested institutions,” he added.

The monitoring of the companies that supply charcoal requires rigid control over labor activity in the yards at the charcoal furnaces, which has been done with great competence by ICC. The action of the Institute contributed enormously to improving working conditions at these places.

Today, at the registered suppliers of charcoal, most workers operate within the labor laws. They use protective equipment, they have signed working papers, suitable lodgings and drink potable water, because even this was denied them. “The ICC makes an invaluable contribution to improving labor relations and confronting slave labor,” recalls Social Observatory
President Aparecido Donizeti Silva. “The audits are conducted with frequency and the reports have a good level of detail,” he added.

The problem is that, today, the charcoal producers registered by the iron mills and audited by ICC are being used as a base to disguise the existence of illegal charcoal at rates that reach more than 60% of the total consumed by some iron producers. It is as if the companies are using their own social responsibility institute to cover-up illegal charcoal.

The current data, obtained by the Observatório Social, complements the diagnosis Ibama conducted in 2005. That sources for that document were data provided by the companies and a comparison was made between declared charcoal production and total pig iron production. The problem, as mentioned above, was that the companies doctored the results, overstating the use of sawmill residues and babassu, which came to represent more than 50% of the total used as raw material to make charcoal.

This study went even farther, by studying production furnace to furnace. The following methodology was used:

1. We obtained the list of all the charcoal suppliers who negotiated with the steel companies in 2010. This is public information provided by ICC.
2. We calculated the maximum monthly and annual production capacity of each supplier.
3. We compared the maximum production capacity of each charcoal supplier with the real total of pig iron sold by the iron companies during 2010. We used the currently accepted average rate of 2.6 m³ of charcoal per ton of pig iron.
4. We reached the level of non-monitored charcoal whose source was not audited, the amount that goes beyond the maximum production capacity of the suppliers.

See the data from the iron mills with the most problems and those with the most discrepant data:
We see for example the case of Sidepar. In 2010, the company purchased charcoal from 2,224 charcoal furnaces. Each furnace was responsible for a maximum annual production of 69.23 tons of pig iron, using as a reference the average conversion rate of 2.6 m³ of charcoal for each ton of pig iron. Thus, the registered charcoal furnaces provide the capacity to produce 153,967 tons of pig iron.

The difference, as shown by the table, is 310,021 tons. This is the amount of pig iron for which the origin of charcoal cannot be identified by the company.

At Sidepar, 66% of the charcoal did not come from the official suppliers.

The same problem, in different degrees, was found at the other iron mills presented in the table. The exception is Cosipar. Since 2009, the company has not complied with the Letter of Commitment to End Slave Labor in Vegetable Charcoal Production. Cosipar failed to report its suppliers. It was expelled from the ICC and from the National Pact for the Eradication of Slave Labor in Brazil. The company does not monitor its suppliers concerning labor legislation and slave labor. Thus, 100% of the charcoal that enters the company does not undergo any type of control involving labor and environmental practices.

In addition to the numbers presented in the table, it is necessary to consider the following:

- A charcoal supplier is not able to maintain 100% productivity throughout the year, especially during the Amazon’s rainy season, when the monthly production of a charcoal furnace can drop by 50% for at least three months.
- In the other nine months, to compensate for the rainy months, production needs to exceed 100% capacity during the normally worked shifts. Not even the most advanced companies, which work with the latest technology, are able to maintain 100% productivity for a few consecutive months. The situation is more difficult for rustic furnaces located deep in the Amazon.
- Many charcoal suppliers sell to more than one iron mill, thus distributing among the iron mills their maximum monthly production capacity.

**RULES**

The registration of all the suppliers is a mandatory element in the ICC by-laws. This rule was written by the iron companies that created the ICC. According to the by-laws, the iron producing companies’ responsibilities include, “informing the institute, periodically or whenever requested, an account on their own production and of the total of its charcoal suppliers, with the indication of monthly production and the number of workers used by the supplier, to verify the compatibility of the entire production chain in relation to the pig iron produced.”

If they violate this rule, they threaten the entire monitoring structure of the iron producing sector in the Carajás region. Given that at a number of iron mills 60% of the charcoal is illegal, the commitment to not use charcoal from deforestation and slave labor appears to be dubious.

The audits, presented by the companies as the main indication that they are complying with the agreement to not use charcoal from deforestation and slave labor, have gigantic
gaps. The sustainability and social responsibility reports presented by the companies in recent years thus lose their value, and the value they provide their clients, giant steel companies in the United States, Europe and Asia.

1. The charcoal furnaces registered as suppliers "launder" illegal charcoal. In addition to their own production, which is monitored, they purchase charcoal from illegal producers, without bills of sale, and off-the-books. In this way they are able to exceed the maximum productivity rate for the furnace, given that they do not make all of the charcoal they sell. In this way, the charcoal producers registered by the iron mills invariably become tools for the maintenance of degrading labor structures and environmental devastation.

2. The iron mills purchase charcoal from furnaces that are not officially registered as suppliers. They are furnaces that have precarious operations, with workers in degrading conditions and which use wood removed illegally from preserved areas and indigenous lands. Before reaching the iron mills, the charcoal is given the appearance of legality in fraudulent processes that often involve the corruption of the public employees who should inspect the process. The mechanisms used to disguise the charcoal produced from deforestation and with slave labor are presented below.

3. The iron mills purchase charcoal from unknown and irregular suppliers, who disguise the loads of charcoal near the mills and deliver them to the iron mill that offers the highest price. Service stations on the highways approaching Marabá have exclusive and reserved areas out back for deals with illegal charcoal.

We witnessed the processes of falsifying the charcoal on the highways and we spoke with the truck drivers. We visited charcoal producers registered with the iron mills and which, on the day we visited, had enormous quantities of charcoal proven to be illegal in their yards. We obtained documents that indicated, step by step, how the charcoal was disguised.

We accompanied the triangulation process used by the charcoal producers that even involve management plans linked to family farming. We found illegal charcoal that is sold and resold up to five times before it reaches the iron mills. This triangulation process is currently the most commonly used mechanism, mainly to disguise slave labor, because it is much more difficult to determine the origin of the charcoal. These cases will be explained on the pages below.
The tractors of devastation

We visited charcoal furnaces and companies and unions related to the iron production chain. We spoke with workers, truck drivers, federal agents and community leaders involved with or affected by the sector. We accompanied inspections by the federal environmental agency, Ibama, conducted at illegal charcoal furnaces and also at furnaces the iron mills register as their suppliers.

State highway PA-150 is one of the main routes along which the charcoal produced from deforestation and by slave labor circulates. It links the municipalities of Goianésia and Redenção, passing through Marabá and Nova Ipixuna. That is the city where on May 24 forest extraction worker leaders José Cláudio Ribeiro da Silva and Maria do Espírito Santo were assassinated. For years, they had been denouncing illegal lumbering to produce charcoal for the iron production chain. The region is within the famous arc of deforestation, the last frontier between the native forest and the monstrous tractors that drag the devastating chains that uproot trees.

Nova Ipixuna is prime territory for lumberers and charcoal producers because the forest has large preserved areas that they systematically invade. The problem has been known about for a long time, but it began to attract more attention in 2008, when José Cláudio made the first denunciations about the criminal removal of wood.

In February 2011, the special edition of the magazine published by the Observatório Social, A Floresta que Virou Cinza, [The Forest that became Ashes] showed that this region was the source of some of the charcoal hidden by the criminal organization composed of politicians, businesswomen, and the so-called “rotten portion” of the Environmental Secretariat of Pará State (SEMA-PA). This racket falsified one million cubic meters of charcoal, nearly 16,000 loaded trucks. The scheme only functioned because of the direct participation of environmental agency employees who forged documents to disguise the charcoal and give it an appearance of legality.

The Crime Route

Charcoal furnaces located along highway PA-150 are at the core of the predatory process that supplies the charcoal from deforestation and slave labor to the iron production chain. The product first goes to the iron mills in the Carajás region, and then to the global companies that make steel and sell it to automobile manufacturers and companies in various industries such as electronics and aerospace. While
recognizing the important advances in recent years, charcoal made with slave labor and from environmental destruction continues to feed the treadmill of predatory and socially irresponsible industrial production.

In Pará, all of the large charcoal furnaces involved falsify the lumber and the charcoal they use from this practice with a single objective: to feed the blast furnaces in Carajás.

The schemes are always the same and can be traced. In sum, this is how they work:

1. With the help of the state environmental secretariat, the racket obtains forged authorizations for cutting lumber and clearing an area. The area authorized often does not even have lumber. The papers, however, declare that trees are standing and lumber remains that is authorized for removal.

2. The papers are traded on the black market for charcoal: they are used to justify lumber removed from protected forests and from indigenous lands. The illegal charcoal attains a document indicating where it came from, although in reality, it came from somewhere else.

Another way to disguise charcoal is to improperly insert lumber credits in the computerized control and inspection systems of the Pará State government. A lumber credit is the quantity of wood that a company can sell. The credit is registered in the system. The criminal scheme that operates behind closed doors within the Pará government controls the improper insertion of credits. With more credits, a lumberer can cut more trees than were initially authorized.

The improper insertion takes place, for example, when a company has authorization to ship one thousand cubic meters of lumber, but overnight this thousand cubic meters becomes 10 thousand cubic meters.

Since 60% of the production of pig iron is conducted with charcoal that is not monitored by the control mechanisms created by the iron companies, it can be said that the parallel market is more dynamic than the official market. The production of pig iron, despite the efforts announced by the companies, continues with the same degree of illegality as in 2005, when the Ibama report indicated percentages very similar to those we found today.

It is important to consider, however, that the confrontation against slave labor has advanced considerably. From the perspective of labor, most of the charcoal furnaces listed by the companies as suppliers register their workers and have come to comply with the law. But they have also come to disguise coal from non-registered and non-monitored companies.

Along PA-150, more than half of the charcoal from the charcoal furnaces that supply the iron mills is illegal. The suppliers are registered by the iron mills. But they are not able to produce all the pig iron that the industry needs. So they “launder” their own operations and finance charcoal from deforestation and slave labor. They receive charcoal or lumber from other locations and sell it, as if it was their own. And the iron producing companies go along with the scheme.

It would be very easy for the iron producers to realize this. They know, better than anyone, the productive potential of a furnace. If a furnace is selling more than 100% of its capacity, it is because it is being used to falsify charcoal.

Another way that the iron mills disguise the charcoal is by making purchases from anyone who has a load to sell. “The demand for charcoal is so intense that it is folkloric,” explains Roberto Scarpari, from the Ibama office in Marabá. One of the stories from the local folklore goes like this: if you are going to have a barbecue, don’t drive in front of an iron mill. The company will do anything to convince you to cancel the party and sell them the charcoal.

COLLUSION

For one week, we accompanied the routine of Ibama inspectors in the city of Marabá. Despite the popular folklore about the issue, the subject of charcoal is considered the most serious environmental crime in the region. “The business of illegal charcoal involves large sums of money and is controlled by powerful businessmen and high level politicians. There are many politicians being financed and viscerally connected to these schemes,” said Roberto Scarpari.

With a small office, a reduced staff and a giant region to monitor, Ibama’s work has become a frenetic daily battle to try to reduce the environmental impact.

During the days we accompanied Ibama’s inspection along PA-150, more than half of the charcoal trucks stopped by Ibama used forged documents to justify the cargo, according to the agents doing the checking. All of the trucks were headed
to the same address: the iron mill district of Marabá. Of the cargo identified as irregular, 90% was addressed to the companies Sidepar and Cosipar.

On highway PA-150, 60 kilometers from Marabá, Nova Ipixuna was a bit smoky in late March. The prime rainy period had ended and it was time to put the wood on the fire and the furnaces to work.

In the Amazon, the end of the rainy period marks the beginning of the most intense heat, that dense humid blast of air that drives you to the closest shade. The end of the rains also announced the time for making charcoal in the thousands of legal and illegal furnaces that dot the region that smells like burning wood.

Within about five or six kilometers from the city hall, close to the police precinct and offices of the state environmental secretariat, 500 furnaces vomit what only the authorities and iron mills do not want to see – the choking smoke that makes the eyes tear.

It is all illegal, but no one does anything. They say that more than a legal problem, it is a social problem - people need to work to be able to eat. The mayor, the environmental secretariat and the police chief all tell the same story: if these people had other things to do, they would. Since they do not, and they need to survive, they devastate the forest and make charcoal. They are pawns at the service of the monumental logistical structure that moves the iron producers at Carajás. No one is there by accident, not the charcoal furnaces, not the authorities.

In Jacundá, 53 kilometers from Nova Ipixuna, the Boa Esperança charcoal furnace is one of dozens used to falsify illegal charcoal. Measurements by Ibama inspectors show that 66% of the charcoal in the company's patio is illegal and has no documentation to prove its origin. After being disguised with forged documents, the charcoal moves on directly to the iron mills.

Where does the document to disguise the charcoal come from? One source is the forest management plans mounted to meet this need with the help of the environmental secretariat of Pará. Or even from the settlements of family farmers.

Far away, practically inaccessible during the rainy period, without government support and without technical assistance, the farm worker settlements suffer harassment from lumberers who pay in cash (but very little) for a lot of trees.

These gangs do not want the wood, just the paper that authorizes the cutting. They use the document to justify, for example, the 66% of the charcoal without proven origin in the factory yard at Boa Esperança.

Here is an example: in the region of Tucuruí, a large quantity of charcoal was falsified in 2010 using the family farmer settlement of Cururui – an area of land that is practically
inaccessible and where various farmers were assassinated by lumberers and illegal land dealers.

Colocar aqui o mapa com a rota do carvão.

According to the official documents that accompanied the product, the charcoal took the following route to reach the iron mills: it left Tucuruí and, heading away from the iron mills at Marabá, it went to Tailândia and later to Paragominas. From there, it passed through Abel Figueiredo and was finally delivered to the blast furnaces.

But that is just on paper. In fact, this charcoal never left the settlement. The documents and their wild fictitious journey were used to falsify the charcoal that is much closer, just 50 kilometers from the iron mills, in Nova Ipixuna and Jacundá. It was just one more load of illegal charcoal that became “legal” by passing through the falsification process of organized crime that supports charcoal production in Pará.

**COMPLETE DOMINATION**

Another method used to launder charcoal is to exaggerate the use of babassu palm nuts, a practice already detected by the Ibama report of 2005, and that was explained above.

In Maranhão State, women who crack palm nuts have seen better days. With their stalwart ability to overcome obstacles placed by the landowners known as “coronels” who make Maranhão a near feudal region, the women are facing their most difficult days. “We eat from the hands of the iron mills,” lamented the community leaders Eunice da Conceição Costa and Maria Faustina dos Santos, two of the most important activists for the cause of women and the palm nut breakers in the Amazon.

They say that they are being “used” by the mechanisms that place the babassu nuts in some steel mills, as the principal raw material for charcoal. “They want to buy everything, the entire coconut, which is terrible for us,” they explained. By selling the entire coconut, the breakers are not able to use the interior, which is widely used in cooking, crafts and traditional medicine.

In addition, as Ibama found, the use of babassu is exaggerated by the iron mills. Since the palm nut does not need the same documents as wood, it is used to disguise the illegally produced charcoal.

Thus, the women who crack palm nuts, and who are famous for their traditions and power of resistance, are also caught in the gears of the tractors of devastation.
Responses from the Companies and the ICC

The iron producing region of Carajás accounts for about 38% of the pig iron made in Brazil, nearly three million tons. More than 90% is exported to make steel. It enters a complex production chain that involves thousands of products, from hair dryers to airplane turbines. Here is what the Brazilian iron producers have to say about the problem.

Over recent years, various impasses have marked the supply of iron ore for the pig iron sector in the Amazon. The giant Vale company, which is the sole iron supplier and owner of the railroad line used to ship the ore, was systematically pressured by social movements to not participate in the production chain that involved slave labor and devastation. It came to suspend supplies to some iron mills in 2007.

In July 2008, in a ceremony that included then environmental minister Carlos Minc, Vale announced that it would stop supplying ore to iron mills that use charcoal from deforestation and slave labor. “Everyone is responsible for protecting the environment,” said the company president at the time Roger Agnelli.

Vale to Investigate

We sought out the Ministry of the Environment. Even after insistent appeals to journalist Cristina Ávila, from the Ministry’s media relations office, the agency did not make a statement.

Vale said the following: “Vale does not have, and cannot have, police power, which is up to the government, for which reason its action is based on official information coming from government agencies that serve as inspectors. Nevertheless, although we do not have police power, the charges that we have heard from non-governmental agencies are carefully analyzed.”

“Until now, Vale has no knowledge, from information provided by public agencies, about supposed irregularities in the production chain of the companies mentioned.”

Monitoring the production chain is not a police activity, but an action of corporate social responsibility. The information that the iron mills in Carajás are devastating the Amazon to produce steel is not new.

The iron mills were also sought out, as was the Instituto Carvão Cidadão [The Citizen Charcoal Institute] (ICC). They asked for the details of what was found. The investigation was presented in São Paulo, on June 6, 2011 at a meeting with representatives of ICC and the companies affiliated to ICC. The entities that are on the committee for coordinating and monitoring the Slave Labor Pact also participated.

The companies and the ICC had access to the chart that showed the percentages of illegal charcoal used in pig iron production. The table is on page 19. Three days later, the same group returned to São Paulo and announced the following: “the table is wrong. It did not include nearly 8,000 furnaces.”
The table used by the report is based on a report from the ICC itself, from December 2010. The report contains a CD with a list, furnace by furnace, of the charcoal companies that supply the iron mills. On the cover, the report says: “these audits were conducted in the period from May 1, 2010 to December 17, 2010 and encompass all the producers in activity informed by the iron mills.”

ICC and the companies issued their own version of the table. They said that the audit used as a reference in this report did not include all of the charcoal furnaces and that a step initiated in November 2009 and concluded in March 2010 should be added.

After the meeting, grave problems were found in the version presented by the companies and the ICC. To include in 2010 the results of the audit begun in 2009 only transfers the problem from one year to another. What was missing in 2010 is found to be missing in 2009. The gap shifts a year.

But this is not the major contradiction. The version presented by the companies and ICC revealed a new problem that had not been identified: the brutal inconsistency of the registration data of the charcoal suppliers. For example:

**CASE 1:** a charcoal producer registered in the ICC as being in Anapu (PA), with 200 furnaces, uses an incorporation number - known as a CNPJ - of a charcoal producer based in Maranhão. The same charcoal producer appears once again in the lists of the ICC, now with its own CNPJ, but at another address, with another 73 furnaces.

**CASE 2:** the CNPJ of a company in Tocantins is used by different charcoal producers, with different names and addresses in Maranhão and Pará.

**CASE 3:** one charcoal producer appears nine times in different inspection phases, with different addresses. The addresses are from cities in Maranhão. The CNPJ is from a shipping company in Tocantins.

**CASE 4:** one charcoal producer appears ten times, in different phases of inspection, in different addresses, with a CNPJ that does not exist in the federal revenue service database.

**CASE 5:** charcoal producers in the 8th phase of inspection are in one city, and in the 9th phase of inspection appear in another city, with the same number of furnaces.

This information questions the auditing conducted by ICC. In a statement, the ICC reported that their table is correct and said that it is always careful to maintain the objectives achieved and search for new challenges.

“The Social Observatory made a mistake in the collection of information,” said Rodrigo Kaukal Valladares, director of Viena. Valladares said that it is impossible to know how much each charcoal producer produces. But this contradicts the very by-laws of the ICC, which in article 11 says that it is the responsibility of the iron mills to indicate the monthly production of each supplier, “to verify the compatibility of its entire production chain with relation to the pig iron produced.”

Margusa reported that it has nothing to do with the problem because it has charcoal in stock and its furnaces produce more than half of what is presented in the table.

The companies need to begin to do their part, as they have promised for more than twelve years. The predatory model benefits few and harms many.
Companies involved in the production chain of charcoal produced in the Amazon

COSIPAR: based in Pará, the company was created in 1986 with Brazilian government support through SUDAM and the then government owned Cia. Vale do Rio Doce. The company belongs to the Costa Monteiro group, as does Usipar which, in the beginning of 2011, had 75% of its capital sold to Mir Steel UK, of Wales, which is controlled by Russian investors. It is the leading Brazilian pig iron supplier to the National Material Trading Co., based in the United States.

VALE S/A: is the exclusive supplier of iron to the mills in Carajás. It has operations in 40 countries and is one of the world’s largest mining companies. The company reports that it is part of the lives of thousands of people throughout the world: “We are in your cell phone, your car, in each one of your appliances, and even in the coins.” The pig iron from Carajás, produced with the charcoal from deforestation and slave labor, proliferates in the same way.

SIDEPAR: based in Pará, the company is controlled by the Valadares Contigo group of Minas Gerais State. It does not have a media relations department and its internet site has been “under construction” since 2007, According to a 2008 edition of the newsletter of the Union of Pig Iron Companies of Pará State, Sidepar will achieve self-sufficiency in wood in the year 2014 from planted forests. “Work and grow, generate employment, jobs and income, taxes, foreign exchange, and social and environmental investments. These are the principles that guide Sidepar in its search for sustainable development,” company director Rogério Gontijo told the newsletter.

NATIONAL MATERIAL TRADING CO. (NMT): is the largest U.S. importer of Brazilian pig iron. It has 15 distributors in North America and supplies large steel and automotive companies such as Ford, General Motors and Kohler. In Brazil, its main supplier is Cosipar. In its corporate code of conduct, NMT said that it does not have relations with suppliers involved with slave labor. Nevertheless, Cosipar was expelled from the National Pact for the Eradication of Slave Labor in Brazil.

GUSA NORDESTE: based in Maranhão, the company is controlled by the Grupo Ferroeste, which produces pig iron, ethanol and vegetable charcoal. Its site says that sustainability is the company strong point and that it will begin to produce “green steel” in 2011.

NUCOR CORPORATION: this is the second largest U.S. steel company and a large consumer of pig iron from the Amazon. It is involved in the manufacturing and sale of steel in various countries, from Canada to the United Emirates. In 2007-2008 alone it invested more than US$2 billion in the purchase of companies linked to steel production.

MARQUESA: based in Maranhão, the company was part of Gerdau until 2008. It is now controlled by the Calsete group, one of Brazil’s largest producers of pig iron and which also operates in Minas Gerais.

THYSSENKRUPP: has more than 170 thousand employees in 80 countries “to supply sustainable ideas and innovations.” It provides steel for a wide variety of applications, from the construction of elevators to airplanes. It purchases pig iron from deforestation to make steel, which it sells to companies such as Ford, Nissan, Toyota, Deere & Co. and DaimlerChrysler.

VIENA: based in Maranhão, it is Brazil’s largest pig iron producer when also considering its plant in Minas Gerais. It is in the same business group as Viena Fazenda Reunidas, which is involved in agríbusiness and Andrade Valladares Ltda, which works in civil construction.

WHIRLPOOL CORP: is one of the world’s largest manufacturers of electrical appliances. It has sales in North and South America, Europe, Africa and Asia. Company products include domestic washing machines, stoves and microwaves, and refrigerators, dryers, air purifiers and freezers. The company purchases raw material from NMT.
The State is an Accomplice and Financier

By providing financing and building infrastructure, the Brazilian State has direct responsibility in the production of pig iron produced with charcoal from illegal deforestation and slave labor.

In the Brazilian Amazon, iron production is not a sustainable activity. In recent years, the iron mills at Carajás have signed various judicial agreements in which they agree to alter their operations. They have been systematically fined and accused of slave labor and environmental crimes, and held responsible for the devastation of one of the planet’s most important biomes.

The most visible problem related to the State is its inability to confront the corruption embedded in the environmental inspection agencies in the pig iron producing regions. Since the establishment of the iron mills in the Carajás region, the illegal production of charcoal has lined the pockets of politicians, public employees and businessmen who act in different phases of the process of falsifying charcoal, as was shown in the initial chapters.

Federal inspection agencies, such as Ibama and the Federal Police, have limited structures and a brutal deficiency of personnel and logistical support. They do what they can. The state inspection agencies are so contaminated by corruption that it will be impossible to make significant improvements before this problem is solved.

See examples that contribute to expand the problem:

**BANCO DO BRASIL**: according to the federal attorney’s office (MPF), the federally controlled Banco do Brasil made at least 55 loans to rural landowners in Pará who used slave labor, conducted illegal lumbering or did not have necessary environmental, agricultural and land ownership documents. The bank has issued more than R$ 8 million in rural credits in an irregular manner from 2008 - 2009, according to the MPF.

**BANCO DA AMAZÔNIA**: in 2008 and 2009 this bank also issued 37 loans totaling R$ 18 million with the same problem. The National Institute for Settlements and Agrarian Reform is a defendant in cases involving both the Banco do Brasil and the Banco da Amazônia. The two banks said that they have sustainable development policies and deny the problem.

**BNDES**: according to a study by the Associação O Eco, [The Eco Association] investments from the National Development Bank (BNDES) in the Amazon do not support sustainability, they “harm not only Brazilians, but neighboring countries.” The study is based on a report of the federal accounting office (TCU), which affirms that BNDES policies to support sustainable practices are insufficient. In 2009, Greenpeace and the federal public ministry in Para reported that slaughterhouses financed by BNDES purchased cattle from farms in areas that were illegally lumbered and whose owners were on the list of those involved with slave labor.

From 2005 to 2010, BNDES invested R$ 12 billion in slaughterhouses that operate in the Amazon. Various specialists were heard by the study conducted by the Associação O Eco, including those who are part of the so-called BNDES Platform, which was created to monitor and lobby for the democratization of the bank. They affirm that the financial institution has a chronic problem of lack of transparency. The study also mentions problems in work financed by the bank in other countries of South America.

**LOCKS AT TUCURUÍ**: locks at the Tucuruí hydroelectric dam were inaugurated on November 30, 2010. The ceremony was attended by then President Luiz Inacio Lula da Silva, who traveled to the inauguration in the company of Cosipar President Luiz Carlos da Costa Monteiro and then Pará Governor Ana Julia Carepa. One of the purposes of the dam is to facilitate the export of pig iron produced by the iron mills at Carajás. At the time, the Cosipar president said that he anxiously awaited conclusion of the construction, which he said would allow 25% savings in shipping costs of pig iron to the port of Barcarena (PA), from where it is exported.