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BRAZIL HOW MUCH ARE HUMAN RIGHTS WORTH IN THE BRAZILIAN MINING AND STEEL INDUSTRY?

The human rights impacts of the steel and mining industry in Açailândia

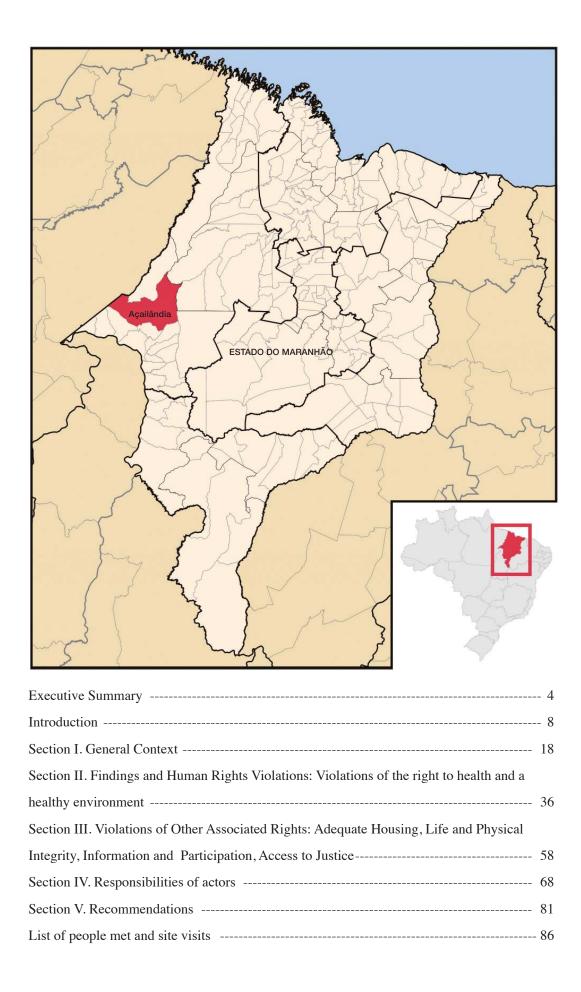
Article 1: All human beings are born free and equal

in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. Article 2: Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty. Article 3: Everyone has



Glossary

ABIN - Brazilian Intelligence Agency **BNDES - Brazilian Economic and Social Development Bank** CMN - National Monetary Council **CONAMA** - National Council on the Environment CREA - Regional Engineering, Architecture and Agronomy Council EFC - Ferro Carajás Railway EIA - Environmental Impact Assessment EITI - Extractive Industries Transparency Initiative FERGUMAR - Ferro Gusa do Maranhão LTDA FHS - Family Health Strategy FIDH -International Federation for Human Rights **GRI** - Global Reporting Initiative IBAMA - Brazilian Institute of the Environment and Renewable Natural Resources **ICMBIO** - Chico Mendes Institute for the Conservation of Biodiversity **ICMM** - International Council on Mining and Metals **ICMS** - Taxes on Goods and Services **IDH** - Human Development Index **INCRA -** National Institute of Colonization and Agrarian Reform **ISS** - Taxes on services MP/MA - Public Ministry of the state of Maranhão MST - Landless Workers Movement PAC - Program of Acceleration of Growth PCA - Environmental Control Plan PETROBRAS - Petróleo Brasileiro SA PGC - Grand Carajás Program **PNAD** - National Housing Census **PNUD** - United Nations Development Programme **POPs** - Persistent Organic Pollutants **RCA/PCA** - Environmental Control Plan SAS - Secretary of Health Care SEBRAE - Brazilian Support Service for Micro and Small Business **SEMA** - State Secretary for the Environment SIAB - Information System of Basic Care SIFEMA - Union of Pig Iron Industries of Maranhão SIMASA - Siderúrgica do Maranhão S.A SISNAMA - National Environmental System SUS - Health System Unit SWMP - Solid Waste Management Plan **UNCED** - United Nations Conference on Environment and Development UPR - Universal Periodic Review **UPR2** - Production Unit



Executive Summary

For several decades the Brazilian Amazon has been subjected to economic policies designed to stimulate migration and encourage the integration of the Amazon into the national market. In the seventies, due to the external debt crisis in Brazil, the government implemented a new strategy, seeking to transform the region into an export platform of primary and intermediate products, including mining products.

Economic policies of the federal government to attract foreign currency, and thereby facilitate payment of the external debt, to finance imports and support remittances of international profit, were accompanied by a process of liberalization of the legal framework by which businesses operate. The PAC (Program of Acceleration of Growth), a development project implemented in Brazil since 2007, consists of a broad set of infrastructure investment and incentive measures, and private investment facilities.¹ The PAC is based on a model that favours large corporations and the export of goods, such as soy, meat, and minerals, among others.

In 2010, the mining sector earned \$157 billion in profits and generated \$51 million in foreign currency, which corresponded to 25% of total Brazilian exports that year.² Legislative proposals are currently under discussion in Brazil, which would further relax current environment laws and regulations and include a reduction of the legal protection for rural lands. The proposal also includes a mining regulatory framework characterised by low royalty rates, and fragile environmental norms.

The principal player benefiting from the politicaleconomic dynamic in the mining-metals sector in the Amazon region has been Companhia Vale do Rio Doce (CVRD), which operated as a state company for 55 years. CVRD played an essential role in coordinating the development of the Grand Carajás Program (PGC), launched in 1982. The PGC implemented a logistics complex comprising an open-pit mine, an 890 km-long railway and a port, which initially exported 35 million tons of iron each year.

CVRD was privatised in 1997 and renamed Vale S.A. ("Vale") in 2007. Vale, ranked the world's largest company in 2011 according to Forbes' ranking and second world's largest according to Vale's website, operates in 38 countries. Vale's activities represent close to 82% of total iron ore exports in Brazil. Vale and its operations comprise 15% of total global iron extraction,³ expected to reach by 2015 close to 230 million tonnes exported annually from the Carajás region alone, with the implementation of new industrial projects, such as the opening of new mines, the doubling of the railway, and the expansion of the port.⁴

^{1.} Brasil, Ministry of Finance, Programa de Aceleração do Crescimento,

http://www.fazenda.gov.br/portugues/releases/2007/r220107-PAC-integra.pdf

^{2.} Ministry of Mining and Energy. National Mining Plan 2030, http://www.secom.gov.br/sobre-a-secom/nucleo-de-comunicacao-publica/ copy_of_em-questao-1/edicoes-anteriores/fevereiro-2011/boletim-1220-09.02/plano-de-mineracao-preve-investimentos-de-us-350-bilhoes/ impressao_view

^{3.} SINFERBASE -- National Union of the Iron and Basic Metal Extraction Industry.

^{4.} Vale: Carajás Project- additional 30 Mtpa, Projeto Carajás - additional 10 Mtpa, Projeto Carajás Serra Sul (mina S11D).

The growth of mining and metals activities in Brazil was accompanied by the mobilisation of various civil society groups around allegations of human rights violations committed in the context of these operations. This report focuses on the description and analysis of the impacts and harm caused by the mining and steel industry in the municipality of Açailândia in the state of Maranhão, in particular to the residents of the community of Piquiá de Baixo and of the rural settlement of Califórnia.

268 families live in the Califórnia settlement. In 1997, landless families occupied a farm in the region and received land titles from the National Institute of Colonization and Agrarian Reform (INCRA). Since then, they have been working as family farmers. However, 66 charcoal furnaces operated by Vale to fuel the iron-metals industries were built next to the settlement in 2005, along with large areas of eucalyptus plantations.

More than 300 families live in Piquiá de Baixo, a rural agricultural community. Since the arrival of the iron and steel industry in 1987, this community has been affected by five plants operating along the BR 222 highway, located near the homes of the community.

Raw mineral extracted by Vale in Carajás arrives by a railway administered by Vale before being transformed into pig iron in ovens operated by five coal powered steel mills located near Piquiá de Baixo. The pig iron is then transported by rail to the port for export.

Initially, the charcoal came from burning wood from the pre-Amazonian native forest. Today

the native forest is being gradually replaced by genetically modified eucalyptus, planted in large areas of monoculture. One of these charcoal-producing units for iron production is Ferro Gusa Carajás, a former Vale-owned enterprise established in Açailândia next to the Califórnia settlement.

Methodology

This report has been produced jointly by Justiça Global (FIDH member organisation) and Justiça nos Trilhos with the support of the International Federation for Human Rights (FIDH). The methodology used is based on an evaluation of the impacts caused by investment projects on human rights,⁵ using human rights as a reference point and based on a process centred on the participation of the affected communities.

Findings

The investigation highlighted serious health problems generated by the emission of pollutants on the part of the iron plants and coal furnaces. Air, water and soil pollution has caused respiratory problems, eye and skin problems, and various other afflictions. The proximity of waste products and pig iron production to the populated areas has also caused accidents, including serious and fatal burns. In addition, problems in accessing health care services were reported. Such elements indicate a violation of the right of every person to enjoy the highest possible level of physical and mental health.

The incessant pollution, the continuous deterioration of water resources, and the extremely preca-

^{5.} See Rights & Democracy, Investing in Human Rights: Volume 2 "Getting It Right: A Step by Step Guide to Assess the Impact of Foreign Investment on Human Rights." 2008. http://www.ichrdd.ca . While this present report does not discuss foreign investment, the methodology in this guide was a useful tool.

rious system of urban sanitation have adversely impacted the **living conditions** of the residents as well as their lands. Their livelihoods have also been adversely affected, and insecurity and poverty of the affected communities have increased, resulting in a violation of the right to enjoy an adequate standard of living.

The mobilisation of the communities seeking redress and reparation for the harm suffered has been impeded by **difficulties in accessing information, irregularities in the approval process for environmental impact assessments, and attacks on the honour, reputation, and freedom of expression of the social actors mobilised in favour of the affected communities.** Judicial claims presented by the communities have been left suspended or pending, and **the absence of reparation measures and adequate guarantees of non-repetition violate the right to due process and to an effective remedy.**

Recommendations

As part of its main recommendations, and after analysing the responsibility of all actors involved, public as well as private, Justiça Global, Justiça nos Trilhos and FIDH recommend that public administration and judicial institutions of the Union, of the state of Maranhão and of the Municipality of Açailândia:

- --Immediately open **impartial and independent investigations and corresponding legal action**, in order to investigate and sanction those responsible for violations committed, guaranteeing integral legal assistance for the victims;
- --Ensure the communities of Piquiá de Baixo and Califórnia settlement receive **reparation measures** according to national and international standards on the right to an effective remedy, including the collective and integral resettlement of all the families in Piquiá de Baixo;
- --Immediately assess the level of compliance to requirements for existing environmental licences and suspend the granting of new licences for iron mining operations and for the coal plants of Ferro Gusa Carajás in Açailândia until adequate monitoring procedures are in place in accordance with Brazilian law.
- --Reinforce the monitoring system for the environmental impacts of the mining and iron sector through greater coordination among distinct public agencies - such as those that regulate the source of the coal used, pollution emission and air quality - and through measures such as requiring the immediate installation of equipment to permanently monitor air quality and prevent contaminant emissions by the iron, coal and steel companies, their ore suppliers and transport companies;
- --Duly inform the population, in particular those people affected or potentially affected, **of the impacts** of iron mining companies in the territory of Açailândia, through **access to information** contained in the environmental

licences, and through annual public meetings organised by the Public Ministry of the state of Maranhão.

It is further recommended that Vale, steel companies and other businesses involved in the iron and steel supply chain, and companies in the pulp and paper sector should:

- --Strictly follow applicable Brazilian environmental, human rights, and labour laws and comply with international standards regarding their responsibility to respect all human rights within the framework of their activities;
- --Exercise due diligence, which implies taking all necessary measures to identify, prevent and redress potential negative impacts on human rights and the environment;
- --Adopt internal preventive measures to ensure their suppliers and clients respect human rights and the environment according to national and international standards, as well as to their internal policies;
- --Adopt measures to redress impacts caused by pollution in the communities of Piquiá de Baixo and the Califórnia settlement;
- --Act with transparency, including through the dissemination to shareholders of complete and accurate information on environmental, social and corporate governance matters, including problems encountered in the present report;
- --Abstain from any action, including legal activities, which have the objective of intimidating and denigrating persons who act in defence of the rights of the people affected by their business activities, in accordance with international standards of protection for human rights defenders.

It is recommended that the **Brazilian Economic** and Social Development Bank (BNDES), as investor and financier of Vale:

--Act with due diligence through a social and environmental audit of the impacts caused by the chain of operations coordinated by Vale throughout its entire area of influence covered by the Carajás Railway, with equal participation of organisations representing those affected by the company's projects in these territories. This initiative could serve as a basis for the elaboration of procedures for current and future BNDES financing of Vale and other companies involved in the mining and steel industry.

--Suspend any support contemplated for other Vale projects until recommendations in this report have been complied with, including legal proceedings related to investigated cases;

Finally, it is recommended that the **Brazilian** government:

-- Create an integrated study group involving state and federal legislative powers, social organisations, and companies to establish a social development fund for the entire impacted area. This area would comprise the municipalities along the Carajás corridor, which would recover the institutional funds from the time of the staterun Companhia Vale do Rio Doce (CVRD), to be co-managed by both by public powers and civil societies.

Introduction

For several decades the Brazilian Amazon was subjected to government economic and fiscal policies designed to stimulate migration and encourage the integration of the Amazon into the national market. In the seventies, due to the external debt crisis in Brazil, the government implemented a new strategy for the region, seeking to transform the region with a platform of primary and intermediate product exports, including mineral products.

In 2001, the federal government launched an economic policy, "Export or Die," which had the objective of prioritising the export of agricultural and industrial products, and primary materials to attract foreign currency, and thereby support payment of the external debt, finance imports, and support the transfer of international payments, among other economic goals. This policy was accompanied by a liberalisation of the legal framework under which businesses operate, including an easing of environment laws and regulations, a reduction in the legal protection for rural lands, and a mining regulatory framework was characterised by low royalty rates.¹

The growth of iron mining activities in Brazil was also accompanied by the mobilisation of various civil society groups against allegations of human rights violations committed during these operations.

This report was written jointly by Justiça Global (FIDH member organization) and Justiça nos Trilhos, with the support of FIDH. It focuses on the description and analysis of the impact and harm caused by the iron mining sector activities in the municipality of Açailândia in the state of Maranhão, Brazil; in particular the health impact on the residents of Piquiá de Baixo barrio and of the rural settlement of Califórnia.

Methodology

The methodology used is based on an evaluation of the human rights impacts caused by investment projects, using human rights as a reference point, and based on a process centred on the participation of the affected communities.

The methodology employed by the investigation team was principally based on a tool used for the evaluation of impacts on human rights developed by the Canadian organisation Rights & Democracy , which published "Getting It Right: A Step-by-Step Guide to Assess the Impact of Foreign Investment on Human Rights."² However, although this report does not discuss foreign investment, rather investment by a multinational Brazilian company and Brazilian steel companies operating in the iron mining sector in Brazil, the methodology proposed by the "Getting It Right" guide was a useful tool in drawing up the report. Focusing on a human rights-based approach, the current report uses the principles of equality and non-discrimination, participation, transparency (access to information), the principles of indivisibility and interdependence of human rights and the accountability of players in the mining industry.

Analysis of allegations of human rights violations was conducted by contrasting the information reported by communities with the human rights provisions in legal instruments ratified by Brazil and other relevant norms. It uses as reference points the international system of human rights,

^{1.} A legislative proposal on mining is currently under discussion in Brazil.

^{2.} See Rights & Democracy, Investing in Human Rights: Volume 2 "Getting It Right: A Step by Step Guide to Assess the Impact of Foreign Investment on Human Rights." 2008. http://www.ichrdd.ca .

the Inter-American human rights system, the Brazilian constitution, and applicable national legislation.

According to international law, States have an **obligation to respect, protect, and fulfil human rights**. The obligation to respect means that States must refrain from interfering with, or impeding the enjoyment of human rights. The obligation to protect requires States to protect individuals and groups against human rights abuses committed by third parties, including businesses. Finally, the obligation to fulfil refers to States' obligations to take positive measures to ensure the enjoyment of basic human rights. States therefore have an obligation to ensure that people have access to the necessary resources and recourses to effectively enjoy their rights, and further, have an obligation to provide reparation for those whose rights have been violated.³ These obligations apply to "all branches of government (executive, legislative, and judicial) and other public or government authorities at whatever level (national, regional, or local) that are in a position to assume the responsibility of the State Party."⁴

The report also took into account the responsibility of all actors involved – public as well as private – in the industrial projects under investigation. It considered **that companies have a responsibility to respect human rights.** When adopting the report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, the UN Human Rights Council confirmed that companies have a "basic responsibility" to respect human rights "independently of the duty of the State".⁵ To comply with this obligation, companies should take all necessary measures, including due diligence, to mitigate the risk to human rights and prevent negative impacts on human rights.⁶

Companies must respect national laws of the country where they operate, as well as international norms when they are more stringent than local regulations. This study discusses pertinent national legislation and international conventions for the protection of human rights.

Case Selection

As mentioned, this report is focused on the description and analysis of the impacts and harm caused by mining activities in the municipality of Açailândia, in the state of Maranhão, Brazil, in particular as experienced by the residents of Piquiá de Baixo and the rural settlement Califórnia.

These communities are not the only cases where allegations of human rights violations by the mining industry linked to the operations of Vale in Brazil have been voiced; however, the selection of these two communities was based upon the following:

- The analysis of these cases would provide pointers to alert and allow preventative action to be taken before human rights violations are committed in other communities in similar situations not only in Brazil, but also in other countries;
- The ability to do a retrospective assessment focused on the impacts caused by projects already implemented is rooted in a willingness to work with affected communities as the principal actors in the evaluation process. Human rights violations are experienced directly and daily by community residents, and their knowledge of actual impacts makes

^{3.} Human Rights Committee, General Observation No. 31, The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, U.N. Doc. HRI/GEN/1/Rev.7 at 225 (2004), §15-16. In relation to the American Convention on Human Rights, see the Inter-American Court of Human Rights case Velásquez Rodríguez vs. Honduras.

^{4.} Human Rights Committee, General Observation No. 31, The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, U.N. Doc. HRI/GEN/1/Rev.7 at 225 (2004), §4.

Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, Protect, Respect and Remedy: A Framework for Business and Human Rights, 7 April 2008 §54-55.A/HRC/8/5.
 Ibid, §55.

them a fundamental resource for an investigative process and impact assessment;

• The community and civil society actors in these two cases have been mobilised for several years. Several movements were born from this mobilisation, and other existing groups joined the communities of Piquiá de Baixo and Califórnia in their claims.

Piquiá de Baixo and Califórnia settlement



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Piquiá de Baixo and Califórnia: Map of the Parties Involved

Communities Affected

- Piquiá de Baixo. One of the first neighbourhoods of Açailândia, formed in the 70s was Piquiá de Baixo. At the end of the 80s, five steel plants operating 14 furnaces were constructed next to the community. Today, Piquiá de Baixo is home to 320 families, with an estimated population of around 1,200.⁷ (see item "Presentation of the communities of Piquiá de Baixo and Califórnia against Vale S.A. and the Grande Carajás Project", Section I.E.).
- Califórnia Settlement. In 1997, landless workers occupied the Califórnia farm located along highway BR-101, which was considered non productive by its Brazilian owners. Four years later, the workers managed to obtain a definitive settlement for their families in the area to proceed with agrarian reform. Today, the settlement has about 1,300 residents.⁸ UPR2, a Vale charcoal production unit operated by Ferro Gusa Carajás is located close to the settlement.

Social Movements and Groups

 Piquiá Residents Association: supports the Piquiá de Baixo residents' struggle against pollution, and for the right to enjoy dignity, housing and health. The Association assists the population by providing information, visiting and interviewing households, organising demonstrations and petitions, and representing the people at public meetings and working groups.

^{7.} According to a survey performed by the State Public Ministry in January 2011.

^{8.} According to figures from the municipal public health service.

- The Parish of Saint John the Baptist: coordinated by the religious congregation of the Comboni Missionaries since 1992. Its priorities include promoting environmental justice, using the populist approach and through the organisation of small community groups. With a total of 30 church communities, the Parish's territory covers the industrial area of Piquiá, rural settlements, such as Califórnia, and the urban region. (Comboni Missions Website: www.ecooos.org.br)
- Justiça nos Trilhos: launched by seven groups and institutions at the end of 2007 (among them the Comboni Missions), Justiça nos Trilhos is a coalition of social and church organisations, unions, and university groups who defend the rights of the communities who live in areas crossed by the Carajás Railway. In particular, it monitors issues related to the impact of the mining sector in the region of Açailândia, and manages support and partnerships at the state, national and international levels to promote the cause of affected communities. In April 2010 it organised the International Caravan of Those Affected by Vale, which passed through Açailândia. Website of the campaign: www.justicianostrilhos.org
- Açailândia Centre for the Defence of Life and Human Rights (CDVDH): CDVDH is a civil society focused on the defence of life and the promotion of human rights in the municipality of Açailândia and the state of Maranhão. It specifically focuses on the serious problem of slave labour, offers legal assistance and follow-up with victims, and seeks ways to prevent violations. The Centre has supported the people of Piquiá de Baixo since its founding in 1996. Website of the Centre: www.cdvdhacai.org.br
- Landless Workers Movement: its Açailândia section supports the resistance of the residents of Califórnia through training. It also networks with settlements in Açailândia and Maranhão, and with the movement at the national level. The movement is particularly involved in the struggle against the single-crop farming of eucalyptus. It is allied with Alert Network against the Green Desert.

Legal Institutions

- Attorney General of the Union: The Brazilian Attorney General's Office is a permanent institution essential to the judicial function of the State and is responsible for defending public order, the democratic regime, and the social and individual interests therein.⁹ In August 2008, it became involved in these cases after receiving complaints from both the Califórnia community and the Residents' Association of Piquiá de Baixo. It followed the Piquiá de Baixo case in particular, and public prosecutors were sent to Açailândia to support the local county. Some of the most prominent individuals sent to Açailândia were Dr. Fernando Barreto, coordinator of the Centre of Operational Support for the Environment, Urbanism and Cultural Heritage, Dr. Marco Aurélio Fonseca, Secretary for Institutional Affairs, and the Attorney General herself, Dr. Fátima Travassos. In addition, district prosecutors in Açailândia were part of the investigation.
- State Public Defender's Office: The Public Defender's Office is an institution essential for the judicial function of the State, and is responsible for providing legal assistance and defence for all those in need¹⁰. This institution made several visits to Açailândia and

^{9.} Art. 127 of the Federal Constitution of Brazil.

^{10.} Art. 134 of the Federal Constitution of Brazil

Piquiá de Baixo in 2008 and 2009, and helped train local people to set up a satellite office in the city, which was inaugurated in September 2010. The former Public Defender, Dr. Ana Flávia Sampaio, and the current Public Defender, Dr. Aldy Melo, are aware of the cases addressed in this report. Likewise, the roving head of the Public Defender's Office, Dr. Jean Carlos Nunes, and the office's resident representative, Dr. Alberto Tavares, have assisted in the negotiation process for the resettlement of the town of Piquiá de Baixo, and in the investigation of pollution, and health and environmental damages. Açailândia's public defenders have closely followed each step of the negotiation process in the Piquiá de Baixo case.

Public Administration

- Municipality of Açailândia: over the past years, the municipal secretary for the environment has been repeatedly challenged about the pollution in the Califórnia settlement and Piquiá de Baixo. In the case of Califórnia, the Municipality took no action nor did it accept any responsibility for these human rights violations. In the case of Piquiá de Baixo, the Municipality agreed to form a resettlement working group and assigned three representatives to the negotiations table: the Secretary of the Environment, the Prosecutor, and the official responsible for neighbourhood relations with Piquiá. In 2006, the working group presented a well-organised Director's Plan to the public, but this plan showed clear contradictions between what was planned and the reality faced by the communities (the most obvious contrast was the location of Piquiá de Baixo and its proximity to the metals plants). To date, the Municipality has taken no action to revise the operating authorisations given to the companies involved.
- State of Maranhão: its responsibilities include planning and executing public development policies, public welfare, revenue distribution, and environmental preservation. In particular, the State Environmental Secretary (SEMA) is in charge of issuing environmental licences, monitoring the social and environmental impacts of licensed enterprises, and applying appropriate penalties for infractions of environmental law.
- The Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA): is a federal agency that has administrative and financial autonomy under the Ministry of the Environment.¹¹ Its principal functions are to implement environmental policies, take national action over environmental licences, oversee environmental standards, authorise the use of natural resources, monitor, supervise and regulate the environment, and ensure compliance with national standards environmental norms. In the cases in question, can be called upon by the State Environment Secretary for support.

Companies

Vale: has a quasi-monopoly over the region along the Carajás corridor. It operates in Açailândia, and utilises (through a concession contract) the railway which crosses the city, the mine loading dock (located near the steel plant and serves as a train station for passengers in Piquiá de Baixo), and a coal processing plant (UPR2) near the Califórnia settlement. The UPR2 refinery was installed in 2005 on the Monte Libano farm in Açailândia in 2005. It operates 66 furnaces for charcoal production which are located

^{11.} Art. 2 of Law N ° 7735 of 22 February1989.

1,500 metres from the Califórnia settlement. The charcoal is transported to Pará via rail, and is used by Ferro Gusa Carajás (FGC), a pig iron plant located in Marabá. Vale has held majority shares in FGC since its foundation in 2003, and fully incorporated it in 2008.¹² With the incorporation of FGC, Vale unconditionally assumed all the assets, rights and obligations of FGC.

Vale has a direct relationship with the five steel plants in Açailândia, which receive ore via the EFC. After the ore is refined, it is carried by train to the port in Ponta de Madeira (São Luis) for export.

- Steel companies: in the 80s, five mining companies were built in the area of the preexisting town of Piquiá de Baixo. The companies, Viena Siderurgica SA; Gusa Nordeste SA; Ferro Gusa do Maranhão; Siderúrgica do Maranhão SA; Companhia Siderúrgica Vale do Pindaré, are all Vale customers.
- Viena Siderurgica SA (Viena) began operations in 1988 and is a major pig iron exporter in Brazil. It operates five furnaces in one plant with an installed capacity of 500,000 tons a year13. According to information on its official website, Viena's "industrial plant is modern and efficient having been built with the highest technology, including an injection system of pulverized charcoal along with thermoelectricity and sinterization".14 Viena employs 450 workers in its Açailândia factory.
- Gusa Nordeste S.A. belongs to Grupo Ferroeste (Ferroeste). In 1990, Ferroeste began to build a factory with the capacity to produce 125,000 tons of pig iron a year in Açailândia. In 1993, Gusa Nordeste began operations with the objective of exploiting the considerable potential of the Carajás mine and its logistics provisions, as well as the port in São Luis. In 1997, Gusa Nordeste built a second furnace, raising its production capacity by 255,000 tons a year. In 2005, a third furnace was built, which increased production capacity to 360,000 tons a year. A large part of this production is exported to North American companies.15 Grupo Ferroeste is now seeking to produce 'green steel,' a concept created for the classification of steel that is produced 100% from reforested charcoal. For this, Ferroeste made a massive investment in the forestry sector as well as in the installation of a Green Steel Plant in Açailândia.16
- Ferro Gusa do Maranhão LTDA (Fergumar), a pig iron production facility for steel and cast iron, was founded in April 1995 in the industrial district of Piquiá¹⁷, a town in Açailândia. Fergumar began operations on 11 January 1997, almost two years after it was created. Its two furnaces operate 24 hours a day and produce 216,000 tons of pig iron a year.¹⁸ One hundred percent of its production is exported to the United States, and countries in Asia and in Europe.¹⁹ Fergumar employs around 200 workers.²⁰

19. **Ibid**.

^{12.} Ferro Gusa Carajás, S.A. (FGC) was founded in 2003 as a joint venture between Vale do Rio Dolce (88%) and the Nucor Corporation (22%). In 2006, CVRD (today Vale, S.A.) assumed majority share control of the company. In 2008, FGC was incorporated by Vale, S.A. through the "Protocol and Justification of Incorporation" and was approved in the Extaordinary General Meeting FGC on 28 April 2008 and Vale's Ordinary General Meeting on 29 April 2008.

 $^{13.} Viena \ Siderurgica \ SA, institutional, \ http://www.vienairon.com.br/institucional/historico.aspx$

^{14.} Viena Siderurgica SA, infrastructure, http://www.vienairon.com.br/institucional/infra.aspx

^{15.} Grupo Ferroeste, "Gusa Nordeste," http://www.ferroeste.com.br/o-grupo/empresas/gusa-nordeste Groupo Ferroeste (Ferroeste) began with the acquisition of Ferroeste, in Divinópolis (MG) in 1978. Eight years later, in 1986, Ferroeste began to expand with the founding of CBF João Neiva, in the city of João Neiva in ES. Four years later, in 1990, Ferroeste began building Gusa Nordeste in Açailândia, which began operations in 1993." Grupo Ferroeste, Our History, http://www.ferroeste.com.br/o-grupo/nossa-historia 16. Grupo Ferroeste, "Our History," http://www.ferroeste.com.br/o-grupo/nossa-historia

^{17.} Established through a Zoning Plan of the city of Açailândia approved in 2006, Piquiá de Baixo became an Industrial District. 18. Fergumar, http://www.fergumar.com.br/

^{20.} **Ibid**.

- Companhia Siderúrgica Vale do Pindaré was built in Açailândia at the end of the 80s. It belongs to the Brazilian multinational Queiróz-Galvão S.A. and , in 2011 merged with Siderúrgica do Maranhão SA (SIMASA), and is now known as Siderúrgica Queiroz Galvão. For the first two years of operation, these companies burned charcoal from native forests; however, are now progressively switching to charcoal produced from large eucalyptus plantations located on the Imperatriz, Açailândia, Bom Jesus das Selvas, Arame and Grajaú regions. Siderúrgica Queiroz Galvão currently operates two furnaces and employs around 220 people.
- Union of Pig Iron Industries of Maranhão: All five steel companies are affiliated with the Union of Pig Iron Industries of Maranhão (SIFEMA), whose former president is the businessman and cattle rancher Cláudio Azevedo, who is also president of the Brazilian Support Service for Micro and Small Business (SEBRAE), director of the Federation of Industries of Maranhão State (FIEMA) and the Maranhão State Agriculture Secretary.²¹

Financial Organisations:

The Brazilian Development Bank (BNDES): is associated with the Ministry of Development, Industry and Foreign Trade. Its mandate is to support enterprises to foster sustainable and competitive development of the Brazilian economy, and for the expansion of Brazilian exports. BNDES works through low-cost, long-term financing of investment projects and the marketing of new infrastructure and equipment made in the country. It also contributes to the strengthening of the capital structure of private companies and the development of the market. It holds 5.5% of Vale shares.²² Between 2007 and 2010, BNDES provided financing to Vale for approximately R\$8 billion in investments projects such as the Estreito hydroelectric plant, container boats and bulk carriers, warehouses, shipyards and tug boats.²³

Since June 2007, a large coalition of organisations and social movements were formed to pressure BNDES to orient its decisions towards the effective promotion of social development.

Banco do Nordeste: The Banco do Nordeste do Brasil S.A. is the largest development bank in Latin America. It is a public financial institution whose mission is to act as a catalyst for sustainable development in the northeast, integrated with a dynamic national economy. In 2009, it financed Guse Nordeste S.A. with R\$193.7 million for the construction of a steel plant in the industrial district of Piquiá in Açailândia. This plant was designed to produce 500,000 tons a year of steel billets to be used both domestically and for export24. In 2004, it financed (with a line of credit from FNE Verde) mills in Maranhão and reforestation projects for the production of organic charcoal.

^{21.} During the first semester of 2011, M. Azevedo was replaced by Marcos Souza.

^{22.} Vale, www.vale.com

^{23.} Balthazar, Ricardo. Folha da São Paulo, 8 August 2010 edition; consulting worksheet on the site www.justicanostrilhos.org

^{24.} BNB News – Edition n. 34/2009. Available at: http://www.bnb.gov.br/Content/Aplicacao/Imprensa/noticias_online/conteudo/ noticia.asp?id=5268

Research Focus

The objective of this report is to evaluate and present the impacts on human rights caused by mining and steel industrial activities connected with Vale's operations in the region of Açailândia.

It focuses on an in-depth examination of the right to health and the right to live in a healthy environment, that is grounded in the national and international law. It also presents a brief description of other rights, such as the right to life, security and physical integrity, the right to adequate housing, the right to access of information, and the right to an effective remedy. The report also highlights acts of intimidation perpetrated against social leaders and human rights defenders. Whilst a subject of concern and relevance, labour rights and the working conditions of the steel plants and of Vale are not evaluated in this report.

The conclusions and recommendations section address the responsibilities of various actors. It is hoped that there will be a dialogue and collaboration among the responsible stakeholders, including companies, to ensure victims can obtain reparation for past and ongoing damage suffered.

While the report focuses on two specific communities, these two cases may also serve other communities facing similar situations, and that it may help the government and private actors adopt effective mechanisms to prevent and/or repair human rights violations caused by the mining and steel industry.

Investigation

The investigation process began in July 2010 and concluded in November 2010. The investigative team, through qualitative interviews and questionnaires conducted in almost every household (census methodology), built a database for the analysis of the impacts on the health of the residents of the communities of Piquiá de Baixo and Califórnia.

Representatives from federal, state and local authorities were interviewed, as were representatives from Vale, the steel plants and other involved actors. A list of those interviewed is available in appendix. Once compiled, the information was corroborated and complemented by academic studies and official documents, among other sources. An annotated bibliography can be found on the CD-ROM appendix²⁵.

During the FIDH international mission, which took place in September 2010, the investigative team had the opportunity to meet with the representatives of Vale, along with SIFEMA representatives. In April 2011, FIDH contacted Vale, SIFEMA and all five steel companies individually to seek additional information and clarification of certain points, namely, the business relationship between Vale and the steel companies. FIDH also sought comments regarding measures taken to address the social and environmental impacts on the communities of Piquiá de Baixo and Califórnia, as outlined in this report.

Unfortunately, FIDH did not receive any response from either SIFEMA or from any of the steel companies. It is important to note here that, despite meeting with representatives of SIFEMA in September 2011, it has proven extremely difficult to develop a sustained dialogue with SIFEMA and the pig iron companies. With regard to Vale, FIDH had an opportunity to meet with its representatives in September 2010 at both the local level and at its headquarters. In May 2011, Vale responded to FIDH, and clarifications provided were incorporated into this report, as well as in the report in Portuguese initially published in May 2011 and updated in March 2012.

^{25.} In Portuguese only.

Upon publication of this report, FIDH and its local partners plan to meet with all stakeholders to discuss the findings and recommendations of the report. It is hoped that the report's recommendations will serve as a basis for future discussions with all interested parties.

Structure of the report

This report is structured in three sections. **Section I** of the report provides a description of the **social, political and legal context** in Brazil in relation to mining development and the human rights situation. It also presents the geographic and economic contexts in which Vale operates, whether directly or whether through the actions of other private actors operating in the mining and steel production chain.

Section II studies the impacts of the industrial activities from a human rights perspective. This section identifies the impacts on the right to health through the environmental impacts observed during the investigation. Section III analyses the impacts on other rights, in particular, the right to life, security and personal integrity, the right to adequate housing, the right to access of information, and the right to due process and effective remedy.

Section IV analyses **the responsibility of the different parties involved**, public and private, and contrasts the documented facts with the international human rights standards the Brazilian government has committed to respect. The report concludes in **Section V** with **recommendations** for each actor involved: Brazilian public authorities (federal, state and municipal), economic actors (Vale, the steel companies, investors and clients), as well as international and regional institutions.

Section I General Context

A. Looking back: Vale and the Grand Carajás Program (PGC)

When I came from Pernambuco I came for the glory that was here [Açailândia]. It was glorious, it was heaven. They said that employment was good, and all that. I was motivated by the 'mystery' that Açailândia had (laughs). But when I arrived here, I didn't find this mystery (....) When I came here, I really came in this illusion.²⁶

This was how "Don Anísio" describes his perception of life in the city of Açailândia, from a glorious promise to indignant disenchantment. At the end of the 80s, he left the countryside in the state of Pernambuco to work in the pig iron plants that were installed along the Ferro Carajás Railway (EFC), for which Vale holds an operating concession. The plants, the railway and the associated mining activities were all part the **Grand Carajás Program** (PGC), a government "development" project established in the 80s for the Brazilian Amazon. This project was based on mineral and energy exploitation in the eastern part of the region. Vale (then CRVD) was one of the entities responsible for the Lead Plan of the PGC, and was its principal administrator. Five steel plants , entailing 14 high blast furnaces, and a thermoelectric plant, were built in Açailândia. Today, Açailândia is one of the territories with the highest number of claims related to human rights abuses linked to the activities of Vale.²⁷

The PGC was planned through the implementation of a logistical complex initially oriented toward the export of **35 million tons of iron ore** from the Carajás region. This complex is comprised of an open-pit mine, a railway with approximately 890 kilometres of track, and a deep water port in São Luis (Ponta de Madeira – 23 metres in depth). This complex has been operated by Companhia Vale do Rio Doce (CVRD) since 1985, with an initial investment of US\$2.9 billion.²⁸ After privatisation of CRVD in 1997, and with the growth in mineral demand from China, Vale S.A. increased its production capacity, and is currently producing 100 million tons of iron ore a year. Production is expected to reach proximately **230 million tons of iron ore a year** by 2015 as a result of the opening of new mines in Carajás and the forecast for the doubling of the railway.²⁹ Although it is not the principal subject of this report, it is worthwhile mentioning that to date, no social or environmental impact assessments have been undertaken to evaluate the effect of such significant increase in capacity.

In order to understand the general context in which the situations analysed in this report take place

^{26.} PEREIRA, Anísio. Oral information, 2010.

^{27.} In addition to Açailândia and other cities in the state, (such as its capital, São Luis), Vale has been denounced for alleged violations in Minas Gerais, Pará, Rio de Janeiro, Mato Grosso do Sul, and Ceará. Aside from the Brazilian cases, there are reports of violations in Peru, Canada, Argentina, Mozambique, Chile, and Indonesia. Cf. International Meeting of Those Affected by Vale. Dossier on the Impacts and Violations by Vale in the World. Rio de Janeiro. 2010

^{28.} COELHO, Maria Célia Nunes et al. Impactos Ambientais da Estrada de Ferro Carajás no Sudeste do Pará - Parte IV. http://www. ufpa.br/projetomineracao/docs/estrut/Arq%2017-%20Impactos.pdf. PEREIRA, Nivaldo R. J.; SILVA, André Luiz S. da. O Programa Grande Carajás e seus Conflitos Sociais. Available at: http://www.ufpa.br/naea/siteNaea35/anais/html/geraCapa/FINAL/ GT7-269-1213-20081124234431.pdf; MACHADO, Paulo F. O Pólo Sídero-Metalúrgico de Carajás Gênese de uma Nova Região Industrial?. Ensaios FEE, Porto Alegre, 12(2), 1991, p. 158-175

^{29.} Goitia, Vladimir. "Vale Invests to Compensate for Distances." Valor Econômico, São Paulo, 28 March 2011. Available at: http://www.valoronline.com.br/impresso/vale/1902/403581/vale-investe-para-compensar-distancias

and the importance of Vale in the region along with its corresponding responsibilities, a review of the history of the region proves useful.

In the middle of the 20th century, the Amazon region was seen as a type of buffer zone for the agrarian region of Brazil. According to official documents, it was meant, in the government's perspective, to connect "men without land in the north-east to lands without men in the Amazon."³⁰ In other words, as a way to release pressure for agrarian reform in the north-east, the government sought to induce migration towards the Amazon region through agricultural development incentives and physical integration, especially after the highways opened the Amazon to the rest of the country. During the military dictatorship (1964-1985) the plan also formed part of a "national security" strategy: the physical occupation and economic integration of the Amazon region would make the country more secure, more adverse to 'subversive' movements in the country, and, at the same time would discourage internationalisation of the territory.

This program, implemented in the mid-seventies, effectively generated a significant migration toward the regions along the highway in the Amazon, but it also ended up creating tension in the region. Indeed, while the fiscal incentives rewarded large landowners, small farmers had difficulty to settle and became victims of land swindles known as "grilagem."³¹ The region now known as Açailândia has a history of demographic occupation that exemplifies this pattern: its population grew along the new highways (especially the Belém-Brasília roadway, or BR-010) in the hopes of economic success for the small farm businesses, but experienced a sky-rocketing escalation in land conflicts.

However, even before conflicts provoked by governmental policies to stimulate migration and business were resolved, the politics of the region changed as a result of the Brazilian external debt crisis at the end of the 1970s. Rather than seeking to integrate the Amazon into the national market, the new strategy was to transform the region into an **export platform for primary and intermediary products** (such as cast iron), with the goal of paying the external debt created by the military regime (in its promotion of 'grand projects' of infrastructure).

Vale (then CRVD) became the principal protagonist in the direction of the events for all of the eastern Amazon: **CVRD was one of the entities responsible for the Lead Plan of the PGC and was one of its principal administrators.** Pressure from Vale was a determining factor in the government's decision to explore mining in the Amazon region (where the potential had been known for more than a decade), considering its actions in the south-east had exhausted the native forests.³² In this way, Vale, which always had been connected to the "imperative" of bringing foreign currency into the country, would do there what it did to Minas Gerais: mining exploration for external markets, generating few jobs - the majority of them low paying - diverting scare revenues for affected cities (which could be considered a real source of economic "enclaves"), prioritizing the needs of these companies over local policies,³³ and inducing the growth of charcoal-fuelled iron plants which affect the environment more than mining activity. As will be shown, this also occurred in the communities of Califórnia and Piquiá de Baixo.

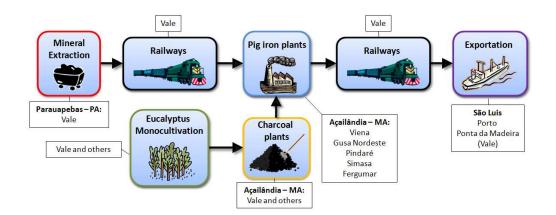
^{30.} Note that the mere concept of an "unpopulated Amazon" was already criticized, illustrating a lack of consideration for the existence of diverse population groups, including indigenous, in the region.

^{31.} Illegal appropriation of land. The term "grilagem," has its origins in the word 'cricket' and the practice by which large landowners falsified property documents by putting the bogus land titles in a box with crickets. The action of the crickets would make the papers look old and seem like old land titles.

^{32. &}quot;Many factors, both internal and international, combined to provoke a change in policy in favour of mining exploration in the region, underscoring the true diversity of the motives that inspired the project. Included among them were the necessity to generate foreign currency with the goal to service the country's growing external debt; (...) the pressure applied by CVRD for the transfer of iron and steel production from Mina Gerais with its decimated forests to the Amazon." HALL, A.L. "Amazon: Development for Whom?" Jorge Zahar Editor, Rio de Janeiro. 1991, p. 61.

^{33.} Minayo confirms the priority of these companies over local policies in the case of Vale's behavior in Minais Gerais, but historical experience has shown that the same in the case of the enterprises of the Grande Carajás Program. MINAYO, Maria Cecília. From Iron to Flexibility. Garamond Universitária. Rio de Janeiro. 2004.

The Mining and Metals Chain



The PGC claimed that iron mining would benefit the region next to the Ferro Carajás Highway, and authorities promised that the region would become an important pole of the Brazilian metalsmachinery industry. However, thirty years into the PGC, the benefits of mining in Carajás have been limited to the production of pig iron, which is generally exported. Today, the project comprises 18 pig iron production units in the area along the railway that is principally established in Marabá in Pará and in Açailândia.³⁴

The city of Açailândia has been called by some members of the Brazilian press the "city of the future" given its recent notable economic growth. However, and despite such economic growth, Açailândia remains characterised by immense social inequalities Despite the high profits announced by the companies, its population is largely impoverished; 54.3% of Açailândia's population was considered poor by the United Nations Development Programme (UNDP) in 2000, and earned less than R\$75 a month (approximately 46 USD). Between 1991 and 2000, when the steel mills were already in full operation, the poverty rate fell to less than 7.53% (much lower than the poverty rate for the state of Maranhão in the same period, which was 11%.) According to UNDP, the Ginni index, which measures equality, got worse, falling from 0.59% to 0.63% (the closer to "1" the more unequal); only 32% of Brazilian cities have worse IDG (Human Development Index) rates. ³⁵ It is worth mentioning that the owners of the steel mills are not Açailândia residents, ³⁶ which explains a good part of the disproportion between company earnings and those of the workers in the city. In 2008, for example, Vale do Pindaré, (one of the steel companies in Açailândia) exported around 130 million USD worth of pig iron. That same year, Viena Siderúrgica managed 218 million USD in exports. The socio-economic dynamic of Açailândia challenges the supposedly automatic relation between economic growth and "development."

Açailândia sees little benefit from the presence of the iron plants. The neighbourhood of Piquiá de Baixo has been characterised as a "Sacrifice Zone" or a "Pollution Paradise".³⁷ These are areas where environmental deregulation favours predatory economic interests, and companies benefit from tax incentives known as tax heavens. A combination of decisions designed to attract local investment of all types are made at the political level for purely economic reasons, with no regard to the social and

^{34.} CARNEIRO, Marcelo S. "Social Critique and Business Responsibility – Analysis of Strategies to Legitimize Steel Production in the eastern Amazon." In: Caderno CRH, Vol. 21, N $^{\circ}$ 53, 2008, p. 331.

^{35.} Atlas of Human Development in Brazil (2000) Profile: Açailândia. pp.3-5. Available at http://www.pnud.org.br/atlas/instalacao/index.php 36. Two steel mills of Vale de Pindaré and one of SIMASA, for example, are the property of the multinational Queiroz Galvão http://portal. queirozgalvao.com/web/grupo

^{37.} ACSELRAD, Henri: "On Throwaways and Sacrifice Zones." In: ACSELRAD, Henri: "Social Conflict and the Environment in the state of Rio de Janeiro". Rio de Janeiro: Relume-Dumará: FASE, 2004).

environmental costs. These installations are almost always located in urban peripheries, where the enjoyment of social and economic rights remains a challenge despite ongoing social projects, such as those financed by Vale through the Vale Foundation.

Every day trains pass by the residents of Açailândia transporting iron ore worth close to \$R50 million. The Vale train can be considered the biggest train in the world with 330 wagons, close to 3,500 metres of railway, and a capacity to transport 40,000 tons of ore,³⁸ but the living conditions of the residents do not reflect this wealth.

B. The Political-Legal Conjuncture: The Tension Between Rights and Development in Brazil

In 2001, the federal government launched the scheme "Export or Die." The Brazilian government faced chronic difficulty obtaining funds to pay for foreign currency, finance imports, and support remittances of international profit. In addition, the government suffered from a capital flight during the international crises of the nineties (Mexico in 1994, "Asian Tigers" in 1997, and Russia in 1999, for example.) The "Export or Die" scheme was finally dropped, but the imperative to export at whatever cost stayed. Even today it guides many governmental decisions in the country.

Brazilian export potential is highly concentrated in products from natural resources, particularly in the mining, metals and paper/cellulose sectors³⁹ (*hard commodities*), and agriculture (including areas close to or in the Amazon.) The policy move towards valuing exports was developed in concurrence with Brazilian environmental legislation.

It is common for Brazilian politicians and business representatives to publicly denounce environmental standards and licensing processes as "barriers to development."⁴⁰

The following box, "Liberalisation Laws and Environmental Laws and Regulations", shows how Vale, along with other companies, focused on exports and benefited from the alarmist context in relation to external accounts, for which legislation has granted companies with freedom to operate outside legal and administrative norms.

In Brazil, there are currently two types of liberalisation:

--Official Liberalisation: These are cases in which laws or standards are institutionally altered. (See Box: Liberalisation and Relaxation of Environmental Laws and Regulations.)

--**Tacit Liberalisation**: Companies feel that licensing and tax agencies face pressure to not penalise export companies, and therefore they take advantage by operating outside the margins of regulations. Tacit liberalisation is probably more common than the official liberalisation of laws and standards in Brazil.

^{38.} BOSSI, Dário. Op. Cit. p. 3.

^{39.} Cellulose has taken an important role in Brazil's trade balance, with an emphasis on kraftliner, which is corrugated packing paper - the version with less added-value and highest in the use of natural resources: the. In general, the Brazilian paper and cellulose sector is typical of the intermediate goods sector of Brazil: a large presence, a strong exporter based on a sophisticated line of products, and a high environmental impact. SCHLESINGER, Sérgio. "Industry in Brazil: Sustainable Production" Democratic Consumption. FASE, Rio de Janeiro. 2001. pp. 53-56.

^{40.} Shortly after his reelection in 2006, then President Lula gave a speech to businessmen and politicans during the inauguration of a new investment project of arofuels in the state of Mato Grosso. Lula pledged to work on what he considered obstacles to the development of the country: environmental law, public prosecutors, the issue of former slaves and indigenous communities. His statement provoked numerous reactions from many sectors of society. Several environmental organizations, indigenous groups, associations Maroons and human rights organizations then published an Open Letter to the President titled "Growth, yes. At any costs? No. See Luis Inacio Lula da Silva. Speech of November 21, 2006.

Steel operations without any Environmental Impact Assessment/Environmental Impact Report (EIA/ EIR), or licensing of charcoal furnaces without any mitigation measures for the socio-environmental impacts are two 'exemplary' cases of this liberalisation in Açailândia. As noted in the box below, these same companies exert an important lobbying effort to weaken environmental norms.

Liberalisation of Environmental Laws and Regulations

- **The redefinition of "Legal Amazon":**⁴¹ The Legal Amazon is a region which comprising the states of Acre, Amapá, Amazonas, Pará, Rondônia and Roraima and part of Mato Grosso, Tocantins and Maranhão and encompasses an area of approximately 5,217,423 square kilometres. It corresponds to around 61% of Brazilian territory. Since environmental preservation criteria were instituted, which stipulated that 80% of the rural areas must be maintained as reserves, there have been attempts to modify this percentage and redefine the very area that constitutes the Legal Amazon. If two legislative proposals currently before the National Congress are approved, the area that constitutes the Legal Amazon could be reduced by up to a quarter. The proposals seek the removal of the states of Mato Grasso and Tocantins, and part of Maranhão, from the Legal Amazon. Large rural landowners of these regions want to completely open these areas to allow the expansion of cattle ranches, and the cultivation of soy, sugar cane and eucalyptus. The landowners have mobilised to remove the barriers of development in the Legal Amazon, which would release them from the obligation to keep 80% of their rural lands as reserves.⁴²
- The Reduction of the Legal Reserve of Rural Lands: "Reform of the Forest Code." A proposal currently discussed aims at reducing the legal reserve of rural land of the Amazon from 80% to 50%, or to authorize the clear cutting of up to 50% of the native vegetation in any rural area of the Amazon.⁴³ A legal reserve, as defined by the Forest Code, is a protected area that must occupy 80% of each rural land in the Amazonian biome, 35% in the savannah and 20% in the rest of the country. There is also pressure from the 'ruralists' (the lobby of the large plantations) to redefine Areas of Permanent Preservation (APP) on rural lands. Such areas have an important ecological function to preserve vegetation along rivers, bayous and foothills. These attempts to change the Forest Code would legalise practically all the deforestation that has occurred over the past 40 years which has resulted in the clearing of close to 700,000 square kilometres of native forests. A change in the Forest Code would also allow those responsible for deforestation to recover cleared areas, and would allow the clear cutting of trees (in the state of Pará, for example) by replacing them with plantations in another state."⁴⁴
- Freeing of credit for those who commit environmental crimes: In March 2008 Minister for the Environment Marina Silva issued Directive 96 that required public agencies to fulfil Resolution No. 3.545 of the National Monetary Council (CMN) and to halt agricultural credit for rural landowners found to be clearing forests. Mato Grosso was the state most affected by this restriction. Lobbyists from the rural sector, along with the governor of Mato Grosso, pressured the federal government to establish a distinction between the Amazon

^{41. &}quot;Instituted with the goal of defining a geographic zone of a political region looking for fiscal incentives with a promotional proposal for its development." AGENCIA CAMARA DE NOTÍCIAS, available at: http://www2.camara.gov.br/agencia/noticias/70447.html. Accessed in March 2011.

^{42.} ALMEIDA, Alfredo Wagner. Agro-strategies and de-territorialization: Territorial and Ethnic Rights in the sights of two agro-business strategists. In: ALMEIDA et al. Global Capitalism and Territorial Resources. Rio de Janeiro: Lamparina, 2010. Unofficial translation. 43. See the draft bill n.6.424/2005.

^{44.} ALMEIDA, Alfredo Wagner, Op. Cit. After publication of the original version of this report, in May 2011, the reform of the forest code was approved by the Federal Senate. The code is expected to go the "Câmara" for approval (around the 6th of March) before being submitted to vote before the Presidency of the Republic.

forests and the Savannah, as if the latter allowed clear cutting. As a result of such pressure, the federal government ended up deciding to alter the above Directive.⁴⁵

- New Mining Regulatory Framework: The Federal government guarantees that it will not change environmental laws on the mining sector, nor will it alter laws on mining on indigenous lands. Despite this guarantee, proposed legislation under discussion seeks to stimulate the Brazilian mining sector through fiscal and licensing incentives for mining exploration that stimulate "efficiency." Considering how mining activities under way in Brazil have resulted in significant socio-environmental impacts,⁴⁶ one could say that the Brazilian mechanism of environmental and labour oversight is likely to be even more challenged by this expansion policy. The current Minister of Mining and Energy, Edson Lobão, has already admitted that the Brazilian mining sector is regulated by weak environmental norms (even when compared to standards for the petroleum and electric sectors.)

The Minister suggested that Brazil charges the world's lowest royalties on mining activities (less than 3% of production, while most countries charge between 6 and 10%). He wants to increase this percentage, while lowering the taxes on such activities. At the time of the writing this report, the question has been suspended and there is no final version of the proposed bill. The bill is divided into three different proposals: two that discuss mining regulation, and one that addresses the controversial issue of royalties within the mining industry.⁴⁷

Finally, it is important to remember that the iron mining sector along the Carajás corridor has been denounced for being closely connected to using **labour practices analogous to slavery** in charcoal production areas.⁴⁸ Although the mining sector generates few direct jobs, a larger number of indirect jobs are created in a dispersed and fragmented way, especially when it comes to coal supply (via so-called "independent producers"). Hence, this sector has been characterised by the presence of degrading labour practices.

According to different studies, labour analogous to slavery was used as a way to maintain the 'competitiveness' of these companies, which are dedicated to production of cheap merchandise and is highly dependent on the fluctuations of the international commodities market.⁴⁹ Such strategy relied on the consent of public authorities for almost two decades, along with Vale (then CVRD), which as a producer and transporter of steel products, was also the administrator of the PGC. There are numerous reports and denunciations of working conditions which expose a wide range of abuses, ranging from the deprivation of freedom and lack of access to health services, to summary execution by guards authorised to kill those intending to escape.⁵⁰

In 1994, *Anti Slavery International* dedicated a study on slave labour in Brazil. It noted the presence of slave labour in the charcoal supply chain to the steel companies in Açailândia.⁵¹ Looking to reduce its prevalence, in 1995, the Brazilian government created a Special Mobile Oversight Group to address slave and degrading labour practices.

50. Additional information is available at: http://www.observatoriosocial.org.br/download/er6alt.pdf

^{45.} IBIDEM.

^{46.} There is ample written and visual documentation of the socio-environmental impacts of mining activities in Brazil.

^{47.} ESTADO DE SÃO PAULO, "Government wants to sweep our mining royalties, say sources." 3/10/2011. Available at: http://oglobo. globo.com/pais/mat/2011/03/10/governo-quer-varredura-nos-royalties-da-mineracao-dizem-fontes-923985545.asp

^{48.} SUTTON, A. "Slave Labor: Trabalho Escravo: a link in the chain of modernization in Brazil Today." São Paulo. Edições Loyola,1994. CARNEIRO, Marcelo S. "Social Critique and Business Responsibility – Analysis of Strategies to Legitimize Steel Production in the eastern Amazon." In: Caderno CRH, Vol. 21, N° 53, 2008, p. 328.

^{49.} A ton of pig iron was sold, for example, for 103 dollars in the middle of 2002. IBIDEM

^{51.} SUTTON, A. "Slave Labor: Trabalho Escravo: a link in the chain of modernization in Brazil Today." São Paulo. Edições Loyola,1994. CARNEIRO, Marcelo S. "Social Critique and Business Responsibility – Analysis of Strategies to Legitimize Steel Production in the eastern Amazon." In: Caderno CRH, Vol. 21, N° 53, 2008, p. 328

C. The Expansion of the Grande Carajás Programme

Even though this report is focused on the impacts of Vale and the steel companies, the amplification of activities resulting from pressure for export growth at whatever cost raises additional concerns in relation to the enjoyment of human rights of the communities in the region of Açailândia. Among other infrastructure and industrial projects, the communities are worried by the expansion of eucalyptus mono-cultivation, which is considered to be a great "turn" for the region through supposed environmental regeneration.

The residents of Piquiá are surprised by the fact that there is financial recourses are available for new investments projects, but there are none to provide reparation to those who have suffered from the pollution generated by the existing mills and plantations. Residents believe that, prior to undertaking any new investment project which may be potentially dangerous and damaging, all conflict generated by the enterprises currently operating should be eliminated. In an interview with a Vale representatives in September 2010, Vale confirmed that its socially responsible actions in the state of Maranhão follow "EFC integrated socio-economic diagnoses of the municipalities, launched in 2008 in which Vale and its Foundation planned actions in respect to the communities along the rail line, including Açailândia. After two requests to obtain the document, in May 2011 Vale agreed to give it to FIDH and announced that it would be published on its Vale Foundation website within the coming months.⁵²

New Projects Being Undertaken in Açailândia and along the Carajás Rail Corridor

--Expansion Of The Ferro Carajás Rail: Vale administers, through a concession contract, a 892 kilometre railway, which links the Parauapebas (PA) iron mine to the port of Itaqui in São Luís (MA). In 2010 the company began work to double the railway, with an estimated expense of R\$8.29 billion, seeking to increase its flow of merchandise. Through IBAMA, Vale obtained separate licences for each phase of the project. Justiça nos Trilhos and the Justiça Global have questioned the legality of such licensing, which has classified the extension as a "railway infrastructure project with little potential for environmental impact." Such classification allows companies to obtain licensing based on fewer criteria and which do not require impacts assessments, public hearings or compensation.

Both organisations argue that a rail construction which forcibly displaces people (around 1,168 properties will be affected according to Vale's own estimates), and which interferes with APPs and units of conservation (including indigenous lands and Quilombo (Maroon) descendent communities⁵³), violates the federal constitution if it is not subject to licensing approval processes which would find that the project would potentially have high social and environmental impacts. Concerns were also raised about the potential increase in rail accidents (on average one death a month.⁵⁴) For these reasons, the two organisations have submitted a request to the fourth Chamber of the Attorney General of the Union (Brazil), requesting the revision of the licences granted to Vale by IBAMA, to be in conformity with legal requirements. They are also asking for an integrated environmental impact assessment and public hearings.⁵⁵

^{52.} On the Foundation's website, only a brief description (8 pages) of the study seem to be available. On the date of publication of the updated version of the report, in March 2012, FIDH's partners had not received a fully copy of the study.

^{53. &}quot;Quilombos (...) designated social groups of African descent brought to Brazil during the colonial period who resisted or openly rebelled against the colonial system and their captive condition, forming independent territories where freedom and communal work constituted symbols of differentiation from the work regime adopted in the cities. On November 2003, article 2 of Decree 4.887 declared the descendants of Quilombo communities ethnic-racial groups, according to criteria of auto-attribution with their own historic trajectory and specific territorial relations with the presumption of black ancestry, related to the resistance and historic oppression suffered." PALMARES Foundation. Ministry of Culture. Available at: http://www.palmares.gov.br/

^{54.} Data from the ANTT (National Land Transport Agency) according to an article published by the paper, "O Estado de São Paulo" 8/26.2008. See also ANTT data cited by the Northeast Brazil Comboni Missionaries in a complaint presented June 10, 2010, page 2, available at: http://www.portogente.com.br/arquivos/arq_658_vale__atropelamentos.pdf

^{55.} Justiça nos Trilhos(Comboni Missionaries) and Justiça Global. "Complaint to the 4th Chamber of the Attorney General of the Republic." 2010.

Gusa Nordeste Steel Plant: Gusa Nordeste is the closest steel company to Piquiá de Baixo, and is suspected to have a large environmental impact on the neighbourhood in terms of atmospheric pollution, noise and waste emissions. The company anticipates the production of 500,000 tons a year of steel billet for export and domestic industrial use. The Banco del Nordeste will provide financing in the amount of R\$300 million for the first phase alone.⁵⁶ Given that the global financial crisis has made it difficult for Carajás pig iron companies to sign new export contracts (in particular with North American buyers who would substitute pig iron for recycled scrap), steel production by the five pig iron companies in Açailândia is considered as a solution to counter the crisis. The value of the steel will largely depend on Vale and the chosen transport mode via the EFC. In contrast to the celebrations for the new infrastructure, fears are that the new plant will result in further damage to the nearby territory since it will generate more pollution and lead to an even greater intensive use of water.

--Eucalyptus Plantations and The Suzano Pulp and Paper Production Unit: Suzano Pulp and Paper (Suzano) is seeking new expansion fronts for eucalyptus plantations. Maranhão is one of the targeted territories. It has acquired land in different cities in the state, and has planned the opening of an industrial production unit for pulp and paper in Imperatriz. Testimonies collected during the investigation show that the population of Açailândia has already suffered from the expansion of eucalyptus plantations along the Carajás corridor by Vale, which were created to guarantee the supply of charcoal for the various steel plants in the region. The residents of Açailândia, including Piquiá de Baixo, consider the proliferation of large- scale eucalyptus plantations as a factor aggravating the problem of agriculture and food for the rural population, since it has reduced the availability of arable land farmers can rent. Additionally, many have complained about being "surrounded" by large eucalyptus plantations, which exposes them to toxins, damages the soil, and creates water scarcity. The Federal Public Ministry lodged a Civil Public Action with the Federal Ministry asking for an embargo injunction on actions by Suzano in Piauí state upon learning that the company intended to fragment the eucalyptus plants into different projects to be submitted in various cities in order to take advantage of local State organs which apply criteria less stringent, as opposed to those applied by the national organ IBAMA.57

Vale has a regional agreement with Suzano guaranteeing the supply of planted eucalyptus, which has been financed by BNDES until 2028.⁵⁸ The President of BNDES, Luciano Coutinho,⁵⁹ stated in an interview with FIDH, that the bank recognised that the steel products have been a "plague for many years" given the deforestation they cause and the presence of slave labour. The bank systemically refuses, he says, the demands of the government of Maranhão to finance these companies in their cyclical crises. On the other hand, the bank has been enthusiastic about the Vale initiative to verticalize their businesses regarding the sale of charcoal in the region through its own eucalyptus plantations, and is even bringing financial resources to the related forest enterprises.

D. Vale Mining Company

History

The Company Vale do Rio Doce (CVRD) was founded in 1942 to exploit the deposits in the Itabira region (state of Minas Gerais, south-east Brazil.) In 1952, CVRD was taken under state control. It remained one of the principal Brazilian state-owned companies until its privatisation in April 1997. Its main activity is iron ore extraction, which accounted for 59% of its total revenue in 2009. Vale found the world's biggest iron ore deposit in Serra dos Carajás (*Pará*).

^{56.} BOSSI, Dário. Impacts and resistance in Açailândia, deep interior of Maranhão. p. 10.

^{57.} Brazilian Environmental and Renewable Natural Resources Institute.

^{58.} ZANATTA, Mauro. Vale Launches Fund to Cure Forest Assets. Valor Econômico. 30 October 2009. Available at: http://www.jornaldaciencia.org.br/Detalhe.jsp?id=66985

^{59.} COUTINHO, Luciano. Oral Information. Rio de Janeiro. 17 September 2010.

After its privatisation, Vale do Rio Doce became Vale S.A., and was controlled by Valepar S.A. (33% of its total capital), the Brazilian government through BNDES (5.5% of total capital), and other investors.⁶⁰

Vale decided to focus exclusively on mineral extraction. In 2000, it changed its strategy and gradually sold the majority of its metal/mining and paper companies for \$2.9 billion.

It is currently the second largest mining company in the world. It has a presence in five continents and operates in 38 countries.⁶¹

The Company Vale

Today Vale is active in the following sectors: iron ore, aluminium and its value chain (bauxite, aluminium oxide and primary aluminium) and non-iron ores (copper ore, potassium chloride, kaolin).

Over and above the mining chain, Vale exercises a monopoly over the entire operation of iron ore supply and pig iron transport to São Luis do Maranhão port (state of Pará) for export.

Vale's net profit in 2009 was estimated at 5.3 billion dollars. The company distributed 2.75 billion dollars in 2009 and 10.075 billion dollars over the last five years in dividends to its shareholders. The same incentive structure is expected to last until 2018.⁶²

Among Vale's clients are major groups of the mining and metal industry: the Italian Iva e Lucchini (subsidiária da Russian group Severstal); Corus (Indian group Tata); ArcelorMittal (France and Holland); Taiwan China Steel Corporation; Baosteel (major Chinese steel group); ThyssenKrupp (Germany), Nisshin Steel, Sumitomo, Kobe Steel, JFE Steel, Nippon Steel (Japan); POSCO (Korea); and, Erdemir (Turkey).⁶³

Vale's corporate social responsibility policies⁶⁴

"We are committed to spreading economic, social and environmental responsibility throughout our supply chain."⁶⁵

Vale adopted a code of ethical conduct that, according to the company, must be followed by Vale's workers as well as by its subsidiaries and controlled companies. Vale's suppliers must also follow this code.⁶⁶ As part of its 2007 sustainable development policy, Vale commits to "guarantee transparency with stakeholders throughout the world concerning (their) corporate governance and social, environmental and economic policies, proceedings, practices and performance.⁶⁷

In 2009, Vale adopted a Human Rights Policy. The Human Rights Policy is "mandatory for Vale [...] as well as its subsidiaries [...]" and rests on "[...] International Commitments and References related

^{60.} Sustainability Report. Vale, 2009.

^{61.} Vale, Throughout the World. http://www.vale.com/en-us/conheca-a-vale/mundo-afora/Pages/default.aspx

^{62.} Sustainability Report. Vale,, 2009.

^{63. 1}st International Meeting of Those Affected by Vale, Op. Cit, p. 18.

^{64.} For the purposes of this report, authors have used the definition of Blowfield and Frynas, who understand Corporate Social Responsibility (CSR) to be an umbrella term for a variety of theories and practices that recognised: a) that companies have a responsibility for their impact on society and the environment at times beyond individual legal duty and responsibility; b) that companies have a responsibility in how they conduct business (for example in the supply chain); and that c) companies need to formalize their relations with society in general, be it for reasons of commercial viability or to add value to society. Blowfield, Michael. e Frynas, Jedrzej G.

 $^{65. \} Vale, \ Suppliers, \ http://www.vale.com/en-us/fornecedores/pages/default.aspx$

^{66.} Vale, Suppliers Code of Conduct, Article 1, available at: http://www.vale.com/en-us/fornecedores/Documents/codigo-de-conduta-do-fornecedor.pdf

^{67.} Vale, Sustainable Development Policy, available at http://www.vale.com/en-us/sustentabilidade/politica-de-desenvolvimento-sustentavel/Documents/Politica_de_Desenvolvimento_Sustentavel_en.pdf http://www.vale.com/pt-br/sustentabilidade/politica-de-desenvolvimentosustentavel/paginas/default.aspx

to Human Rights issues", including the International Covenant on Economic, Social and Cultural Rights.⁶⁸

Vale also has a specific code of conduct for its suppliers (including its subsidiaries and affiliates), which it adopted as part of its recent human rights policy. In the preamble of the "Suppliers' Code of Conduct", the code establishes that its suppliers must acknowledge "the need to promote development while ensuring sustainability and environmental responsibility. The Code also explicitly recognises the health and life of communities as a top priority. Article 1 of the code establishes respect for lawlegislation, human rights and, in particular, rights pertaining to health, safety and the environment. It states: "Compliance with legislation, regulations, contracts, and codes is underpinned by our drive for sustainable development. This entails respect for local legislation, human rights, workers' rights, and rights pertaining to health, safety and the environment, but not limited to these."⁶⁹

Using the UN Universal Declaration of Human Rights as a reference, Vale reiterates its commitment to establish business relationships with suppliers that respect human rights.⁷⁰ According to Vale, its suppliers must respect prevailing environmental legislation and implement necessary measures to limit the environmental impacts of its activities, including going beyond prevailing legislation or regulations.⁷¹ The code also provides disciplinary measures in the case of non-compliance with the principles and commitments in the Code.

Coincidentally or not, the formulation of Vale's policies regarding social issues occurred after increased exposure about the impact of its operations and the resulting complaints and resistance movements. For example, due to environmental impacts in the Grande Vitória region, CVRD was a target of pressure from civil society and public authority in the 80s and 90s. In response, the company adopted, at the end of the nineties, an environmental marketing strategy to legitimise the company as one committed to environmental and ethical values. It then established a Code of Ethics with the objective to guide "its businesses by a set of values that observe the highest ethical and moral standards" with one of its fundamental principles being "to act with social responsibility and respect for the environment." ⁷²

It was only in 2007 that Vale reformulated its contracting policy with suppliers and suspended its business relationships with Companhia Siderúrgica do Pará (Cosipar) and Usina Siderúrgica de Marabá S/A (Usimar).⁷³ There were already innumerable notifications lodged with the Ministry of Labour and Employment (MTE) and complaints about business relationships with charcoal suppliers that used slave labour. Vale stated that it only ended its contract with some plants in 2007, after these were audited by IBAMA and by the Ministry of Labour (MPT) for resorting to slave labour. According to information received from Vale in May 2011, Vale's contracts with the three companies, Viena Siderúrgica do Maranhão S.A., Simasa, and Fergumar, were suspended in 2007/2008 due to the use of forced labour in its supply chain and the illegal acquisition of wood and charcoal. According to information received, relations were resumed with these companies when the latter "managed to provide documentation and a plan to monitor and "sanitise" their supply chain." Vale also affirmed that it contractually requires its clients to comply with environmental law and regulations. According to information provided by Vale, the suppliers' Code would also be applicable to its clients.⁷⁴

In addition, the current investigation team found that Vale presents certain actions as "social investment" actions, or as a sign of company good will, while such actions in fact are legal obligations

^{68.} Vale, Human Rights Policy.

^{69.} Vale, Suppliers' Code of Conduct, http://www.vale.com/en-us/fornecedores/Documents/codigo-de-conduta-do-fornecedor.pdf

^{70.} Ibid. article 7.

^{71.} Ibid. article 8.

^{72.} GRIGATO, ROSEMAY B. and RIBEIRO, LUIZ C. M. The Environmental and Corporate Responsibility Policy of CVRD. Revista Ágora. Vitória, n.4, 2006, pp. 1-20.

^{73.} José Arnaldo dos Santos Ribeiro Junior. Vale's Sustainable Development Policy, Annex of the XVI National Geographic Meeting, June/2010.

^{74.} Interview with Vale and Vale Foundation staff. 17 September 2010. Rio de Janeiro.

imposed on Vale through judicial sentences and terms of behavioural adjustment (TAC) for harm caused to the environment and to communities. For example, Vale has, since 2007, included in its Sustainability Report a chapter on "actions of ethno-development" which gives support to Quilombola communities and indigenous peoples.⁷⁵ This support, however, coincides with political pressure and legal actions taken against the company by indigenous peoples, such as the Xikrin, Kayapó⁷⁶ and Krenak⁷⁷ communities. According to the team's analysis for this report, such actions could therefore not be qualified as purely voluntary initiatives from the company.

Vale's international commitments on social responsibility

Vale has been a member of the UN Global Compact since September 12, 2007. In 1999, at the World Economic Forum in Davos, former UN General Secretary Kofi Annan called on the world's business leaders to adopt the Global Compact Principles, both through their corporate practices and by supporting appropriate public policies. The ten principles of the Global Compact encompass human rights, labour rights (including anti-slavery or forced labour, and abolition of child labour) environmental protection and the development of environmentally friendly technologies, and the fight against corruption.⁷⁸

More than ten years after the creation of the Global Compact, various investigations and case studies have shown that adherence of companies to this initiative has merely been formal and they have not changed practices that damage the environment or violate human rights. In fact, critics maintain that the Global Compact could undermine efforts, beyond voluntary commitments, to effectively bring about the issue of corporate accountability into the intergovernmental arena.⁷⁹ A recent report from the Joint Inspection Unit of the United Nations, the only independent external supervision of the UN system, questions the results of this initiative.⁸⁰

In addition to the Global Compact, Vale is also a member of the International Council on Mining and Metals (ICMM). The ICMM recognises the responsibility of companies to respect human rights⁸¹ and demands that its members respect various related principles, including exercising a duty of care to minimise environmental impacts.⁸²

Through its participation in the ICMM, Vale also joined the Extractive Industries Transparency Initiative (EITI) whose principles focus on transparency and the reporting of activities and impacts, along with the participation of civil society in the design, monitoring and evaluation of the initiative.⁸³ Vale is also a member of the World Business Council for Sustainable Development, and, in 2007

78. http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html

^{75.} In the chapter on 'Indigenous Rights – Building Alliances', Vale states that it "carried out activities that benefited over 5.5 thousand indigenous peoples in the Brazilian states of Pará, Maranhão e Minas Gerais" and noted among its initiatives "participation of employees in commemoration of the Day of the Indian" and distribution of toys to the children of the Kayapó and Krenak people." Sustainability Report 2009, Vale.

^{76.} Vale was ordered to pay R\$268,000 a month to the Xikrin community of Cateté and R\$388,800 a month to the Xikrin people of Djudjekô, which upheld a preliminary injunction of December 2006. However, Vale suspended payment sin October 2006 alleging that the indigenous people broke the agreement by occupying its installations in Paraupebas (PA) in protest. The judge also instructed Vale to guarantee implementation of a programme for the sustainable use of reparation resources to the Xikrinsuch support. Decision of Federal Court Obliges Vale to compensate Xikrin Indians. Repórter Brasil, 19 August 2008. http://www.reporterbrasil.org.br/pacto/noticias/view/84 77. CIMI, Krenak occupy railway of Companhia Vale do Rio Doce. www.cimi.org.br.

^{79.} MARTESN, Jens. Six problems of the Global Compact between Business and the UN World Economy, Ecology and Development Association and Global Policy Forum. 23 June 2004. According to the organisation CorpWatch, there are four fundamental flaws in the Global Compact: absence of mechanisms to regulate or impose the adherence to the Pact; acceptance of known violators as I Pact members; it represents the kind of flawed relationship between the UN and the corporate sector that should be interactive but not partnership; the Compact offers substantial opportunities for corporations to "clean" their image using the UN Flag to help their reputation. RICHTHER, Judith. Building on Quicksand - The Global Compact, Democratic Governance and Nestlé, outubro/2003, CETIM, IBFAN/GIFA and Berne Declaration, p. 13.

^{80.} Joint Inspection Unit of the United Nations System, Report United Nations Corporate Partnerships: The Role and Functioning of the Global Compact. JIU/REP/2010/9, www.unjiu.org/en/reports.htm

^{81.} ICMM, Business and Human Rights, /www.icmm.com/page/225/business-and-human-rights

^{82.} ICMM, Work Programs, Environment, www.icmm.com/our-work/work-programs/environment

^{83.} The EITI Principles and Criteria, EITI, http://eiti.org/eiti/principles

Vale joined the 1997 Global Reporting Initiative (GRI), a multi-stakeholder initiative that provides guidelines to elaborate sustainability reports.⁸⁴

For instance, in its 2005, 2006 and 2009 20F-Form reports submitted to the US Securities and Exchange Commission, Vale cites the presence of "protesters" as a risk factor impeding the fluidity of its operations and two projects. "Protesters, including from indigenous communities living in areas where we operate, may take actions to disrupt our operations in an effort to influence us to continue or increase the level of support we provide to such communities. Although we will defend ourselves vigorously against such actions, and will continue to provide support to the communities that live in the vicinity of the Carajás rail-road, future efforts by protesters to disrupt our logistic operations could have a negative impact on our activities."⁸⁵

Although Vale's reports offer explanations about the reasons for these protests, it makes no reference to observed problems, such as health, or environmental contamination, nor does it present measures taken to prevent or remedy the negative impacts, social or environmental, of its activities.

These observations corroborate critical arguments presented in relation to companies' reports on corporate social responsibility initiatives. For about a decade, the public denunciation of serious human rights abuses, labour conditions and environmental degradation resulting from the activities of large corporations has gradually led companies to adopt "corporate social responsibility" (CSR) policies and programmes.

In her investigation, Melissa Whellams of Saint Mary's University in Halifax, shows that the mining industry has been adopting socially responsible programs as a way to publicly respond to criticisms and complaints about the aggressive impacts of their activities.⁸⁶ For their part, Heledd Jenkins and Natalia Yakovleva note a lack of transparency and reliable data in many corporations' socio-environmental reports. They also note a tendency to incorporate information on the economic impacts of mining operations in their socio-environmental reports.⁸⁷

The socially responsible initiatives of the energy, gas and mining sectors have been widely questioned and "there is growing evidence of an abyss between the declared intentions of the corporate leaders and their actual behaviour."⁸⁸

"Strategic Philanthropy," fiscal incentives and high advertising spending

According to the company Vale, its investments in social responsibility projects in 2009 amounted to US\$781 million (US\$580 million for environmental protection and US\$201million for social projects.)⁸⁹ However, and as the company states, a large part of the total destined for the company's socio-environmental responsibility is the result of tax incentive laws.⁹⁰

Vale's social marketing emphasises "strategic philanthropy" works and actions, or the concentration of donations to highly visible causes and ones that attract public sympathy. In general, the company

89. Sustainability Report Vale, 2009, p.18.

^{84.} Global Reporting Initiative. www.globalreporting.org/Home

^{85.} SEC Reports, Vale, 2009, www.vale.com/en-us/investidores/resultados-e-informacoes-financeiras/relatorios-sec/pages

^{86.} Whellams, Melissa. The Role of CSR in Development: A Case Study Involving the Mining Industry in South America. Saint Mary's University, Halifax, Nova Scotia, 2007, p. 05.

^{87.} Heledd Jenkins and Natalia Yakovleva. Corporate Social Responsibility in the Mining Industry: Exploring Trends in Social and Environmental Disclosure. Journal of Cleaner Production. Volume 14, Issues 3-4, 2006, pp. 271-284. Improving Environmental, Economic and Ethical Performance in the Mining Industry. Part 1. Environmental Management and Sustainable Development.

^{88.} Jedrzej George Frynas, Oil In Nigeria: Conflict And Litigation Between Oil Companies And Village Communities. See notably: ESCR-NET Corporate Accountability Working Group, December 2005, http://www.escr-net.org/usr_doc/ESCR-Net_on_HR_and_Extractive_Industry. pdf, John Ruggie, Interim Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, U.N. Doc. E/CN.4/2006/97 (2006), para.25.

^{90.} Interview with Vale and Vale Foundation staff, 17 September 2010. Rio de Janeiro. Second Sustainability Report 2009, total fiscal incentives in 2009 were US\$148 million and companies "carry out cultural, sporting, childcare and other programmes which receive incentives in compliance with the requirements of Brazilian tax legislation, and this offsets part of the tax due." Vale, Sustainability Report 2009, p.18.

supports causes that give the company high visibility in larger centres and for a certain sector of society. For example, Vale recently financed the renovation of the new lighting of the Christ the Redeemer statute. Once finished, Vale published a public letter with the image of the Christ in the most widely distributed newspaper in Rio de Janeiro. Vale also supported preservation work in the Botanical Garden and on Ilha Grande, two other beauty spots in the city. On the eve of the Olympic games in Brazil, Vale launched the programme "Brazil is Worth Gold" to train youth in judo, swimming and athletics. Additionally, in association with the ministries of Defence and Sport, Vale established a "National Centre of Excellence" in the *Circulo Militar de Deodoro* sports complex in Rio de Janeiro.

Vale's Social Responsibility policy includes strong investments in advertising, including high spending to buy advertising space in large mass media communications. In 2009, Vale more than tripled its spending on radio, television and newspaper advertising: from R\$45 million spent in 2008 to R\$178.8 million; a high amount for the advertising market, especially considering that a mining company's product does not depend on attracting or convincing the end-consumer. In this same period, Vale made a 13% reduction in its "social investments" and the year before cut its operating budget by US\$5 billion and dismissed almost two thousand employees.⁹¹

Vale Foundation

The Foundation supports projects in three lines of activity: (a) human and economic development (b) public management (c) urban and housing infrastructure.⁹² In the area of infrastructure, the current investigation found that the Foundation's most direct action has been in management training (mainly in municipalities) to attract and generate public funds. In other words, despite the additional costs that Vale's presence imposes on municipalities as a result of health consequences on affected communities (as highlighted in section II), Vale does not directly invest in urban and housing infrastructure other than providing assistance to mayors seeking funding from PAC, BNDES and the Federal Economic Fund, among others.⁹³

Currently the Vale Foundation runs various social projects in Açailândia, including infrastructure projects and capacity building projects with municipal civil servants responsible for education. The Vale Foundation also runs a programme that helps communities located along the railway to have access to medical services and preventive care. In 2011, Vale also provided help to the governor of Açailândia for the promotion of maternal and child health (Health Action Programme.)

Although the company's stated mission is to "contribute to the integrated development – economic, environmental and social—of the territories" where the company operates, the investigation concluded that the Vale Foundation does not allow resources to compensate for or mitigate the impacts of its operations.⁹⁴ In addition, its philanthropic and/or social actions are not associated with the damages most frequently caused by the activities of Vale and its affiliates, nor are they initiated in the places where these damages occurred. Even though the mining industry is responsible for causing and aggravating respiratory problems, the Foundation's health initiatives are focused

^{91.} Revista Época Negócios. Country phenomenon. 11.28.2009, http://epocanegocios.globo.com/Revista/Common/0,,EMI107328-16370,00 FENOMENO+EM+CAMPO.htm

^{92.} According to Vale employees, the principal incentive for the company for economic and human development were Stations of Knowledge, which are OSCIP's for children and adolescents, run by police organizations or civil society groups. In Maranhão, they are located in Arari and São Luis. Not referring to "public management," the foundation said it was developing programs to improve the administrative-financial management of city halls to reduce costs and increase funding, principally in the areas of education and health. In Maranhão, the so-called "Health Action" works in 5 towns close to São Luis, with a mobilization of local organizations to fight infant mortality. Interview with Vale staff. 17 September 2010.

^{93.} According to coordinator of the Vale Foundation, "we see that there is a deficit in public performance, resources do exist in the PAC, in My House My Life, but they don't get to the towns. We work on projects as a kind of 'social consultancy. (...) the city hall of Pindaré-Mirim calls Vale at all hours for help." Interview with Vale Foundation staff. 9.17.2010.

^{94.} According to one of the coordinators of the Vale Foundation, the foundation doesn't exist to respond to the impacts of Vale enterprises, but to promote "territorial development," supporting projects that help social problems that have nothing to do with the impacts. Interview with Vale Foundation staff. 17 September 2010.

on maternal health and campaigns to prevent sexually transmitted diseases, rather than on projects related to the prevention or treatment of the damage generated by the pollution and contamination caused by Vale's operations.

E. The communities of Piquiá de Baixo and Califórnia settlement next to Vale and the Grande Carajás Project

The community of Piquiá de Baixo



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According to the individuals interviewed for this investigation, the area where Piquiá de Baixo is today was known only to indigenous groups until the 1950's. The settlement of the area was the result of a dual movement: on one side, from a federal stimulus looking to transfer people without land to the Amazon; and on the other, spontaneous moves of poor people in search of good land. Over the next decade, before there were any official roads, peasant families from other areas of western Maranhão began to move to the area. The family of Joaquim de Souza was one such family. The family left Bahia for Maranhão at the beginning of the sixties and settled in Piquiá de Baixo in 1964.

At the end of the 60s, the federal government began to build a highway (today called BR-222) located nearby the community. The labourers were drawn to the location by the abundance of natural resources for family farms (water and land) and by fruit (such as açaí, which gave Açailândia its name). This was the case for Edvard, the current President of the residents' association. The most common crops were corn, rice, manioc and beans. The name Piquiá comes from the fruit of a common tree in the area. After the highway was built, however, large landowners moved into the area and restricted access to land (including through "grilagem" land swindles) which led to an increase in the price of land and food commodities.

In the 80s, the peasant families faced different threats with the construction of the Ferro Carajás Railway (EFC), operated by Vale (then CRVD). The railway accelerated migration and land speculation, aggravating conflicts, without any measures taken by the government or on the part of Vale as a state-owned company (then CRVD) to reduce its negative impacts.

Starting in 1987 metals and mining companies connected to Vale (metals buyers and those who used the railway fleet) started to buy land and build furnaces, heightening land problems and causing social and environmental impacts in Piquiá de Baixo. The arrival of these companies initiated an important investment in publicity to promote migration of workers. In other words, the steel companies settled in Piquia, interested in the hydro resources of the region and seeking a flexible contingency of workers for the plans.

As more qualified workers from the south- and north-east, moved to the region fewer people from Piquiá de Baixo could find work in the plants. Additionally, Vale's policy to attract workers from elsewhere, increased the town's density which put pressure on the real estate market and strained the precarious local urban infrastructure. According to a study by the Federal University of Maranhão, Piquiá de Baixo transformed into a "hall" of plants.⁹⁵

The personal account of Don Anísio provides insight as to the community perspective on the human rights impacts observed in Açailândia:

"The guilty party in all this is Vale, since if it had never found ore, none of this would have happened. All the pollution that Vale brought ... the owners of these companies (the metals/ mining companies) they are very rich, they have lots of investments, they have money, they have everything on hand. Now the question is whether all this money ends up at Vale, since all of them make and sell for Vale, nothing leaves here without being sold to them...they are the ones who transport it. All the poison was brought by Vale."96

According to Don Anísio, the chain of responsibility is very clear: Vale operates both at the upstream and downstream of the metal supply chain. It has a true monopoly from iron ore supply to pig iron transport to the port in São Luís in Maranhão where this ore is exported. As it controls the prices of these two activities, it is the one which makes the most profits.

Don Anísio lives on Avenida João Castelo, referred to as the "street of smoke" due to the very visible and ongoing pollution. He says that some years ago he had what seemed to be, at the beginning, a simple cold. However, he was bedridden for three months and was practically unable to eat. "I never got better. I have problems everywhere: in the lungs, headaches, dizziness, runny nose, so many things I can't even say..." Health problems in the neighbourhood, such as those of Don Anísio, are common and severe.

Dona Francisca, whose wall faces the Gusa Nordeste plant, also gives testimony on the health problems in the neighbourhood:

"Here at home we have sinusitis, throat problems, headaches, eye problems. My son is only 21 years old and he already has a problem with his eyesight, he's always blinking, he can't open one eye, he doesn't see well (...) the doctor says that people end up with lungs all black inside. A neighbour already had an x-ray and the doctor said to get out of here as soon as possible (...) my husband died four months ago. Two months before the doctor examined him and said there was nothing to do, that the lung was very full.⁹⁷

According to the Regional Engineering, Architecture and Agronomy Council (CREA), Piquiá de Baixo has 298 households, with another 22 non-resident establishments, such as schools, churches, stores, etc. The resident's association estimates the population to be around 1,500 people.⁹⁸

^{95.} CANCELA, Cristina. Piquiá Station: A New Kilometer In The Amazon Frontier. Development and Citizenship. São Luis, ano 2,no.6, Dec./Jan. 1992. EVANGELISTA, Leonardo. City of Smoke: the Constitution of the Worker Neighborhood Piquiá in the town of Açailândia. Program of Post Graduate Studies in Social Sciences of the Federal University of Maranhão, 2008, p. 44.

^{96.} PEREIRA, Anísio. Oral information. 2010.

^{97.} SILVA, Francisca. Oral narrative, 2010.

^{98.} CARDEAL, Edvard. Oral information, 2010.

In 2010, after the FIDH international mission, the investigative team met with the Office of the Prosecutor in Açailândia, the steel plants, the municipality, and community leaders to discuss the relocation of the Piquiá de Baixo community to a new site. The town agreed to provide infrastructure and equipment and the pig iron companies agreed to acquire lands for the installation. Vale accepted to undertake a socio-economic investigation, along with a "qualitative study of vocational production" of all the residents of Piquiá de Baixo, and agreed to help identifying existing federal funds that could finance the construction costs related to the community's resettlement.

In May 2011, Vale advised it had finalised the studies and that it was submitting them to the Federal Prosecutor's office. However, Vale also advised that it was awaiting instructions before presenting, "if so requested", the studies to the community. Hence, at the time of the publication, they have not been communicated to the research team⁹⁹. Vale also said that to go forward, the project depended on other interested parties. In particular, the land had still not been bought by the pig iron companies as agreed. In February 2011, following protests by the residents of Piquiá de Baixo and a workers' strike at Viena Siderúrgica, SIFEMA agreed to invest in the acquisition of 21 hectares of land for the new settlement. Up until now, no concrete action has been taken for this resettlement.¹⁰⁰ All related aspects of the relocation, from conception to execution, the participation of the residents of Piquiá de Baixo, the respective responsibilities of all interested parties, such as the amount of financial contributions, have been discussed in the international FIDH mission with its partners in Brazil upon publication of the report.

Carvoarias industriais da Vale Área de Eucaliptos Área de Eucaliptos

The Califórnia Settlement

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In 1993, landless workers occupied the farm in Califórnia, which was considered to be non-productive by its Brazilian owners. Until the definitive settlement of the families in the area through agrarian reform in 1997, the settlement saw numerous comings and goings as settlers had to camp in canvas tents (where, according to the residents, they had to endure hunger, heat and rain), only to leave when

^{99.} After publication of the report in May 2011 and before publishing this updated version, Vale indicated that printed and CD version of the socioeconomic diagnosis had been distributed in 2008 to the audience attending the presentations made by Vale Foundation on this subject.

^{100.} There were developments since the publication of the original report in Portuguese but the process remains paralyzed due to legal procedures to acquire the chosen land for public purposes.

police demanded. The memory of these difficult times remain and give the community the feeling that it is possible to band together to fight for justice and make alliances with other movements and groups. Today the leaders estimate that the settlement has around 1,300 residents.

Califórnia is located on the margins of BR-010, the first major highway built by the federal government in 1958 as part of its efforts to populate Brazil's interior. This little piece of land reflects the problematic related to the occupation of the Amazon in that: a) it was the result of incentives to colonise the region (the construction of the highway); b) it was accompanied by a process of concentration of lands into the hands of a few large landowners who speculated with real estate prices; and c) it was caught in the middle of Brazil's democratic dynamic, witnessing the birth of the Landless Workers Movement (MST).

Ultimately, MST pressured for the incorporation of Califórnia into the national politics of Agrarian Reform. A decade after the formal recognition of the settlement, Califórnia became part of the second wave of high "valorization" of Amazonian territory as a base for ore and forest-based commodity export. (The first wave happened in the 80s.)

In 2005, Vale began to operate a large charcoal production unit (UPR2). It built 66 furnaces, each holding 83 cubic metres of charcoal, plus seven smaller units. In total, the furnaces occupied an area of 1,185 square metres.¹⁰¹

When production of charcoal began, the residents of Califórnia began to feel effects on their health. According to statements in the film "Vale of Tears" (produced by the residents in 2006), they began suffering from vision problems, high blood pressure, fatigue, gastritis, and cough and respiratory problems in general.

Dona Joaninha (Joana Pereira da Silva), now 54 years old, had a throat operation a year after Vale's activities began: "I had a bad throat problem, it made me tired...and a nodule grew in my throat. So the doctor said that I had to have an operation as soon as possible." After this scare, the next year Dona Joaninha started to lose her vison and had to go through another operation:

Since then, I've been left almost blind. Sometimes, I'm scared to cross the highway alone. Sometimes I'd go along the sides of the road to see if anyone could accompany me.. because I was like this.. and only saw the cars if they were very close (...) It was all of a sudden! (...) Until I found a way to get the surgery. A friend of the health secretary arranged all the paperwork (...) I had the surgery in the eye clinic. At that time I stayed three months in Imperatriz, I couldn't come back here... I had no work. And I still can't see like I used to. I can only read large print and, this, with glasses!

^{101.} State Secretary for the Environment and Natural Resources/SEMA (SOUZA, A.C.C., DOMINICE, C.C.E.), Technical Report, 2008, p. 2.

UPR2 was Vale's first incursion into pig metal production in the Amazon (since then Vale has gone into ore supply and rail transport to the port of São Luis). In 2005 Vale began construction of Ferro Gusa Carajás in Marabá (located in Pará state.) In total, Vale built 11 reduction units, capable of producing 967,016 cubic meters of charcoal¹⁰² per year, distributed in five cities in Maranhão¹⁰³ to supply the furnaces for the steel mill in Marabá.

The state environmental secretary (Secretaria Estadual do Meio Ambiente/ SEMA) accepted to provide licences for these units conjointly, without taking into account the risks inherent in these types of activities, which would have required a much more detailed licence. Nor was there any federal involvement in the licensing due to the fact that the charcoal was destined for a plant in another state (Pará).¹⁰⁴

The environmental degradation associated with Vale's charcoal furnaces (along with chemical products used in the cultivation of eucalyptus¹⁰⁵) quickly deteriorated the health of the residents of the Califórnia settlement, as will be detailed in this report.¹⁰⁶

In addition to atmospheric pollution, the settlers also felt the impacts of pesticides spraying of the eucalyptus plantations before 2008, also located next to the Califórnia settlement. Although the pesticide is no longer sprayed from planes, residents complained the wind continued afterwards to carry some of the pesticides sprayed from the tractors into the settlement.

In 2009, Vale sold 100% of the land attached to UPR2 to the Municipality of Açailândia, representing a total of 82,000 hectares of forest, 34 hectares of eucalyptus, 41 hectares of natural reserves and the rest in infrastructure. Vale sold 8.2 million cubic metres of eucalyptus wood from the Monte Libano farm (the land on which the operation is located) to Suzano Holding, S.A., which produces paper and cellulose.¹⁰⁷ In addition to the closure of the production unit, which could potentially relieve residents, the latter have asked Vale and the authorities for reparations for the damage related to water and air pollution linked to the production of charcoal and the pesticides used in the cultivation of eucalyptus. The residents also hope that the planting and management of eucalyptus on the part of Suzano will be performed under an adequate licensing process and environmental monitoring to avoid further contamination of the land and water. (see section II and V).

^{102.} State Secretary for the Environment and Natural Resources/SEMA (SOUZA, A.C.C., DOMINICE, C.C.E.), Technical Report, 2008, p. 2. 103. In addition to Açailândia, charcoal production units were built in Imperatriz, Cidelândia, Vila Nova dos Martírios, and São Pedro da Água Branca.

^{104.} Article 4° of resolution 237/97 of the National Environmental Council establishes that IBAMA is to perform the environmental licensing process on "undertakings and activities with significant environmental impact" that are "located or developed in two or more states."

^{105.} In Brazil there is literature available on the risks of environmental poisoning linked to eucalyptus cultivation. TUFFI SANTOS, L.D. FERREIRA, F.A; FERREIRA, L.R; Duarte, W.M.; TIBURCIO, R.A.S.; SANTOS, M.V. Poisoning Of Eucalyptus Species Subjected To Glyphosate" Revista Planta daninha vol.24. no.2. Viçosa Apr./June 2006. Available at:

http://www.scielo.br/scielo.php?pid=S0100-83582006000200020&script=sci_arttext&tIng=es

^{106.} On 8 March 2008, around 150 women of via Campesina (which is part of the MST) incorporated into their celebration of the International Day of Women a protest against Vale's charcoal furnace in Açailândia. Shortly after this incident, the public authorities pressured Vale to comply with two items in the environmental licence (such as the building of smoke burners and effective communication on air monitoring.) Although Vale said it had complied with demands made by the state environmental secretary, the residents of the Califórnia settlement did not feel the situation had improved. Hence in October 2008 they complained to different authorities asking for the "immediate closing of the furnace." Despite these protests, charcoal production continued, at an even higher level. 107. Clarifications made by Vale in May, 2011.

Section II Findings and Human Rights Violations

Violations of the right to health and a healthy environment

1) The legal framework:108

Right to health

At the international level, the right to health is established in article 12 of the International Covenant on Economic, Social and Cultural Rights, ratified by Brazil, which recognises the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.

As recognised by the Committee on Economic, Social and Cultural Rights, "the drafting history and the express wording of article 12.2 acknowledge that the right to health embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment."¹⁰⁹ The Committee interprets the right to health as extending to "the underlying determinants of health, such as access to safe and potable water and adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information, including on sexual and reproductive health. A further important aspect is the participation of the population in all health-related decision-making at the community, national and international levels."¹¹⁰

It is worth mentioning that the right to health includes the obligation, on the part of the state, for the need to prevent and reduce "the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health."¹¹¹

That said, the First International Conference on Health Promotion in Ottawa in 1986 considered as fundamental conditions for health: *peace, shelter, education, food income, a stable ecosystem, sustainable resources, social justice and equity*" and includes in its definition of health promotion "the process of enabling people to increase control over, and to improve their health.¹¹²

At the regional level, the American Declaration on the Rights and Duties of Man holds that "every person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources." This right to health is explicitly expressed in Article 10 of the San Salvador Protocol, ratified by Brazil.

^{108.} For more references, consult the "Normative Framework" annex in the CD-ROM (in Portuguese only).

^{109.} State Secretary for the Environment and Natural Resources/SEMA (SOUZA, A.C.C., DOMINICE, C.C.E.), Committee on Economic, Social and Cultural Rights, General Comment n°11, Plans of action for primary education, E.c.12/2000./4.S2 110. Ibid §11.

^{111.} Ibid §15.

^{112.} First International Conference on Health Promotion, Ottawa Charter for Health Promotion. Ottawa, 12 November 1986.

In Brazil an important historic step in the definition of the concept of health/diseases took place at the 8th National Health Conference in 1986 which reinforced the Health Reform movement. At the conference, health was defined in its most comprehensive sense as "*resulting from conditions of food, housing, education, income, environment, work, transport, employment, recreation, land access and ownership, and access to health services. This is also, above all, the result of forms of social organization of production that can generate difficulties in life standards.¹¹³*

At the national level, he Federal Constitution of 1988 establishes health as a fundamental right guaranteed with distinct protection: "Article 6° -- Social rights are education, health, food, work, housing, recreation, safety, social security, maternal and child protection, assistance to the poor, in the terms of this Constitution." The Constitution also establishes the obligation of the state to provide for the right to health through specific public policies:

- Article 196: Health is a right of all and a duty of the state, guaranteed through social and economic policies on the reduction of the risk of illness and other problems, and on universal and equal access to actions and services for its promotion, protection, and recovery.
- Article 197: Health actions and services are publicly important that public power must arrange, through terms of law, regulation, oversight and control, perform directly or through third parties, and also by legal entity or corporate body.
- Article 200: It is responsibility of the sole health system, among others, in terms of the law:
 II to perform health and epidemiological monitoring, along with those for worker health;
 (...) VII to collaborate on defence of the environment, including the work environment.

Finally, Health Law N° 8.080/199¹¹⁴ describes conditions for health promotion, protection and recovery, and the organisation and function of services. Article 3 of the Health Law describes a wide perspective on the concept of health used in this report: "Health determinants are, among others, food, housing, basic sanitation, the environment, work, income, education, transport, recreation, and essential goods and services; the health levels of the population express the social and economic organisation of the country."

Right to a healthy environment

Even though the right to a healthy environment is not explicitly recognised by the International Covenant on Economic, Social and Cultural Rights, a healthy environment is closely linked to other rights protected in the Covenant, such as the right to health.¹¹⁵

The serious environmental problems that affect the world were the reason that, in 1968, the UN General Assembly called for a Conference on the Human Environment, which took place in June 1972 in Stockholm.

In 1988 the UN General Assembly approved a Resolution to hold a conference on the environment and development to evaluate how countries have promoted environmental protection since the Stockholm Conference. In 1989 the General Assembly called for the United Nations Conference on Environment and Development (UNCED), known as the "Earth Summit," held in Rio de Janeiro in 1992. In 1990, the UN General Assembly adopted a Resolution that recognised the right of all

^{113. 8&}lt;sup>th</sup> National Health Conference http://portal.saude.gov.br/portal/arquivos/pdf/8_CNS_Relatorio%20Final.pdf

^{114.} Available at: http://www.planalto.gov.br/ccivil_03/Leis/L8080.htm

^{115.} Article 12 of International Covenant on Economic, Social and Cultural Rights provides: The step to be taken by the States parties to the present Convenant to archieve the full realisation of this right shall include those necessary for : [...] b) the improvement of all aspects of environmental and industrial hygiene.

individuals to live an environment adequate for their health and well-being.116

In terms of international norms, in relation to the specific themes discussed in this report, the *Stockholm Convention on Persistent Organic Pollutants* (POPS Convention) establishes measures to gradually eliminate the emission of persistent organic pollutants (POPs) because they are not biodegradable and they accumulate in living organisms, thereby damaging health and the environment. Brazil adopted the text of the Convention through Legislative Decree 207 on 7 May 2004, and issued Decree 5472 on 20 June 2005 This Convention includes the obligation of State Parties to adopt regulatory measures related to all stages of the life cycle – production, import, export, the use of substances classified as persistent organic pollutants.¹¹⁷

At the Inter-American level, article 11 of the Protocol of San Salvador states: "everyone shall have the right to live in a healthy environment and to have access to basic public services". It also provides that the "State Parties shall promote the protection, preservation, and improvement of the environment."

Within the domestic legislative framework, the Federal Constitution guarantees in Article 225 that all have the right to an ecologically balanced environment, which is an asset of common use and is essential to healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations." In addition, the Constitution determines that, in order to guarantee the exercise of this right, public authorities must: "i) preserve and restore essential ecological processes and provide ecological treatment of species and ecosystems; (...) iv) require, in the manner prescribed by law, for the installation of works and activities which may potentially cause significant degradation of the environment, a prior environmental impact assessment, which shall be made public; v) control the production, sale and use of techniques methods and substances that carry risks to life, the quality of life or the environment."¹¹⁸

After the Federal Constitution, Law No. 6938/81 and environmental norms defined basic concepts of "environment," "degradation," and "pollution," and have set forth even more relevant objectives, directives and instruments for the adoption of a theory of responsibility.

Since the passage of Law No. 6938/81, Brazil has an official National Environmental Policy, which serves as a legal framework for all public policies on the environment to be developed by federal entities.. Prior to that, each state or municipality had the autonomy to choose its political directives regarding the environment, but in practice, few states chose to do so. The creation of Law No. 6938/81 allowed for the integration and harmonisation of policies with the directive objectives established by the law.

Other important national laws related to this report are: Law No. 6803/80 that addresses basic directives on industrial zoning in critical areas of pollution and other matters; Law No. 9605/98 that establishes judicial and administrative sanctions on conduct and activities that damage the environment; Law No. 10.257/2001, the City Statute, that establishes general directives for urban policy; and Law No. 10.650/03 that creates public access to data and current information on agencies and entities in the National Environmental System (Sisnama.)

The National Environmental Policy establishes that cities working with the Secretary of the Environment (who issues licences and permits) must have a Municipal Environmental Council.¹¹⁹ Despite repeating requests, at the publication of this report, Açailândia did not have such a Council.

^{116.} The Need to Ensure a Healthy Environment for the Well-being of Individuals, UN General Assembly A/RES/45/94, 68th Plenary Session, 14 December 1990. §1.

^{117.} Persistent organic pollutants (POPs) are highly persistent chemical substances, capable of being transported over large distances and that accumulate in the tissues of living organisms; they are toxic for humans and animals. POPs circulate globally and can cause adverse effects to the different environments they reach.

^{118.} Unofficial translation

2) The Case of Piquiá de Baixo

a) The situation according to data from the investigation on the rights of health and to a healthy environment

The issue of the right to health has been a primary topic in meetings and assemblies of Piquiá de Baixo residents since 2004. Throughout the investigative process of this report, residents in diverse meetings spoke of health problems, as well as problems in accessing health services. The Box below shows observations on the health situation gathered at meetings in 2004 and 2005.

Health Diagnosis of the Residents Assembly, 11 November 2004

Health/Basic sanitation/infrastructure

- --Heavy pollution
- --Poor hospital care
- --Lack of professional patient care
- --Lack of public sanitation and trash disposal
- --Medical negligence
- --Absence of welfare/food
- --Lack of qualified of health professionals

Diagnosis of the First Programmed Assembly of Piquiá de Baixo, July, 2005

HEALTH

Description of the problem

- --Respiratory problems, principally observed in children
- --The Piquiá de Baixo hospital does not function as a hospital but as a health clinic
- --Lack of permanent ambulance services. There is a car that functions as an ambulance, but it is not always available.
- --People rely on other members of the community for transport. For example, the priest's car is often used as an ambulance and one woman gave birth in the car.
- --There is no primary care at the hospital or high blood pressure monitors.
- --There is no longer any dental treatment at the hospital.
- --There is a lot of pollution from the furnaces of the steel mills and from Piquiá's unpaved streets.
- --Unsanitary conditions at the mills. The use of gas to burn at the mills, despite a standing resolution recognising that it causes various health problems in workers.
- --Industrial waste on the streets Piquiá that contain high content of silica and other toxic elements spread by the wind.

"In this house we suffer from sinusitis, throat problems, headaches and eye problems. My son is 21 and already suffers from eye problems, he blinks all the time, he can't open his eye, he doesn't see very well (...) The doctor told us that we had black powder inside us. Our neighbour already had an x-ray, and the doctor said to leave here as soon as possible (...) my husband died four months ago. Two months before, the doctor examined him and said there was nothing to do, that his lung was very full." Francisca Silva, oral testimony, 2010.



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The testimony of Dona Francisca, whose wall faces the Gusa Nordeste plant, is illustrative of the health damages in the neighbourhood that residents describe.

At the end of the 80s, the resident population of the industrial district of Piquiá de Baixo showed severe health damage resulting from the environmental changes allegedly caused by the **heavy pollutant emissions by the plants,** some located less than a kilometre from the closest houses.



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"This pollution hurts a lot of people. People don't have a moment to clean the house, which is always dirty. The smoke begins and our eyes start to run, our noses are stuffed up, our throats dry, headaches. There are people living at home today. Some already left. My sons who left Piquiá are in better health today. $(...)^{120}$

During its field visit, the investigative team observed that the pollution in Piquiá de Baixo was visible to the naked eye. There were dusty trees, gray houses, and a lot of noise at the end of the day.

Dona Francisca, resident of the neighbourhood for 29 years, feels physically surrounded by pollution. On one side, pig iron is deposited on the ground, visible less than 20 metres from her house. The iron "*comes down like fire*"¹²¹ and the hot smoke drives her away from her kitchen, while seeing heavy dust from the crusher¹²² covering the door of her house. Dona Francisca also feels the effects of the tremendous noise of the thermal power station.

The residents believe that this situation, which violates their right to health and a healthy environment, is also due to the industrial waste emitted into the open air. For years, the slag and *munha*¹²³ two different solid residues from the process of pig iron production, have been emitted into the environment, contaminating plants, animals and people. Various residents say that the wind brings the dust and the "ball dust." This dust is a by-product of production piled in columns alongside the houses and many times is blown into the wind by the crusher – one of the machines that reduce the 'by-product' into particles.

Beyond the evidence of damage to health and the environment as a result of the pollution caused by residues in the water, soil, and air, testimonies collected in interviews show that solid residues emitted a few metres from Piquiá de Baixo residents' houses have caused **serious and fatal physical injuries.** These constitute violations of the rights to physical integrity and life, as will be analysed. According to residents' testimonies, seven year old Gilcivaldo Oliveira Souz, approached the mountain of 'munha,' the incandescent dust, or slag deposited by company trucks, while looking for some pieces of coal to heat up food at home, The mountain started to collapse, and the boy's legs burned up to his hips. On 2 November 1999, after 20 days of agony, Gilcivaldo died. His family presented a claim for moral and physical damages against Gusa Nordeste. They received payment of a monthly minimum wage for 58 years as decided by the judge who held the company responsible for his death on 27 June 2002.

Another victim of residue accidents was Ivanilson Rodrigues da Silva. He died on 21 October 2001, having suffered from burns on one of his legs.

In 2002 the Centre for the Defence of Human Rights of Açailândia denounced these burn problems and, as a result, IBAMA's Technical Inquiry confirmed that the fences to isolate the waste deposit area were, at the time, damaged. Despite these findings, the waste dump remains open and easily accessible to anyone. Further, as there is no provision or intention that these "mountains" be removed, they remain and continue to pollute and pose a risk of accidents.

During a meeting on 4 September 2010 with SIFEMA, the Union of the Pig Iron Industry in Maranhão,¹²⁴ the investigative team, along with the FIDH international mission, SIFEMA's President stated that the companies are building a wall to separate the patio that contains the slag

^{120.} Tilla. Oral Narrative. Piquiá de Baixo, 2010.

^{121.} SILVA, Francisca, Oral Narrative. 2010

^{122.} After many protests by residents, Gusa Nordeste's two crushers are being enclosed according to a procedure monitored by MPE in order to contain dust clouds. Viena Siderúrgica is studying similar processes to contain pollution.

^{123. &}quot;Munha" is a slag powder that can be used in construction, such as in railway construction, or as a fertilizer. It is production waste that is cooled and then tempered with extreme heat from below. According to the survey The Alternative Technologies For Using Waste From The Pig Iron Production For Agroforestry Purpose: Study On Economic And Technical Viability" (Amazonia Embrapa Oriental, Documents n° 333, 2008) closing the furnaces "is the major part of the total waste generated, obtained by the reaction between the cast iron and the minerals impurities, which results in high levels of calcium, aluminum, magnesium and iron oxide. Its total pig iron production is around 100kg/t and 150kg/t.

^{124.} The President of the Pig Iron Plants of Maranhão represented all five plants in the area when meeting with the international mission.

and *munha* from the residents' houses. When questioned if they had any intention of removing the residues from the area, he said that the deposit in the area was made exclusively by the company Gusa Nordeste, and that a barrier was being constructed to separate the community from the deposit site. At the time of publication of this report, the construction of the wall was not completed.

Another factor that contributes to the pollution is the absence of filters. The President of SIFEM confirmed the absence of filters at a meeting with the investigative mission¹²⁵ making reference to Directive 111/2008,¹²⁶ which defines deadlines for what is necessary to regularise the situation of the plants. Smoke emissions filled with particles of charcoal residue blow in large black clouds each time that combustion is not regular making it necessary to 'uncork' the oven.

It was also confirmed that, recently, even before the regularisation process of the directive to control emissions, one of the companies built a thermal electric plant fed by the emissions from its furnaces. This guarantees the production of electric energy for internal use and may provide the possibility of making profits from the sale of carbon credits. Despite this, such system did not manage to contain all the emissions and the dust continued to pollute, decades after the beginning of the operations.

The investigation process contributed to highlight that the state of Maranhão did not perform any monitoring of the emission of pollutants and/or waste deposits, or even published data on self-monitoring presented by the pig iron producers of Vale.

In November 2005, 21 resident families of Piquiá de Baixo (those physically closest to the plant) lodged a complaint denouncing the harm caused to their health by the pollution produced by the Gusa Nordeste plant, and demanded reparation. After almost five years, despite pressure and popular support, the legal procedures have not yet concluded.

The environmental expert report of Dr. Ulisse Brigatto Albino,¹²⁷ performed at the request of the district judge of Açailândia, sought to verify the existence of a relation between the activities of Gusa Nordeste and the cases before the court. The report confirmed that "these emissions of soot, water containing metal residues and noise **are certainly harmful to human health.** The condition in which the residents live, their rituals and habits make the situation even more critical. Livestock such as chicken and pigs eat insects and waste containing traces of metals that can be carried by storm water that washes from the courtyard of the company to those of homes...at the time of the inquiry, with the wind blowing in an east-west direction, there are many houses in this region affected by gas emissions. The cooling water of the furnaces comes warm out of the company courtyard containing dissolved material, the smell of iron oxide is strong, taking into consideration that it is not just iron in the processed minerals, **this water can very well contaminate the courtyards of the houses and the people who live there, principally children**. Furthermore, after passing through the courtyards of the houses, the water reaches the Piquiá River carrying metals and increasing the temperature of the water."¹²⁸

The study concluded that "the conditions in which the company operated at the time of the investigation appear to be incompatible with the presence of residents in the area." The expert also indicated that "**ideally, the community should be relocated**."¹²⁹

Dona Tília¹³⁰ sums it up as follows: "They are rich, they put up a company in someone else's courtyard. Then they put a chemical product on us. And there's no punishment, nothing. Why?

^{125.} The meeting with SIFEMA occurred on 14 September 2010.

^{126.} Directive of the State Secretary of the Environment and Natural Resources of Maranhão, which is responsible for all pig iron production installations in Maranhão at the date of publication, to promote process improvements, the installation of control equipment, the adequate disposal of residues, monitoring, and other measures necessary to the integral fulfillment of environmental legislation. 127. Environmental Expert Report, Dr. Ulisses Brigatto, 2007.

^{128.} Environmental Expert Report, 2007. Grifos nossos. Unofficial translation.

^{129.} ALBI O, Ulisses Brigatto. Environmental Expert Report. Imperatriz. 2007. Unofficial translation.

^{130.} Tília. Oral Narrative, 2010.

Because we are the bottom of the barrel, we are poor, we have nothing. Only because they are rich... they can't do this to people, but we are human beings, same as them. We deserve our health. We need health to work and put food on our tables. But we eat our food with the dust of the company. We sleep breathing the dust of the company. Everything we do here is with this dust..." Dona Tília said that all of her habits and her entire way of life are at risk due to pollution caused by the companies. Some of her neighbours use the same expression: "Here, people eat and breathe dust."

b) Findings of the investigation on the impact on the right to health and a healthy environment in Piquiá de Baixo

The residents' association in Piquiá de Baixo reports that there are about 300 homes in the community, CREA reports that there are 298 homes in the community, 131 and our investigative team located 240 households. Our team interviewed 184 (76.7%) of the households. In 18.8% of the households, no one was home after various tries; 3.3% were abandoned, and only three households (1,3%) refused to answer the questionnaire.

In terms of population covered, 757 people lived in the houses visited (4.1 residents per household on average), and 50% of these inhabitants were women. The average age is 26 years old; however, 50% of the population is under 21 years old.

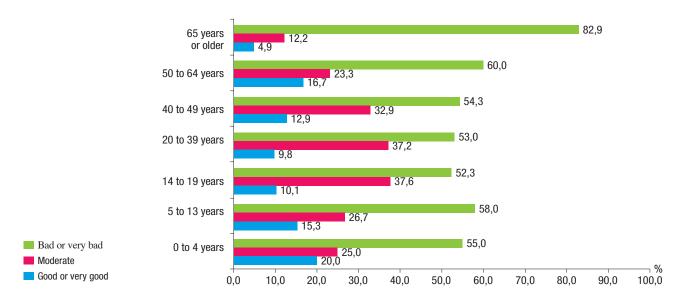
Age	Female		Male		Total	
	n	%	n	%	n	%
0 to 4 years	40	10,6	34	9,0	74	9,8
5 to 13 years	73	19,3	90	23,8	163	21,6
14 to 19 years	55	14,6	54	14,3	109	14,4
20 to 39 years	113	29,9	124	32,8	237	31,3
40 to 49 years	44	11,6	26	6,9	70	9,3
50 to 64 years	33	8,7	28	7,4	61	8,1
65 years and above	20	5,3	22	5,8	42	5,6
Total	378	100,0	378	100,0	756	100,0

Table X. Resident population according to gender and age. Piquiá de Baixo, 2010

Source: Developed with data gathered by the investigation team

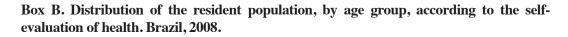
A major part of the population described their state of health as 'bad or very bad' (56.5%) and only 12.4% evaluated their health as 'good or very good;' the rest (31.1%) perceived their health as 'moderate'. This evaluation did not vary significantly in relation to gender, however there was a large variation associated with age, with the older respondents giving a worse evaluation of their health (Box A.) Despite the worst health situation for older people, more than 50% of the residents of all age categories considered their health as 'bad or very bad', which in and of itself remains higher than similar evaluation within the Brazilian population. (Box B)

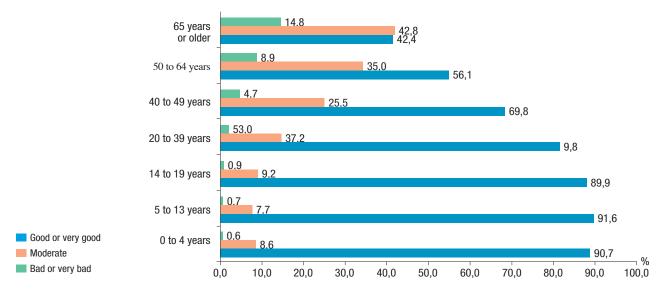
^{131.} Information collected in an interview with members of the residents' association and representatives of CREA-MA, which confirmed this estimate at a hearing.



Box A. Distribution of the resident population, by age groups, following the health evaluation. Piquiá de Baixo, 2010

In Brazil, the estimates of the 2008 National Housing Census (PNAD)¹³² notes that 77.3% of the population assessed their health as 'very good or good' and just 3.8% as 'bad or very bad.' Data from the same investigation show that in the region with the smaller proportion of people evaluating their health as 'good or very good' the rate was 75.5%, much higher than the 12.4% noted in Piquiá de Baixo. In that same region, the rate of people who evaluated their health as 'bad or very bad' was of 4.6%, much less than the 56.5% in Piquiá de Baixo.





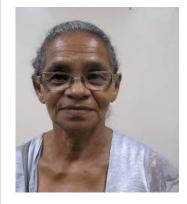
Source: IBGE, Directory of Investigations, Coordination of Work and Revenue, National Housing Census, 2008.

132. IBGE, National Housing Census. A Panorama of Health in Brazil access and use of services, health conditions and health risk and protection factors 2008. Directory of Investigations, Coordination of Work and Income, IBGE: Rio de Janeiro, 2010.

Source: Developed with data a gathered by the investigation team

The testimony of Dona Francisca shows that, in addition to the poor health of the residents of Piquiá de Baixo, the pollution caused by the plants also makes the neighbourhood residents feel morally outraged. The following testimony of a resident highlights the suffering of hear husband and the difficulty for her to accompany him towards the end of his life in a dignified manner:

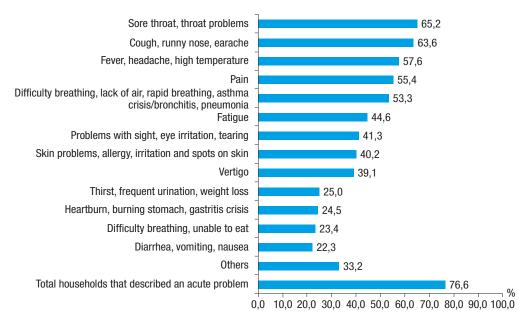
" I don't like to think about what I've been through...for me to see my husband in that way...I looked after him, I put him on the bed on a white sheet, because a patient always looks better on white. When I looked after him (and I have proof, on my sheets) the sheets were black, because they gathered the dirt and dust that was on his face (...) and I put the fan in front of him day and night, so he could breathe, because he couldn't manage to breathe. His eyes were watering from all the pollution around him. And it was a pollution that scratched. And there was very loud noise from the thermoelectric plant all night long (...) This is something that hurts me inside, to know that he died, and I could do nothing. Because there's nothing I could do, I couldn't leave the house because I didn't have anywhere else to go. And this was my life. And today he is dead, and I'll carry this for the rest of my life, to see him suffer without being able to do anything."



This high prevalence of health evaluations as 'bad or very bad' could be, in part, explained by the high incidence of acute illnesses. In 76.6% of the homes visited, some members had suffered from acute illness within the 15 days prior to the survey. (Box C) A total of 242 people (32% of the population covered by the investigation) had an acute illness in this period.

The main symptoms of illnesses reported in homes included problems with the upper respiratory tract, such as pain or throat problems (in 65.2% of the houses visited), cough, runny nose or earaches (63.6%), difficulty breathing (57.6%) (Box C). Other symptoms described in 41,3% of the households were vision problems, eye irritation and tearing. It is important to note that respiratory symptoms have been recognised by the residents as a health problem relevant to the community (see Box 12 – Diagnostic of the First Programmatic Assembly of Piquiá in July 19, 2005.)

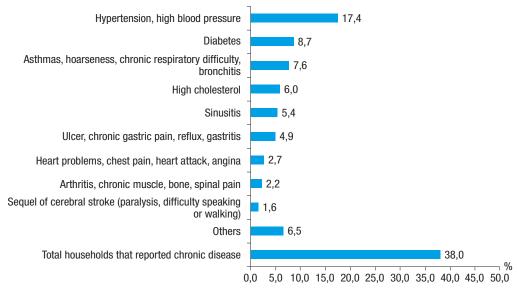
Box C. Distribution of households according to symptom/problems associated with a described episode of acute illness. Piquiá de Baixo, 2010.

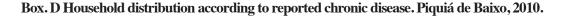


FIDH, Justiça Global, Justiça nos Trilhos / 45

In terms of chronic diseases, in 38% of households, some members had already been diagnosed, totalling 82 people with some chronic illness (10.8% of the population covered.) The most common chronic diseases in households diagnosed by a doctor or health professional were hypertension and diabetes, in 17.4% and 8.7% of homes, respectively, followed by asthma (7.6%), high cholesterol (6.0%), and sinusitis (5.4%) (Box D.) Data from the 2008 PNAD show that in Brazil the chronic diseases most cited were: hypertension and back or spinal pain, followed by arthritis or rheumatism; bronchitis or asthma; depression; heart disease and diabetes. Such a highly distinctive profile as found in Piquiá de Baixo, where respiratory diseases were the third group of the most common chronic diseases, could underscore the importance of environmental externalities, such as air pollution, in the morbidity profile of this population.

In terms of the prevalence in the population, 10.8% of Piquiá de Baixo's population is stated to have a diagnosis of some chronic illness. Brazilian population data in general indicate a much higher predominance of chronic disease, such as hypertension, for example, whose rates (14% according to the PNAD 2008) exceed the total predominance of chronic disease in Piquiá. PNAD data also indicates that reports of chronic illness are much higher in populations with higher incomes,¹³³ explained by better access to diagnostics. This low prevalence of the total number of chronic diseases could therefore be considered as an indicator of the lack of access to diagnostic services.



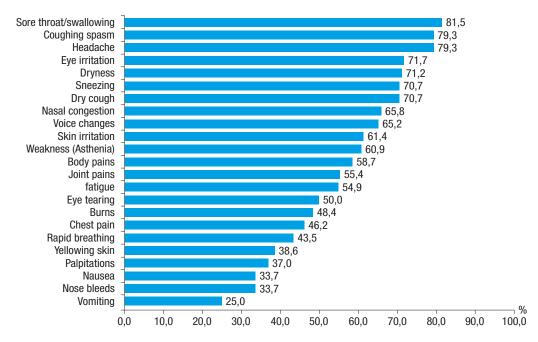


Source: Developed with data a gathered by the investigation

Health problems reported most commonly or frequently in households followed a profile similar to the distribution of symptoms of acute illness within 15 days prior to the interview. Respiratory problems and upper respiratory tract infections, along with eye irritation, figure at the top of the list of health problems among households (Box E) – such problems appear most frequent and serious in polluted environments with exposure to soot or smoke.

^{133.} VIACAVA, F. Access and use of health services by Brazilians. Radis, 96, August 2006.

Box E. Distribution of households according to health problems most common/frequent among residents. Piquiá de Baixo, 2010.



Source: Developed with data gathered by the investigation

The incidence of accidents linked to neighbouring plant operations is also characterised by the risk profile to which residents of Piquiá de Baixo are exposed. In 20.7% of households, at least one of the residents has suffered some accident. It is worth mentioning that nine households reported hand burns and another seven households reported vision damage resulting from coal powder (culm), situations directly related to steel/mining activities according to data in Table Z^{134} .

Table Z. Distribution of households according to type of reported accident. Piquiá o	le
Baixo, 2010. ¹³⁵	

		Household Distribution				
Type of Accident	n	% (in relation to total households that reportedan accident)	% (in relation to the total % of houlseholds visited)			
Hand burning	9	23,7	4,9			
Coal dust in the eye	7	18,4	3,8			
Others	2	5,3	1,1			
Total of households that reported an accident	38	100	20,7			
Total of households visited	184	-	100,0			

In relation to data on income and spending, the total household monthly average income at the time of this report was R\$ 640.42 (approximately 405 USD) with a median monthly income of R\$ 515.00 – approximately 325 USD – and a per capita monthly average income of R\$ 188.26 (approximately 120 USD), with a median of R\$ 145.66/ approximately 92 USD.¹³⁶ 73.4% of households reported

^{134.} Slag or "munha" is an end product of pig iron production that is first cooled and then kept in water in underground chambers for a long time.

^{135.} Even though it is not the focus of this report, it is important to note that there were also reports of 21 work/occupational-related accidents (55.3% in relation to the total number of households that reported an accident and 11.4% in relation to the total number of households visited.)

^{136.} Using the exchange rate of 1 Real for 0.6346 USD

purchasing medication in this period. The average spending on medicine for these households was R 100.3, comprising, on average, 18.0% of total income per household.

3. The case of Califórnia settlement

a) The situation in the Califórnia settlement: the right to health and a healthy environment

Chronological summary

-June 23, 2005: Vale receives an environmental licence to operate 11 charcoal production units in five cities on the Maranhão-Pará border. The unit known as UPR2 was located in an area next to the Califórnia settlement. It employed 106 people in peak periods (however, in August 2009 there were only 39 employees.)

-December 15, 2006: Residents file a complaint with the Municipal Health Council of Açailândia (MA) against the company Ferro Gusa Carajás S/A (FGC).

-2007 – The documentary *Vale of Tears*, which highlights residents' complaints regarding the health situation, is widely disseminated on the internet.

-November 2007: A delegation of Califórnia settlers goes to the Public Ministry. The settlers filed a complaint with the Public Ministry in 2006.

-February 15, 2008 in Açailândia: At the Regional Environmental Conference, residents once again denounce Ferro Gusa Carajás.

-March 2008: after years of learning about the risks associated with pollution, the settlers unite with Via Campesina in a protest against UPR2.

-April 10, 2008: Doctor Walderci Ferreira Filho, who worked in the Califórnia settlement's health clinic, writes a statement for the residents: "as a result of the installation of the coal units close to the settlement, there has been an increase, in certain seasons, in the number of patients attended for respiratory diseases."

-March/August 2008: The State Secretary for the Environment (SEMA) recognises problems with the licence and asks for a report on air monitoring. Vale submits an incomplete report, which lacks data on sulfur dioxide levels and data concerning total suspended particulate levels that exceed the National Council on the Environment (CONAMA) limits.

-October 2008: in a letter to officials, residents ask for the coal plan to be closed, arguing as Vale is not complying with SEMA demands.

-August 2009: in a meeting with members of Justiça nos Trilhos, Vale claims that it's only operating one burner, despite the fact that 36 furnaces are in use. The company commits to install the necessary number of burners. Vale also explains that its former plant was now property of Suzano Holding S.A. Consequently, charcoal production would be interrupted, and eucalyptus cultivation by Suzano around Imperatriz would be redirected for the pulp and paper industry. Vale would then possibly benefit from transporting the product to the external market. Although the company recently tried to negotiate to improve the situation, it did not indicate that it would provide any form of compensation to the community for harm caused in relation to the 4 years of operation of UPR2.

-In 2009, Vale sold the Monte Libano farm to the pulp and paper company, Suzano Holding S.A. UPR2's operations are anticipated to end in 2012.

2005 can be considered a turning point for the situation of the residents of the Califórnia settlement. After twelve years living in the settlement, the community started to be confronted with daily pollution coming from the smoke emitted by the charcoal burning of Ferro Gusa Carajás (FGC); located on the Monte Libano farm.

SEMA allowed to grant joint licenses for such projects without adequately evaluating the risks these projects could bear. It should be noted that the authorization of the licenses did not have to go through federal processes, despite the fact that the coal produced in Maranhão was destined to be

sent to a steel company located in another State, the State of Pará.137

When Vale installed the Processing Production Unit, it presented its operations as a solution to reduce the risk of using slave labour in the pig iron production chain. Labour practices analogous to slavery were reported in the hundreds of charcoal plants that supply almost two dozen steel/mining plants in the region, including the five that exist in Açailândia. These companies have been supervised since 1999, after they signed "Terms of Conduct Adjustment" with the Public Ministry. In a letter of commitment signed in August 2004 steel manufacturers committed to eliminate slave labour in the production of charcoal and to create work conditions in the pig-iron chain of production that are dignified, formalised, and modernised. In this context, Vale sought to streamline eucalyptus cultivation and charcoal production, breaking with the regional pattern of externalizing such operations, despite the fact that most of the work in these forests is done by outsourcing workers. This also allowed Vale to avoid environmental problems associated with the use of native Amazonian forests.

The residents of California are particularly concerned with air pollution and its impacts on health, in addition to the environmental impacts caused by the cultivation of eucalyptus.

In 2006, residents complained about the company to the Public Ministry and IBAMA.¹³⁸ By the end of that year, however, neither of those agencies had responded to the complaint, so residents filed a complaint on 15 December 2006 against FGC with the Municipal Health Council of Açailândia. The complaint stated: "We want municipal authorities to support the community and stop the pollution coming from the charcoal plant."¹³⁹

A 2007 documentary, "Vale of Tears" discusses the high number of complaints that have been made about the health impacts suffered by the residents of California. The film traces the history of the residents' health problems. Below are some examples.

Dona Maria Aldinete, settler, reports that she suffered a cerebral aneurysm and felt very ill due to the smoke. She further explains that her child, who is a year and a half old, has difficulty falling asleep due to extreme fatigue. Before going to bed, she gave her child Vicks¹⁴⁰ and the child remained tired and weak in bed.

Mr. Evaristo Cabral recounts that he and his family felt very poorly due to the smoke, and his neighbour also complained a lot that his children had colds and were very tired.

Mr. Raimondo Timóteo noticed that the area was now much hotter than before. He believes the pollution is a factor in bringing about this change.

Mr. Almeida, settler, said that the situation "is wrong," people are hurt, mostly older people.

Dr. Marco Aurélio Fonseca, Prosecutor in the area of environmental protection for the district of Açailândia, published an informal conversation with representatives of FGC when a delegation of California settlers went to the Public Ministry in November 2007. Dr. Marco Aurélio demanded the installation of filters to reduce the level of pollution.¹⁴¹

^{137.} The requirements for granting licences can be found in Ley no.6.938/81. Article 10 states: "The construction, installation, expansion and operation of facilities and activities that use environmental resources considered effective and potentially pollutant, as well as capable, in any way, of causing environmental degradation, will depend on prior licencising granted by the depend on priorthe compente, member of the National Environmental System (SISNAMA) and additionnally of IBAMA, without prejudice to any other required licences." Unofficial translation.

^{138.} The Brazilian Institute on the Environment and Natural Resources (IBAMA) is a federal legal authority with financial and administrative autonomy, connected to the Environmental. Its principal responsibilities are the implementation of environmental policy, regulation of environmental quality, the authorization and control of the use of natural resources, environmental control and monitoring, and the execution of actions to ensure compliance to environmental law throughout the country. http://www.ibama.gov.br

^{139.} Junior Mendes, member of the Human Rights sector of MST in Maranhão and at the time a resident of Califórnia Settlement. http://www.mst.org.br/node/3394

^{140.} Vicks is an expectorant often used in Brazil.

^{141.} Available at: http://www.reporterbrasil.org.br/exibe.php?id=1322

At the same time, on March 8, 2008, around 150 women from Via Campesina (of which MST is a member) held protests as part of their celebration of International Women's Day against Vale's charcoal plant in Açailândia. The women occupied the company's installations for some hours and also temporarily blocked highway BR-010.

The occupation was a political action by rural and urban women, and represented an act of protest and support for the families of the Califórnia settlement who suffered due to smoke from the burning of eucalyptus. Women protested against the increased mono-cultivation of eucalyptus in the region by transnational companies that operated in the Brazilian countryside. The cultivation of eucalyptus in Vale's area is exclusively destined to supply a charcoal plant, largely responsible for the region's air pollution and for area resident health damages.¹⁴²

Among the demands of the protest were: the installation of filters, the end of smoke emissions, the demand for vision treatments for those affected, and the closure of the plant.

The protest came in support of the demands of the settlers and triggered media coverage . In the program *Repórter Brazil* the settlers said that due to the smoke, they encountered respiratory problems, bad headaches, eye irritation, physical fatigue, sinusitis and other problems. They added that more than 30 people had already gone to the health clinic in Açailândia, 12 kilometres away from the settlement.

After the protest, authorities started to pay more attention to the problem and started to pressure Vale to comply with its environmental licence (for example, by installing smoke burners and providing adequate reports on air monitoring.)

Vale recognizes the impact on the Califórnia settlement in the press

FOLHARPRESS - 10/03/2008

http://www1.folha.uol.com.br/folha/brasil/ult96u380560.shtml

RIO DE JANEIRO – On Monday, Vale recognized that the charcoal produced by its pig iron company in the municipality of Açailândia (MA) could cause a "small" impact, however rare, on the MST (Landless Workers Movement) settlement located in the municipality. MST affirms that the charcoal plant is causing respiratory problems among residents of the settlement. According to Pedro Gutemberg, director of FGC (Ferro Gusa Carajás), Vale is seeking technological solutions to reduce the smoke coming from the plant. He denied, however, that there were environmental problems in the area. According to the director of corporate affairs and energy, Tito Martins, the new technology used would simply "improve what is already good." "Our environmental license was very clear about the fact that eventual impacts caused by smoke would be little. If it happens, although it is unlikely, it will be when there is a thermal inversion", stated Gutemberg. He also noted that a column of eucalyptus that separated the plant from the settlement functioned as a "natural filter" of the smoke emitted. "We are seeking a technological solution. We already have a prototype in our industrial unit." Director Martins said that all Vale operations were licensed. The MST protested in front of the charcoal plant on Saturday. The movement maintains that the plant was installed 800 meters from the settlement, which has 1,800 residents. Vale says the distance is 1.5 km.

^{142.} MST. Note to the Press, 2008.

In April 2008, SEMA issued an opinion on Vale's charcoal plant and designated two analysts. César Carneiro undertook a monitoring visit to the company and organized a meeting with the former director of UPR2. SEMA's notice presented a series of demands for the company; some of which would apparently not have been complied with, according to the analysis of the present report.

ANALYSIS OF THE REPORT PRODUCED BY VALE: NON-COMPLIANCE WITH THE ENVIRONMENTAL LICENSE AND INCOMPLETE DATA DISCLOSURE

Pressured by the mobilisation of social movements, SEMA performed in April 2008 a technical analysis on the conditions of operations of the production unit of Vale in the area. The experts concluded that the **Environmental Control Plan (PCA) in the license was not compliant with applicable requirements:** experts noted that Vale should build 16 gas burners, considering that each burner barely covers four of the 66 kilns. Vale had planned the construction of one. It also noted that the company should be warned that it had not signed the Registry of Users and Consumers of Forest Products of the State of Maranhão (CEPROF-MA), obligatory for commercial forest enterprises, according to Decree No. 23.170 of June 28, 2007. Finally, SEMA would determine if Vale had done two verifications of air quality: 1) of the levels of Total Suspended Particulates (TSPs); 2) of the levels of sulfur dioxide.

In response, Vale presented an Air Quality Monitoring report¹⁴³ addressing the evaluation of TSPs. The levels of sulfur dioxide, however, were not measured. In the Monitoring Report, the company said it had measured TSPs for five days (13/03, 19/03, 24/03, 31/03, and 04/05 of 2008) using two HI-VOL measures and compared the results with the parameters of the National Council on the Environment (CONAMA), which regulate the limit of tolerable in the country. Vale controversially concluded that the company did not exceed the daily limits during these five days, "not being possible to identify trends on the air quality levels in the area of direct influence of the Processing Production Unit." However, Vale's conclusions can be strongly refuted: the company recognised that it ignored results from 31/03, when the particle level was much higher than CONAMA's acceptable standard. The allowed limit is just 240 μ g/m³, but that day the measure showed 911,6 μ g/m³ TSP, according to the company's own report. Vale presented two justifications for leaving out of the analysis one of the five days. The first was that the measure was biased due to the movement of charcoal during loading and transportation operations, nearby the location where measures were taken. The second was that "on 31/03, kilns 65 and 66, also located nearby the measurement site (Hi-Vol measurement) P02, were in a phase of carbonization." Both justifications can be questioned. Firstly, Vale's explanation lies on a hypothesis (the company never proved that the particles were generated by the movement of loads located nearby the measurement sites, and hardly mentioned that this could have been a possibility). Secondly, arguments brought forward lack strong basis: Vale solely mentioned that kilns 65 and 66 operated near the measurement sites, which according to them, makes the report biased. Contrary such arguments, the report does not mention any norm to determine the distance that needs to be established between kilns and the meters used for measurement. Likewise, there is no objective reason for leaving out results captured on the day which presented higher emission levels (around four times higher) than allowed. In this regard, it could be argued that art. 69-A of the law 9.605/98 (Law on Environmental Crimes) has been violated: "To elaborate or present, in licensing, forest concession or any other administrative procedure, study, report or environmental report that is totally or partially false or misleading, including by omission."

^{143.} VALE, Air Quality Monitoring Report, Mimeo, 2008.

On 17 September, 2010, the FIDH mission in association with Justiça Global met with Vale representatives in their headquarters in Rio de Janeiro. On this occasion Vale representatives were informed of the contradictions in the Air Quality Monitoring Report. The company representatives were not able to adequately respond; they did not know how to explain the reasons for the omission. It is important to note that the representatives told the FIDH/Justiça Global mission that the Hi Vol measures were only installed three years into UPR2's operations.

Incongruence between the license and the operations

The Hi-Vol measures (necessary to perform the "evaluation program on air quality and the accompanying burner operation") promised by Vale in the PCA (Environmental Control Plan) that forms the basis for the license, were only installed in 2008 - three years after operations began.

--The first smoke burner, also promised under the PCA and that was essential to minimize the impacts admitted by the company in this same document, was **only installed in October 2008.**¹⁴⁴ Vale installed another burner four months later. The State Secretary for the Environment had already considered that at least 16 burners were needed.¹⁴⁵

According to information received from Vale, the company has also taken the following measures: --"maintenance of a green belt around UPR2, 1.5km long, that functions as a natural barrier against the smoke;"

- "community grievance mechanism, adopted to register, address and respond to community complaints."

Vale also indicated that it will "annually supply the Sustainable Development Agency with a Supply Plan, and each semester will provide to this agency a report on progress of the Environmental Management Plan."

A month after the protests on 10 April 2008, complaints formulated by residents were reinforced. Dr. Walderci Ferreira Filho, who worked in the settlement's health clinic, wrote a statement attesting that "as a result of the installation of the coal units close to the settlement, there has been an increase, in certain seasons, in the number of patients attended for respiratory diseases."¹⁴⁶ The document's annex contains a list of residents with their symptoms and health problems: Respiratory problems, sore and inflamed throat, skin problems, fatigue, intense cough, among others.

Even then, in October of that year, Califórnia residents felt the situation had not improved, so they sent "complaint letters" to various authorities asking for "the immediate closing of the charcoal plant" since Vale did not comply with demands from the environmental agency. Despite these protests, coal production continued although at a lower scale. Vale alleged that it had disconnected part of the kilns to meet the residents' demands. However, it is likely that the global economic crisis, which seriously affected Brazilian pig iron exports, was one of the reasons for the decrease in production volume.¹⁴⁷

145. State Secretary for the Environment and Natural Resources/SEMA (SOUZA, A.C.C., DOMINICE, C.C.E.) "Technical Report," 2008.

^{144.} Admitted in a meeting with representatives of Justiça nos Trilhos

^{146.} Various residents had also complained to the investigative team about the assault on their health in periods of high temperatures. O Jornal Estado do Maranhão also found "a 60% increase in the number of admissions for respiratory illnesses in Socorrinho," 15 September 2010, where the number of admissions in the Children's Hospital in Imperatriz (the "socorrinho" is commonly used by Açailândia residents taking into account its high profile) increased 60% in September, and 40% in August due to the high temperatures. According to the director of the hospital, "the most common illnesses in this period involved the respiratory system, such as throat infections, pneumonia, asthma, allergies and sinusitis."

^{147.} From January to October 2010 in Marabá, city where Ferro Gusa Carajás is located, \$263,622,035 in pig iron was exported. In the same period in 2008, the pig iron company exported \$790,622,984. Ministry of Development, Industry and Foreign Trade/Secretary of Foreign Trade (SECEX). Available at: http://www.mdic.gov.br//sitio/sistema/balanca/

Dona Maria Nusa,¹⁴⁸ 56 years old, illustrates how the smoke continues to bother people. Immediately after the emissions began, her health deteriorated, as did the health conditions of many others. She noted that many people have been sick due to the "bad smoke" and that some people left the settlement due to sickness. Dona Maria Nusa complains that the dust in the community is terrible and that the smoke is even stronger at night.

Dona Joaninha,¹⁴⁹ trained in community health and a settlement resident, had a vision problem that affected her healthcare studies. Suddenly, she started to feel as if she "was going to go blind." She attributes these symptoms to the smoke and pollution. Her sight, even after surgery, has not returned to normal.

To some extent, these deprivations faced by the local population served the company in that it allowed the company to offer the settlers some benefits presented as a "compensation" for the pollution. To give an idea of these deprivations, the residents noted in an assembly in March 2010: the lack of assistance from public authorities due to the lack of sanitary resources, the water supply, the quality of the roads, the provision of childcare and schools¹⁵⁰, and the promotion of recreation teams (such as soccer fields and a stage for a theatre group.)

The population, however, is not backing down from its demands. They are insisting on installation of filters, the end of the smoke, eye treatments for the most affected and finally, the very closing of the charcoal plant.¹⁵¹ The negotiations with Vale have not progressed, possibly due to the residents' stand not to trade off health for services that are public responsibility.

Beside the problem of atmospheric pollution, the residents report that they are affected by the intense pesticide use on the eucalyptus plantations connected to the company, which are also next to the Califórnia settlement. Even though air planes are no longer spraying pesticides, residents say that the wind still brings some of the volume of pesticides sprayed from tractors into the settlement.



Dona Joaninha

^{148.} Nusa, Maria. Oral Narrative, 2010.

^{149.} Pereira da Silva, Joana. Oral Narrative, 2010.

^{150.} The existing school needs to be enlarged. There is no local childcare, according to the document, "Memory – Assembly of the residents of Califórnia Settlement with the Participation of Members of the Justiça nos Trilhos." Mimeo. 2010 151. Ibid.

b) Findings on the right to health and a healthy environment in Califórnia



The investigative team found 196 households in the California settlement. In 155 of these households (79%), someone took part in an interview. The remaining residents were not located after various attempts – some were abandoned households or refused to participate in the investigation (21%).

A total of 635 people live in the visited households, with an average of 4.1 residents per household. 52.1% of the population is men, the average age is 28 years old, and the median age is 23 years old. 50% of the population is under 23 years old.

		Total				
Age	Fema	ale	М	ale	Total	
	n	%	n	%	n	%
0 to 4 years old	34	11,2	41	12,4	75	11,8
5 to 13 years old	46	15,1	71	21,5	117	18,4
14 to 19 years old	41	13,5	41	12,4	82	12,9
20 to 39 years old	90	29,6	89	26,9	179	28,2
40 to 49 years old	31	10,2	28	8,5	59	9,3
50 to 64 years old	38	12,5	35	10,6	73	11,5
65 years or older	24	7,9	26	7,9	50	7,9
Total	304	100,0	331	100,0	635	100,0

Table W. Resident population according to sex and age. California, 2010

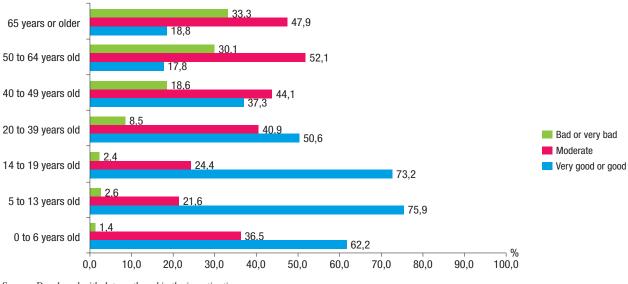
Source: Developed with data gathered in the investigation

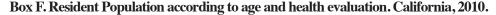
The health conditions of the population of California, as determined through self- evaluations, show a standard inferior to the national standard. While the proportion of people with a health evaluation of "good or very good" is 77.3% for the total population of Brazil¹⁵², it represents only 52,1% in the settlement. The proportion of people evaluating their health as "bad or very bad" by region in Brazil

^{152.} IBGE. National Housing Census.

is, at most, 4.6% in the North-eastern region, which presents the worst results in terms of health indicator, according to the PNAD in 2008. However, in California the proportion reaches 11.1%.

Even though there is a relation between the proportion of people with a health evaluation as "bad or very bad" and the increase in age, what can be observed in the California data (Box F), along with trends verified nationally by the PNAD, is that for all categories of ages this proportion is higher than the one for the entire Brazilian population. (see Box B for proportions in Brazil)

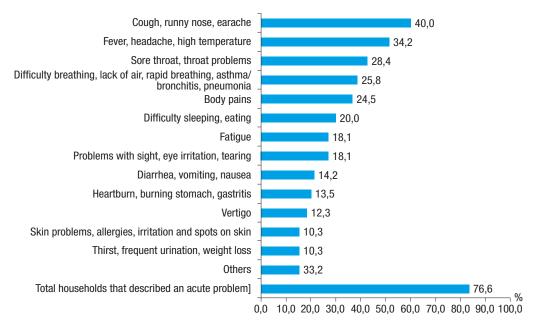




Source: Developed with data gathered in the investigation

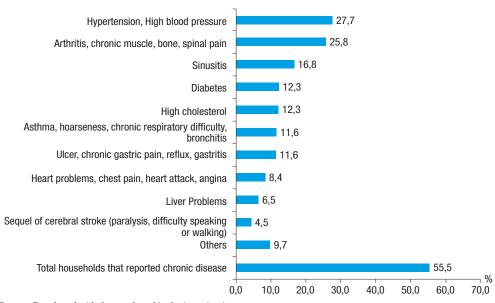
In 55.5% of visited households, symptoms of acute illness have been observed during the previous 15 days, mainly upper respiratory infections such as cough, runny nose, or earaches (40%), sore throat or throat problems, (28.4%) and difficulty breathing (25.8%) (Box G). Fatigue, a symptom referred to in qualitative interviews as an important problem, along with other respiratory and throat problems, was reported in 18.1% of households.

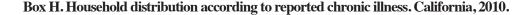
Box G. Household distribution according to symptom/problem associated with an episode of related acute illness. California, 2010.



Source: Developed with data gathered in the investigation

In relation to chronic illness, in 55.5% of households surveyed, some member reported having been diagnosed, representing a total of 124 people with chronic illness (19.5% of the population covered.) The chronic diseases that were most frequently diagnosed by a doctor or health professional include hypertension (in 27.7% of households visited) and arthritis, chronic muscle, bone and spinal pain (25.8%), followed by sinusitis (16.8%), diabetes (12.3%), high cholesterol (12.3%) and asthma (11.6%) (Box H.) This profile is similar to the national PNAD profile, with the exception of sinusitis, which appears as the third most frequent chronic illness in California, and is indicative of the problems experienced by a population constantly exposed to smoke and soot

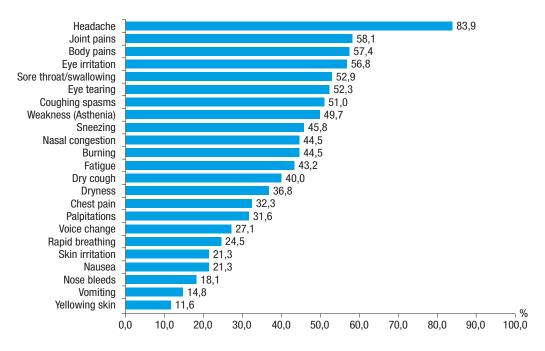




Unlike Piquiá de Baixo, where most of the common problems in households were respiratory, in California the most frequent problems observed were headaches (89.3%), joint pain (58.1%) and body pain (57.4%.) (Box I). However, the second most common group of symptoms is related to smoke and air pollution exposure: eye irritations (56.8%), sore throat/painful swallowing (52.9%), tearing of the eyes (52.3%), and coughing spasms (51.0%). Weakness and fatigue, often mentioned in qualitative interviews, also appeared in many households.

Source: Developed with data gathered in the investigation

Box I. Household distribution according to most common/frequent health problems among residents. California, 2010.



Source: Developed with data gathered in the investigation

In terms of data on income and spending, total average household income in the month prior to the investigation was R\$ 665.11 (with a median of R\$ 600.00) and an average per capita income of R\$ 205.34 (the median was R\$ 147.86). During the same period, 78.1% of households reported some spending on medicine. Average spending on medicine in these households was R\$93.69, equivalent on average to 22.5% of total household income.



Anísio Pereira

Section III

Violations of Other Associated Rights: Adequate Housing, Life and Physical Integrity, Information and Participation, Access to Justice

The principal objective of this report focuses on the assessment of health adverse impacts experienced by the residents of Piquiá de Baixo and California as a result of the operations of Vale and the companies involved in the iron ore chain of production. However, to determine the extent of responsibility for each of the actors involved in the violations, the following section frames the right to health in light of the principle of indivisibility of human rights. As explained, health must be understood as part of a set of rights essential to a dignified life.

This chapter analyses the human rights violations suffered by the residents of Piquiá de Baixo and California, beyond the right to health and a healthy environment. Also considered are the rights to adequate housing, to life and physical integrity, to access to information and to participation and to an effective remedy.

The investigation carried out in Piquiá de Baixo and California showed alarming indices of adverse health impacts that constitute a violation of the right to heath. With regard to **acute illness**, the community of Piquiá de Baixo registered symptoms that included afflictions in the upper respiratory tract, such as sore throat or throat problems, corresponding to 65.2% of the households visited; cough, runny nose or earaches in 63.6% of households visited; eye irritation or tearing in 41.3% of the households interviewed. And in Califórnia, the most reported symptoms were afflictions of the upper respiratory tract, such as cough, runny nose, earaches (40% of households visited), sore throat or throat problems (28.4% of households visited) and difficulty breathing (25.8% of households visited.)

It is important to remember that in Piquiá de Baixo, the majority of the population reported that their heath was "bad to very bad" (56.5% of households visited) and only 12.4% of households visited evaluated their health as "good or very good." The rest (31.1% of households visited) perceived their health as "moderate." In California, the proportion of people with a health evaluation of "good or very good" was 53.1%, while the national rate is 77.3%.

According to the UN Committee on Economic, Social and Cultural Rights (CESCR), the state holds the primary responsibility for protecting the right to health. This includes the obligation to adopt "measures to impede third parties from interfering with the application of guarantees in Article 12" (right to health).¹⁵³ In Maranhão, this would include the adoption of measures to avoid the negative health impacts caused by Vale and the pig iron companies. The state can also be found responsible for not meeting its obligation to ensure access to adequate health services in the communities, in particular access to emergency care.

In addition, non-compliance with applicable environmental legislation has resulted in serious damage to the residents of Açailândia, without any precautionary measures or measures to end or remedy damage done. This situation also raises the issue of the responsibility of Vale and the pig iron producers in relation to their obligation to respect all human rights and to act with due diligence.

1) Impacts on the Right to Adequate Housing

A. Legal human rights framework

In the international realm, the International Covenant on Economic, Social and Cultural Rights (ICESCR) recognises "the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions."¹⁵⁴ The CESCR has argued that "the right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly it is one of the most fundamental conditions for survival."¹⁵⁵

According to the interpretation of the CESCR, for housing to be adequate, it must, at a minimum, meet the following criteria : a) security of tenure; b) access to services, materials, facilities and infrastructure, such as drinking water, energy for cooking, heating and lighting, sanitation, site drainage, and emergency services; c) accessible housing; d) habitable housing that offers adequate space, protection from cold, damp, heat, rain, wind or other threats to health, structural hazards and diseases vectors, that guarantees the physical safety of its occupants; e) accessibility for people in disadvantaged situations; f) access to employment options, health-care services, [...] both in large cities and rural areas; and g) culturally appropriate housing.¹⁵⁶ The 2007 report of the UN Special Rapporteur on adequate housing confirms that, aside from those criteria already mentioned, adequate housing must also include the following essential elements: "privacy and security; participation in decision-making; freedom from violence and access to remedies for any violation suffered."¹⁵⁷

At the regional level, the American Declaration on the Rights and Duties of Man states that every person "has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources."¹⁵⁸ Article 34 of the Charter of the Organization of American States determines that American states must "devote their utmost efforts to accomplish the following basic goals: (...) k) Adequate housing for all sectors of the population."

^{153.} Committee on Economic, Social and Cultural Rights, General Observation, No. 14 (2000) The Right To The Highest Attainable Standard Of Health (article 12 of the International Covenant on the Economic, Social and Cultural Rights, E/C.12/2000/4, August 11, 2000. §33.)

^{154.} The International Covenant on Economic, Social and Cultural Rights, Article 11, §1.

^{155.} United Nations, General Comment no. 15, Applying The International Covenant On The Economic, Social And Cultural Rights To The Right To Water (Articles 11 and 12 of the Covenant) HRI/GEN/1/Rev.7 (2002), §3.

^{156.} Committee on Economic, Social and Cultural Rights, General Comment, No. 4, The right to adequate housing, 12/13/1991, §8. (Submitted in English) Extract from "Report of the Special Rapporteur on adequate housing, as a component of the right to an adequate standard of living," Miloon Kothari, A/HRC/4/18, February 4, 2007. §55.

^{157.} Report of the Special Rapporteur on adequate housing, as a component of the right to an adequate standard of living, Miloon Kothari, A/HRC/4/18, February 5, 2007, §55.

^{158.} Article 11 of American Declaration of the Rights and Duties of Man, adopted by the Ninth International Conference of American States in Bogotá, 1948.

At the Summit of the Americas on Sustainable Development in 1996 in Bolivia, State and government leaders presented an action plan in which governments agreed to realise the following initiatives on the right to housing and water: Initiative 36 – "Redouble efforts to meet the housing needs of the poorest and most vulnerable sectors, bearing in mind the need to provide adequate essential services and to improve the environment..."

The American Convention on Human Rights does not explicitly address the right to housing, but Article 26 addresses the obligation of State parties to gradually develop economic, social and cultural rights detailed in the San Salvador Protocol.¹⁵⁹ Article 11 recognises the right to "live in healthy environment and to have access to basic public services."

At the domestic level, the right to housing is protected as a fundamental guarantee under the Brazilian Federal Constitution.¹⁶⁰

B. In practice: Critical Living Conditions Caused by the Pollution from Companies and Lack of State Protection

The residents of Piquiá de Baixo and California report that since the installation of Vale and the iron ore production companies in Açailândia, they have suffered daily assaults on their right to adequate housing.

The transformation of Piquiá de Baixo into a 'sacrifice zone,' through its designation as an industrial district, happened as a result of the State's intention for the region. Residents report that since 2004, pollution has been excessive, the urban sanitation system overloaded, and access to public health services is difficult. Moreover, and as highlighted earlier, the state provided fiscal incentives to the companies, such a tax subsidies ISS and ICMS.



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As delineated in Section II, item 2 of this report, the right to live in a healthy environment is considerably challenged in Piquiá de Baixo. The pollution is apparent in many ways: dusty trees, sooty houses, and excessive noise. The structures are incapable of protecting residents from the heavy pollution. According to the report of the environmental expert Dr. Ulisse Brigatto Albino, mentioned above, the conditions in which the residents live is deplorable: livestock eat insects and waste that contain trace of metals. Water that has been cooled in the furnaces contains dissolved materials, and could contaminate the patios of houses, as well as the people who live there.

Similarly, housing conditions in California were seriously affected by the arrival of FGC. The excessive heat and smoke from the production of charcoal invades houses and causes health problems, such as sore and inflamed throats, skin problems, fatigue, and intense coughing, as confirmed by Dr. Walderci Ferreira Filho, who worked in the California health clinic.

Beyond the health problems connected to pollution, farms and livestock that are used for local consumption and small scale trade were also affected. According to residents, these activities were adversely affected, as presented in the following tables.

^{159.} The San Salvador Protocol – Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights – was ratified by Brazil in August 2006.

^{160.} Art. 6 on social rights includes education, health, food, work, housing, leisure, safety, prevention, maternal and child protection and, assistance to disabled people.

Household distribution according to activity affected or the cause of the harm Piquiá de Baixo, 2010.

	Household distribution			
Affected Activity	No.	% (in relation to the total number of households reporting accidents)	% (in relation to total households visited)	
Farming	38	45.8	20.7	
Livestock	7	8.4	3.8	
Pollution/Air quality	36	43.4	19.6	
Total households that reported affected activities	83	100.0	45.1	
Total households visited	184	-	100.0	

Household distribution according to activity affected or cause California, 2010.

	Hou	Household distribution			
Affected Activity	No.	% (in relation to the total number of households reporting accidents)	% (in relation to total households visited)		
Farming	17	51.5	11.0		
Livestock	15	45.5	9.7		
Pollution/Air Quality		0.0	0.0		
Total households that reported affected activities	33	100.0	21.3		
Total households visited	155	-	100.0		

Edvard Cardeal, Seu Anísio's friend and the current President of the Piquiá de Baixo Residents Association, reports experiencing many changes within a short period of time after his arrival in the neighbourhood:

I arrived here in '78, bought a plot, and some old things, and started my activities, we took down the forest here... in that time only the person who cut down the trees got the right to the land, whoever opened the woods. But then the big landowners arrived, the Carajás Railway came.... the big farmers came and bought all the rights (...) Edvard Cardeal, Oral Narrative, 2010.

A resident of Piquiá de Baixo for more than three decades, Mr. Edvard speaks from experience, like his friend Anísio, when dreaming of another life outside of Piquiá de Baixo:

"My dream has always been to live here. Sure, I arrived before the pig iron plants and had more right to stay than they did. But these companies are too powerful and from the beginning we could not raise our voices to stop them. They choose places where the people are weakest, they convince us with empty promises of work and wealth, and that's how they convince everyone else. After they arrived the curtain of smoke rose between the companies and our houses: beside the pollution, I thought that from the beginning they had something to hide and that all those promises were not going to easily materialise. Shortly after, a flood of eucalyptus trees came to invade our courtyards and surround the people. That was the so-called 'green curtain,' according to them, to protect the houses from the pollution. And so among the smoke and these stalks of eucalyptus, we learn that the company likes to put up 'curtains' and hide behind them. Edvard Cardeal, Letter to Moisés. Mimeo. 2010.

Mr. Edvard Cardeal remembers when, before the arrival of the mining and metal companies, the community survived on small farms. Now there is nowhere to plant. "You need to travel around 150 to 200 square kilometres to reach the farm. Today, people breath iron ore dust and other residues that fall on the town." He recounts that he once had a large piece of land: "I had the idea of surviving there, planting my things, but with the pollution it lost value and there's no way to go somewhere else." He also reports that the pollution emitted by the plant chimneys, which includes mineral dust, charcoal dust and other residues, "falls in the river, on our patios, on the houses, on everything."¹⁶¹

As outlined by the CESCR, the right to adequate housing should not be interpreted in a limited manner. It does not mean simply a roof and four walls, but includes the right of all people to live in safety, peace and dignity.¹⁶²

2) The right to life, personal safety and physical integrity

A. Legal human rights framework

At the international level, the right to life is protected in Article 9 of the International Covenant on Civil and Political Rights: "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life."

At the regional level, the Declaration on the Rights and Duties of Man protects life, personal safety, and physical integrity. The American Convention on Human Rights holds that "Every person has the right to have his life respected. (Article 4); " Every person has the right to have his physical, mental, and moral integrity respected." (Article 5); and "Every person has the right to personal liberty and security" (Article 7).

Nationally, Brazil's Federal Constitution of 1988 protects the right to life, to personal security and physical integrity in Article 5: "All are equal before the law, without distinction of any kind, guaranteeing Brazilians and foreign residents in the country the inviolability of the right to life, liberty, equality, safety, and property."

B. In practice: the omissions of the State and the negligence of the companies causing death and affecting the physical integrity of people.

The investigative team obtained information on "munha" or slag-related burns suffered by members of nine households in Piquiá de Baixo. In another seven, vision damage from iron dust was reported. (Refer to Section II for more detail).

As mentioned above, two cases of serious and fatal accidents that would have been avoided with proper management and storage of residues such as slag by the companies and with effective state supervision of the pig iron producers were already discussed: the death of **Gil Oliveira de Sousa**, a ten year old boy, on 2 November1999; burns on the legs of **Ivanilson Rodrigues da Silva**, on 21 October 2001.

^{161.} MERLINO, Tatiana. Vale, the mining company with dirty, bloody hands in Revista Caros Amigos, edition of May, 2010.

^{162.} Committee on Economic, Social and Cultural Rights, General Comment, No. 4, The right to adequate housing, 12/13/1991, §7.

At the first assembly of the residents of Piquiá at the Darcy Ribeiro high school on 19 July 19 2005, residents complained about industrial waste on the streets with a high content of silicon and other toxic elements that were scattered by the wind. These specific complaints indicate that the companies were not complying with the operating licences which required that solid toxic elements be generated, transported and stored at an appropriate final destination. Further, there was no oversight or supervision by the State.

The President of SIFEMA, in a meeting with Justiça Global, Justiça nos Trilhos and FIDH on 14 September 2010, said that the company responsible for the deposit of residues was Gusa Nordeste and that there were no longer any deposits near the community. Despite this statement, "mountains" of slag very close to people's houses and all along paths and tracks used by residents were observed during the visit of Justiça Global in June 2010 and later during the FIDH mission on 14 September 2010. There were no barriers of any kind to prevent access to these deposits.

3) The right to information

A. Legal human rights framework

At the international level, the right to "seek, receive and impart information" is protected in Article 19 of the International Covenant on Civil and Political Rights. Beyond that, access to information on questions related to health was recognised as an essential and related element in the exercise of the right to health.¹⁶³

At the regional level, the American Convention on Human Rights establishes in Article 13 freedom of thought and expression when addressing the right of all people "to seek, receive, and impart information and ideas of all kinds [...]".¹⁶⁴

At the domestic level, the right to information is one of a citizen's principal rights and designated in Article 5 of the Federal Constitution as a fundamental guarantee:

"\$XIV – access to information is ensured to everyone and the confidentiality of the source shall be safeguarded, whenever necessary to the professional activity".

"XXXIII – all have the right to receive from public agencies information of private interest to such persons, or collective or general interest, which shall be provided within the period established by the law, subject to liability, except for the information whose secrecy is essential to the secretary of society and for the State¹⁶⁵.

Section IV of Article 225 of the Federal Constitution also holds that in order to guarantee a balanced and healthy environment, public officials must demand environmental impact studies prior to works or activities that could cause significant damage to the environment, and the study or result must be made available to the public. This implies an obligation on the part of the companies to supply environmental information.

Law 6.938/82, which addresses the National Environmental Policy, provides for the dissemination of environmental data and information to raise public awareness on the necessity to preserve environmental quality and the ecological balance. The law specifies that as part of the National Environment Policy is the guarantee to provide information on the environment, requiring Public Authority to produce such information, even when it may not exist already.¹⁶⁶

^{163.} CESCR, General Comment, No. 14 (2000) The right to the highest attainable standard of health (article 12 of the International Covenant on the Economic, Social and Cultural Rights, E/C.12/2000/4, August 11, 2000. §3, 12.b.iv)

^{164.} American Convention on Human Rights. Article 13.

^{165.} Unofficial translation.

^{166.} National Environmental Policy (Law 6938/81) available at: http://www.planalto.gov.br/cicivil_03/Leis/:L6938.htm

Law 10.650/2003 is more precise. It "covers public access to data and information in departments and entities that are part of the National System on the Environment (Sisnama).¹⁶⁷ As per this law, any individual has the right to access to certain data, regardless of his/her interest, through a written request (Article 2 § 1). The law establishes a deadline to provide information, but does not foresee penalties in case the authority/agency does not comply.

B. In practice: the lack of access to public information impedes popular participation and rights claims

The continued difficulty in obtaining clear and comprehensible information from public agencies (at all levels) regarding operations that can impact the environment could generate irreparable damage to society. The environmental licensing process (brief explanation to follow) was conceived to allow society access and participation at all stages, especially communities who will be affected by the operation.

As verified by the investigative team, the impossibility of obtaining information regarding environmental licences, oversight reports, and environmental impact assessments related to the activities of Vale and the related pig iron companies prevented the community from:

- -- being aware of the potential health risks associated with pig iron and charcoal production;
- -- being more proactive in ensuring that environmental regulations were appropriately applied by the State Environmental Secretary; and
- -- resisting and mobilising against the harm that pig iron and charcoal production would bring to Piquiá de Baixo and Califórnia.

Transparency and access to information contribute to ensure the accountability from public authorities. In the situation discussed, the population had no meaningful access to information from the State Environmental Secretary about the operations of Vale and the pig iron producers (according to what will be described below). As there is no transparency on the part of such public authorities, there consequently is no effective State accountability.

Findings and analysis in relation to access to information will be discussed in Section III of this report when the responsibilities of actors involved are analysed.

4) Rights to due process and to an effective remedy

A. Legal framework on fundamental rights

Article 8 of the Universal Declaration of Human Rights and Articles 2 and 14 of the International Covenant on Civil and Political Rights guarantee the right to due process and the right to an effective remedy.

At the regional level, the American Declaration on the Rights and Duties of Man protects the right to an effective remedy in Article 18. Article 25 of the American Convention on Human Rights states that "Everyone has the right to simple and prompt recourse, or any other effective recourse, to a competent court or tribunal for protection."

The Brazilian Federal Constitution addresses the right to effective recourse in Article 5: XXXV – "The law shall not exclude any injury or threat to a right from the consideration of the judicial power" LIV – "no one will be deprived of freedom or property of his assets without due legal process;" LV – "litigants and defendants in general are guaranteed in judicial or administrative proceedings a full defence with the inherent means and resources therein."¹⁶⁸

^{167.} National Environmental System - SISNAMA, instituted by Law 6.938, August 13, 1981.

^{168.} Unofficial translation.

B. In practice: lack of access to justice

"My rebellion found support with others and we decided to pursue justice. A courage gesture: finally, we thought, these companies are going to hear us." We were 21 families waiting to receive indemnity for the health damages. Once again we organised alone and went to battle.. Maybe justice is blind, but my impression is that it has a good sense of smell and likes the perfume of those with money."¹⁶⁹ Don Edvard Cardeal.



The situations of the residents of Califórnia and Piquiá de Baixo point to the probable violation of the right of every individual to legal protection, guaranteed as much by both the Federal Constitution of Brazil (which establishes the principle of the impossibility of excluding judicial power¹⁷⁰) and by as by international treaties that Brazil has ratified.

The 1988 Constitution requires the State to give "full and free-of-charge legal assistance to those with insufficient resources".¹⁷¹ The Public Defender is the agency responsible with providing this service; however, in September 2010 there was no Public Defender office in Açailândia. This prevented many residents from seeking assistance to defend themselves against further violations and obtain reparation for damages already incurred.

The Attorney General also failed to meet its institutional responsibilities as the organ responsible for the protection of collective interests.¹⁷² The Attorney General did eventually become involved, but only after long neglecting to respond to the demands of the petitions of the affected communities. Possible justifications for this neglect could be the low number of attorneys and their irregular presence in Açailândia. It is notable that until now, the Attorney General has not taken any measure to initiate any civil or criminal investigation and has shown serious weaknesses during the negotiations process it is supposed to be leading.

Finally, there was an unjustified delay on the part of the State Public Prosecutor of Maranhão to follow up on civil actions filed by 21 resident families in Piquiá de Baixo in 2005 to obtain compensation.

5) Assaults on Human Rights Defenders

A. Legal human rights framework

At the international level, the UN Declaration on Human Rights Defenders¹⁷³ guarantees that "Everyone has the right, individually and in association with others, to promote and to strive for the protection and realisation of human rights and fundamental freedoms at the national and international levels' (Article 1) and determines that States have the obligation to protect these agents (Article 14). In its report on the responsibility of non-state actors, the Special Rapporteur on the situation of Human Rights Defenders recognised several cases in which local authorities had colluded with the private sector to criminalise human rights defenders, and in which the media played a major

^{169.} CARDEAL, Edvard. Letter to Moisés. Mimeo. 2010.

^{170.} Constitution of the Federal Republic of Brazil of 1988, Art. 5, XXXV: "The law does not exclude from review by the judiciary injury or threat to law." http://www.planalto.gov.br/ccivil_03/constituicao/constitui%C3%A7ao.htm

^{171.} Constitution of the Federal Republic of Brazil of 1988, art. 5, LXXIV. http://www.planalto.gov.br/ccivil_03/constituicao/ constitui%C3%A7ao.htm

^{172.} Constitution of the Federal Republic of Brazil of 1988, art. 127, "caput" and art 129, III: "Institutional responsibilities of the Attorney General (...) III – to promote civil inquiry and public civil action for the protection of public and social patrimony, of the environment and other diffuse and collective interests." Unofficial translation. http://www.planalto.gov.br/ccivil_03/constituicao/constitui%C3%A7ao.htm

^{173.} Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognised Human Rights and Fundamental Freedoms, A/RES/53/144 – March 8, 1999.

role in stigmatizing such defenders.¹⁷⁴ In this report, the Rapporteur confirmed that companies' responsibility to respect human rights means they should "at all times refrain from curtailing the enjoyment of human rights defenders"¹⁷⁵

At the regional level, the General Assembly of the Organization of American States reiterated the importance of the work of human rights defenders.¹⁷⁶ In a related resolution on June 2003, the General Assembly resolved "To reiterate its support for the work carried out, at both the national and the regional level, by human rights defenders; and to recognise their valuable contribution to the promotion, observance, and protection of human rights and fundamental freedoms in the Hemisphere" and the importance for states to adopt the necessary measures to guarantee the rights of these defenders and the continuation of their work.¹⁷⁷

B. In practice: The criminalization of human rights defenders and their activities

During the investigation it was found that Vale, public security and other law officials, along with the media and other private actors, had acted in ways that could be qualified as judicial persecution, intimidation, and attempts to criminalise those who worked in defence of the rights of people who suffered from business operations.

Before the initiation of this investigation, there were already complaints about attempts to criminalise social movements through, for example, legal action proposed by Vale against the leaders and other members of the Brazilian Landless Workers Movement (MST) of Brazil.¹⁷⁸

Such legal action was accompanied by media campaigns directed at social movements (especially MST) which referred to the human rights defenders as "criminals"¹⁷⁹ or linked violence to the growing presence of social movements in the country.¹⁸⁰

Members of Justiça nos Trilhos have also been victims of persecution for their activities.

On August 21 and 22, 2008, one of the most influential newspaper in the state of the Pará, the journal *O Liberal*, published a series of reports, editorials and opinion pieces¹⁸¹ which associated Justiça nos Trilhos members and other organisations (most of them religious) with the planning of actions that the newspaper described as illegal and intended to inflict financial damage on Vale.

The news surprised Justiça nos Trilhos, not only since the accusations were false, but mainly due to the fact the reports named people who were not part of the organization, who had never participated in its activities, who live on other continents and who had never travelled to Brazil. Members of Justiça nos Trilhos and the other organisations mentioned in the pages of the newspaper demonstrated their

^{174.} Report of the Special Rapporteur on the situation of human rights defenders, "Human Rights Defenders," A/65/223, August 4, 2010, Section II.2.

^{175.} Ibid. Section IV.54.

^{176.} The theme was the subject of resolutions AG/RES. 1671 (XXIX-0/99), AG/RES. 1711 (XXX-0/00), AG/RES. 1818 (XXXI-0/01), AG/ RES. 1842 (XXXII-0/02) and AG/RES. 1920 (XXXII-0/03).

^{177.} Resolution AG/RES. 1920 (XXXIII-O/03) Human Rights Defenders: Support for the Individuals, Groups, and Civil Society Organizations Working to Promote and Protect Human Rights in the Americas, June 10, 2003.

^{178.} More information is available at: http://www.direitoshumanos.gov.br/protecao/defensores

^{179.} See, for example, in a television interview with journalist Miriam Leitão, Vale CEO Mr. Roger Agnelli, referred to MST members as "criminals who don't respect the law, who don't respect democracy." Interview on September 17, 2008, on Globo News. Video available at: http://video.globo.com/Videos/Player/Noticias/0,,GIM881457-7823 ENTREVISTA+COM+ROGER+AGNELLI,00.html

^{180.} See, for example, a survey sponsored by Vale at the private institute lbope on public opinion in Brazilian society on the behavior of social movements in Brazil's countryside and its dissemination in the newspaper O Globo in June, 2008.

^{181. &}quot;Group plans to occupy the railway." (O Liberal, Current section, Page 5, 8.21.08) "Church unites with MST." (Amazônia, General section, Page10. 8.21.08) "Railway occupation causes polemic" (O Liberal, Current section, Page 8. 9.22.08) "Sinners and Criminals" (Editorial Section, Page 2, 8.22.08).

indignation and repudiated the accusations in a public notice.¹⁸² At this time, no one knows how the newspaper obtained the information and data that were never discussed in meetings or made public. The newspaper maintained its right not to reveal sources.

Members of Justiça nos Trilhos have stated that, ever since January 2009 when they organised seminars and workshops at the World Social Forum in Belém in Pará, they had noticed the frequent presence of strangers at their activities, always taking notes, photos and videos. This practice occurs not only at their public activities, but also during private moments of their lives. Members have also noticed that sometimes their vehicles are followed. Justiça nos Trilhos suspects that they are private security agents, public law enforcement, and/or the Brazilian Intelligence Agency (ABIN). It is not known why they would do this, much less what they will do in the future.

On 10 April 2010, Vale took legal action against members of Justiça nos Trilhos in Açailândia. The suit was filed against a number of organisations, and identified five people whom it considered to be members of those organisations. Vale claimed they had taken actions designed to cause financial damages.¹⁸³

The legal action was filed during the "International Caravan of those Affected by Vale," in which people from zones affected by Vale operations all across the world¹⁸⁴ visited the region along the Carajás highway and other operation sites connected to Vale. They participated in conferences and debates on the Grande Carajás Project and its negative impact on communities and workers.¹⁸⁵

In its initial petition, Vale, through its lawyers, presented allegations of intent to harm by referring to the objectives and agendas of planned seminar, debates and caravan visits. Vale's accusations were never proven.¹⁸⁶ Despite this, and even though Vale never complied with the obligatory judicial tax, the judge immediately issued a decision by setting a "prohibitive injunction" and imposing individual fines of R\$5,000 (approximately 3,085 USD) a day on Justiça nos Trilhos members for the hypothetical transgression of this judicial decision, along with police force to ensure compliance. On 13 January 2010, the injunction was revoked and a mistrial was called, since the company never proved that it paid applicable taxes. The accused were never officially informed of the injunction.

Considering the legal action and other acts of intimidation described above, the company showed a threatening treatment of people who are affected by its operations, along with those who hold critical positions vis-à-vis its activities and who fight for the protection and enjoyment of human rights and for the preservation of the environment. Although not undertaken as part of this investigation, it is important to note that the impartiality of judicial organs could be questionned

^{182. &}quot;Public notice to the newspaper O Liberal," signed by CNBB (Parishes and Organizations (Cáritas, CJP, CREA, Pastoral da Criança, PASCOM, CPT, CPP); CRB (Conference of Religious of Brazil); Comitê Dorothy; Missionários Comboni Missions; UNIPOP; ABONG; FASE; Inter-Religioso. Available at: http://www.justicanostrilhos.org/nota/39 (last accessed: 22/3/2010).

^{183.} Tribunal de Justiã§a do Estado do Maranhã£o, 2ª. Vara Judicial de Aã§ailã¢ndia, processo nº. 1083-83.2010.8.10.0022. The action was taken Vale SA against "members of the Movement of People Affected by Vale, which integrates various social movements, among them, the movement Justiça nos Trilhos (which counts as members Gustavo Covarrubias, Nonato, Dario Bossi, Danilo Chammas and Father Antonio) representatives of the Forum Reage Sao Luis, Forum Carajás representatives, representatives Caritas of Maranhão / Tocantins, representatives of the Central Workers (CUT) and others "

^{184.} People representing communities and workers affected by Vale operations in different states in Brazil as well as Canada, Chile, Mozambique and Peru participated in the Caravan.

^{185.} The caravan began on April 5 and finished April 11, 2010. It included visits to the towns of Barcarena-PA, Marabá-PA and Açailândia-MA.

^{186.} Justice Tribunal of the State of Maranhão, 2nd Criminal Court of Açailândia, docket no. 1083-83.2010.8.0022. The action was filed by Vale S.A. against "members of the Movement of those Affected by Vale, comprised of various social movements, among them, Justiça nos Trilhos (whose members include Gustavo Covarrubias, Raimundo Nonato, Dario Bossi, Danilo Chammasand Padre Antonio), representatives of the Reage Forum São Luís, representatives of the Carajás Forum, representatives of Cáritas Maranhão, representatives of the Pará/Maranhão/Tocantins Railway Union, representatives of the Unified Workers Central (CUT), among others."

Section IV Responsibilities of actors and recommendations

The social and environmental impacts of the mining and metals company operations on the local communities and the environment are widely known and are being documented. The negative impacts are aggravated in places like Açailândia where there is poverty, inequality and a lack of public policies on housing, health and basic sanitation on one side, and companies with strong economic power on the other.

These impacts become serious and systematic human rights violations when the activities of a polluting industry are not appropriately supervised and regulated by a State authority. Local authorities often establish a dependent, and many times subservient, relationship with an economic enterprise, such as Vale. Beyond making natural resources easily available to the private party through economic and fiscal incentives, services, public officials (at different levels) intentionally or not, fail to oversee the economic activities of these companies, principally working conditions and the impacts on the lives and health of the workers and communities.

Situations presented in this report are grounded in a context characterized by impoverished communities, powerful companies, and fragile or permissive state institutions. Using the descriptions and analyses made in the previous section on the impact and damages caused by the metals-mining chain in the town of Açailândia, especially the residents of the neighbourhood Piquiá de Baixo and the rural Califórnia settlement, this section will demonstrate and analyse the legal responsibility of public officials (national, state, municipal) and of private actors (Vale and the pig iron companies) for violations of the right to life, physical integrity, housing, health and healthy environment, due legal process, participation, reparation, and other associated rights.

Brazil has an adequate and advanced legal framework to promote and protect human rights and the environment¹⁸⁷ as well as the institutional structure needed to guarantee such right. However, in practice, such rights are flagrantly disrespected. The enjoyment of these rights depends on the existence of strong public, active, and independent monitoring institutions, which is far from being reality in various parts of the country, especially in Açailândia and in the state of Maranhão.¹⁸⁸

1) The lack of monitoring of public environmental agencies in the supervision of the operations of Vale and pig iron producers in Açailândia

Brazilian environmental law (addressed in the Federal Constitution, National Environmental Policy, Environmental Protection Code of the state of Maranhão, and others) encompasses a wide range of conditions regarding human activities to guarantee the quality of the environment. To guarantee

^{187.} Brazil is short of reaching the recommended standards for pollution emissions as established by the World Health Organization (WHO). 188. "To understand what happens with a region (like Carajás), it is necessary to observe through the optics of the mining-metals businessman and accompany their classic reasoning on economic and technical viability of mining-metals projects in the regions with low levels of social development. Everything is computable in the balance of viabilities, less the environmental costs and the negative social impacts,". "Genesis of a new mining/metals region: accents and distortions of origin in the Carajás/São Luís track" Aziz Ab'Saber, elaborated in 1987 at the request of the then-state company Vale do Rio Doce (CVRD). Repórter Brasil, Carajás Special. http://www. reporterbrasil.org.br/exibe.php?id=1236

fulfilment of these conditions, public authorities use **instruments of environmental control**, which are acts and measures destined to verify adherence to norms of Environmental Law.

The obligation to verify compliance with these laws falls on public officials through established controls prior to the initiation of the regulated activity (such as through permits, authorisations and licences), supervision during the performance of the regulated activities, and follow-up after the controlled activity is finished (through surveys, and terms of completion of work.)

An Environmental Impact Study (EIS) is required for any activity that could potentially cause significant damage to the environment. Resolution No. 001/1986 of CONAMA requires that studies must be performed prior to granting licenses for such activities as mining terminals, ore extraction, steel complexes, or any activity that uses more than 10 tons of charcoal a day.

The objective of the EIS is to evaluate the proportion of change that an undertaking will wreak on the environment. Preventative action, as founded in Article 225, paragraph 1, clause IV of the Federal Constitution, is meant to avoid harmful consequences on the environment. It is the responsibility of public officials to demand that plans for the installation of work or activity that will cause significant environmental degradation have protections in place that will eliminate or mitigate any negative impact. It must be made accessible to the public.

Public participation during the process of the environmental study is a constitutional requirement. Since the environment is an integral part of life, individuals should as a consequence have access to instruments of environmental preservation, improvement and recuperation policies.

However, despite these obligations, it was not possible to obtain copies of such documents from the State Environmental Secretary of Maranhão (SEMA). On 12 July 2010, Justiça Global and Justiça nos Trilhos made requests to SEMA to read and photocopy documents on the environmental licensing for operations by the five pig iron companies in Açailândia: Gusa Nordeste S.A.; FERGUMAR – Ferro Gusa do Maranhão; Siderúrgica do Maranhão S.A. (Simasa); Companhia Siderurgica Vale do Pindaré; Viena Siderúrgica do Maranhão S.A.

They also expressly asked for copies of the EIS-RIMA and Environmental Control Plan, selfmonitoring reports on emissions and other relevant documents as required under Article 25 of State Law no. 5405 (Environmental Protection Code) and Article 225, clause IV of the Federal Constitution. To date, neither organisation has been given access to the processes and documents.

In fact, Assistant Secretary Antônio Moyses Netto received the petition to SEMA in person in a meeting with Justiça Global and Justiça nos Trilhos representatives on 12 July 2010. Justiça Global and Justiça nos Trilhos filed complaints with the Attorney General's office regarding the impossibility of obtaining public documents from the responsible agencies.

After representatives of the Justiça nos Trilhos met with the Public Prosecutor of Environmental Justice in São Luis, Fernando Barreto, they received part of the requested documentation. Operating licences were obtained from the State Environmental Prosecutor in Maranhão's Attorney General's office on the following companies: Viena Siderúrgica S.A.; Viena Florestal Ltda.; Companhia Siderúrgica Vale do Pindaré; Fergumar – Ferro Gusa do Maranhão; Cosima – Siderúrgica do Maranhão Ltda.; Gusa Nordeste, Margusa – Maranhão Gusa S.A; Simasa – Siderúrgica do Maranhão, and Ferro Gusa Carajás. The majority of the licenses were solicited by the companies in 2008 and were valid until 2012 and 2013.

SEMA's principal recommendations and conditions verified in the licences analysed were the following:

- trimester monitoring for liquid effluents, surface and groundwater, as per CONAMA Resolution No. 357/2005 and No. 397/2008;
- 2. concentration of emissions of suspended and inhalable particles must conform with CONAMA Resolution No. 003/1990 and No. 008/1990;
- effluents from polluting sources can only be poured into bodies of water conforming to those parameters established in CONAMA Resolution No. 397/2008;
- 4. implementation of all mitigating measures on environmental impacts;
- 5. transport of solid residues generated and stored at an adequate final destination; not on vacant lots, near springs, rivers, fields, and other fragile environments;
- 6. construction of impermeable channels around the plant to conduct effluent liquids to a lake built specifically for that purpose;
- 7. implementation of an Integrated Solid Waste Management System;
- 8. monthly monitoring of: the Rio Piquiá river, both upstream and downstream from the plant, water used to clean gases before the container dumping them into the basin, cooling waters for the furnaces before being poured into the river, and groundwater for drinkability;
- 9. monthly monitoring of air quality in four points in rotation, two a month, to determine total suspended particles;
- 10. bi-annual monitoring of existing chimneys to determine total particles and gases;
- 11. use of agro-toxins only when necessary and in a quantity established by the agronomic instructions;
- 12. no use of the soil for a prolonged period, to prevent leaching;
- 13. preservation within the limits of the enterprise of areas considered for permanent preservation (mountains, accented slopes, riparian areas).

Despite the recommendations for the creation of a Solid Waste Management System, monitoring of chimneys, waste transport to an appropriate locale, it is unknown whether the companies sent this data to the Environmental Secretary or if the State performed any oversight on them.

As has been shown, the data gathered from residents of the communities of Piquiá de Baixo and Califórnia settlement point out that years of high-level pollution caused serious health problems.

It is interesting to note that on December 29, 2008, after complaints from these two communities began to be voiced, the Environmental Secretary issued Directive No. 11 that established rules regarding the monitoring of air quality, of solid industrial waste, and water resources specifically for "pig iron production installations" that "are responsible for process improvements, the installation of control equipment, appropriate waste disposal, monitoring and other necessary measures to comply with environmental law."¹⁸⁹

Despite the laws regarding environmental protection and environmental health that have been enacted since 1981, SEMA still fails to oversee the operation of companies in Açailândia. Having received no response from SEMA after requests for information made by Justiça Global and Justiça nos Trilhos on 12 July 2010, it remains impossible to verify whether companies have submitted the required information. A further indication of disinterest on the part of SEMA, is that no SEMA representative attended the public hearing in Açailândia Town Hall on 14 September 2010 to address the relocation of Piquiá de Baixo residents, even though the Secretary had been duly summoned by the state Attorney General of Maranhão.¹⁹⁰

^{189.} Directive 111/2008 excerpt.

^{190.} State Attorney General of Maranhão. 2nd Prosecutor. Açailândia Town Hall. Announcement: public hearing on proposals about the relocation of the neighborhood Piquiá de Baixo, September 1, 2010.

At the public hearing, the President of SIFEMA said that when the companies first came to Piquiá de Baixo it probably was not necessary to perform an Environmental Impact Study. However, the pig iron companies dealing with Vale bought the land and built the furnaces in Piquiá de Baixo starting in 1987. In other words, he is making the claim that the state of Maranhão did not require instruments of environmental control and protection for the new infrastructures and companies already in operation *six years after* the enactment of the National Environmental Policy of 1981. Despite his statements, a representative of the Environmental Ministry interviewed by the investigative team confirmed that EIS' have been obligatory since 1981. By the time the companies arrived in 1987, EIS' were required by both the National Policy Environmental Policy and CONAMA Resolution 001.

In effect, **the lack of effective public control in the licensing process and the lack of oversight in monitoring activities potentially harmful to the environment** on the part of the state of Maranhão have reduced the role of the Environmental Secretary to a simple "licence counter."

For the price of R\$700 (444 USD) the pig iron companies received licences to operate until 2012/2013. However, the Environmental Secretary's recommendations and conditions turned out to be useless not only because there was no oversight, but also because they were generic and practically the same for each company. In reviewing the licences, it is clear that SEMA did not perform any situational analysis regarding the production volume and the pollution generated, nor did it formulate specific and tailored recommendations for each of the involved companies Instead of being an important control mechanism on the activity of the companies, licences are transformed into mere bureaucratic protocol.

2) The neglect of public health agencies in the prevention, notification and treatment of illnesses

Even though it is well known that metals and mining activities generate the highest levels of pollution emissions and cause health problems, there are no specific public policies that address the prevention of, or remedy for, contaminated areas and affected people.

The public health system in Brazil is co-managed on the federal State state and municipal levels, but primary healthcare is a municipal responsibility. The development of the principal program of basic healthcare in the country, the Family Health Strategy (FHS), is the responsibility of municipal health secretariats.

In 2010, Açailândia town hall and the Municipal Health Secretary launched a Municipal Health Plan to establish health policy through 2013.¹⁹¹ The Açailândia Municipal Secretary of Health, Juliano Salles, noted the difficulties of collaborating with the State government and the State Health Secretary. According to Salles, all actions depend on the state secretary and the transfer from the federal government. To complicate the situation, in Açailândia there are only mid-level health services - high level health care needs are treated in Imperatriz (75 kilometres from Açailândia.)

Health services in Açailândia are of 60% public institutions, for which the municipality is responsible, and 40% are private.

According to the Health Secretary, the funding system remains a challenge. According to him, the municipal revenue oscillates and depends on the taxes collected from economic activity, such as metals-mining and agriculture. As a result, due to the current global crisis, revenues have fallen precipitously, making it necessary to invest resources coming directly from the municipality treasury. As financing is directly related to the presence of the companies in the region, the secretary said it was necessary to work directly with them to "improve" the health system. For example, a Centre for

^{191. &}quot;The goal of the Municipal Health Plan of Açailândia is to provide directives, strategies and objectives of this administration from 2010-2013 for policies that promote, protect and recover health, intended to reduce the risk of harm, along with improvement in the quality and efficacy of municipal health care services."

the Treatment of Leprosy and Tuberculosis to support patient rehabilitation is expected to open in 2011. Dr. Juliano believes this partnership is a result of the fact that **"Vale produces and doesn't give back** to the city." It remains the only partnership between polluting companies and the Health Secretary that came to the attention of the investigation team,

In a meeting with SIFEMA the union President said that the pig iron plants paid for an ambulance and the renovation of Piquiá de Baixo's health clinic, which was confirmed in an interview with the FHS coordinator. The ambulance is critical given, as already discussed, that Açailândia only has midlevel health services, and any other more complex needs must be handled in Imperatriz. However, according to the residents, the ambulance is often out of service due to maintenance problems and the difficulty to acquire necessary parts. The FHS coordinator told the investigation team that *"in this case, there is nothing to do, people have to get to the hospital by themselves and there is no way to be reimbursed for transport costs."* Speaking on the eventual acquisition of an ambulance, the coordinator said, *"there is no way to buy one or include it in the budgets for the health ministry; it depends on the good will of some eventual donor."*

However, the Secretary and his teams **admit that the companies are the cause of the main health problems of the population,** especially those that live close to the companies. In an interview with the investigative team, the FHS coordinator was told that the preliminary visit to Piquiá de Baixo had confirmed a series of frequent health problems among the population, in particular, pneumonia, tuberculosis, bronchitis, pulmonary problems, asthma, skin and respiratory allergies, eye problems, such as vision problems, frequent throat infections and constant colds. The investigation team asked if these problems were frequently found by health care workers and the FHS coordinator confirmed that these cases were indeed more prevalent in Piquiá de Baixo than in any other place, and further elaborated that they frequently remove "strange material" from people's eyes, which are almost always fragments of iron from the plants.

Given the risk factors shown, the FHS coordinator said that two Piquiá communities -- de Baixo and de Cima – are considered high risk areas, **since the pollution from the pig iron plants contributes to the development of certain pathologies**. Speaking on the measures of control and risk prevention in the context of Piquiá, the FHS coordinator admitted : "Yes, they are limited. In a context such as this, there is no possible control. The (healthcare) staff complains that in Piquiá the pollution makes it very difficult to cure such simple illnesses as the cold, for example."

In an interview with the investigative team, the Municipal Health Secretary said that "where there is pollution the patients will have a higher risk of developing infections." He does not see pollution as a factor for collective health action nationwide, but rather believes that it should be analysed in the regional context, in particular when the weather is very dry and the number of people with respiratory infections rises. When asked if some environmental factor contributed to the precarious health situation in the city, the Secretary said "the higher the pollution level, the more possibility of contracting diseases."

On the health burden of polluting activities, the Secretary said: "Yes, it is certain that we end up being harmed by the aggression caused by pollution...it is certain that it is contributing to illness and afflictions especially in the two areas where you are doing this investigation". He noted that the number of consultations increased at certain times of the year, the number of return visits in Piquiá were very high. According to him, for a treatment to be efficient in case of respiratory infections, the patient shall not return to where the causal agent is; in other words, to his/her home if located where the pollution takes place. "It is true that when he goes back there will be a new infection and this is also a burden to the SUS – Health System Unit." Given the reality of Açailândia and the high number of respiratory illnesses, some prescription respiratory medicines were included in the basic care network, some of which are available in health clinics.

Data records are another fundamental aspect of the health system. Current literature recognises the

high potential of data systems in supporting the public management and decision-making processes in the health sector. However, federal funding is currently linked to the compulsory notification of certain illnesses, which leaves other afflictions go under-reported. According to the FHS coordinator, "the compulsory notification of illnesses that require higher attention according to the Ministry are those such as dengue, hepatitis, yellow fever, H1N1 flu, leprosy, botulism and infant paralysis, to name a few. In general, respiratory infections are not considered for compulsory notification." This could be one of the reasons why respiratory illnesses show such low levels in the Information System of Basic Care (SIAB). This underscores that the findings of this investigation on upper respiratory infections in Piquiá de Baixo and Califórnia are accurate.¹⁹²

In addition to funding of the health system (SUS), the Health Ministry is also responsible for developing policies at the national level.

The investigative team met with the coordinator of Environmental Surveillance in which the subject of under-reporting was addressed. According to the coordinator, "under-reporting is a major problem and matter of concern for the Health Ministry, especially those who work in environmental monitoring. Such situation requires to work with the perspective of not being tied to the "causal nexus," but rather to focus on the additional 'risk' of illness, without limiting themselves to poisoning but to exposure."

Within the structure of the Health Ministry, basic care, not environmental monitoring, falls under the responsibility of the SAS (Secretary of Health Care). However, the connections between the two are such that it calls for a collaboration between the different responsible bodies in order to obtain effective results, such as for example the data system and its potential use in the planning and monitoring of health prevention and promotion.

For the Health Ministry, "*under-reporting raises deeply worrisome questions. Many times, [health] staff are not trained, making it difficult to make specialised diagnoses.*" Public officials in charge of environmental health also recognise the great challenge of the work of the SUS to "focus on prevention and legal compliance." It noted, however, that even though it is necessary to focus on health promotion and use the existing standards, there is a lack of training in monitoring, which is a great difficulty. In this sense, the state ends up depending on information produced by municipalities and states, even though it knows that in many cases this data was not recorded correctly and is not accurate.

As shown, municipal and national officials are well aware of the health damages caused by contamination and pollution from metals-mining companies and coal plants. Despite Brazil's stated policy to align the right to health and life with important international paradigms and with the debate on modern health concepts, in practice it is far from protecting or fulfilling the right to a healthy environment and the related right to health. Whether through action or omission, the Brazilian State is co-responsible for the poor health situation of the people in Piquiá de Baixo and Califórnia.

3) Civil Responsibility of Public Authority for Action and Omission

In the realm of international law, the right to an effective remedy is considered a fundamental principle.¹⁹³ The right to reparation represents a substantive dimension of the right to an effective remedy. In addition to access to justice, the violation of any human right must consider victims'

^{192.} For more information, see Section II for data on health in Piquiá and Califórnia.

^{193.} See in particular the International Covenant on Civil and Political Rights, Article 2(3)(1).

right to reparation.¹⁹⁴ Reparation measures can be: restitution measures,¹⁹⁵ rehabilitation,¹⁹⁶ compensation,¹⁹⁷ and, finally, measures of satisfaction and guarantees of non-repetition.¹⁹⁸

The Interamerican system for the protection of human rights also protects the right to reparation, including for violations of economic, social and cultural rights, confirmed various times in the jurisprudence of the Interamerican Commission and the Court on Human Rights.

At the national level, when citizens or communities see their rights adversely affected as a result of an action or omission by Public Authority, Brazilian law requires the state to provide compensation, through the responsible civil body of the State. The extra-contractual civil responsibility of the State results from the need for better protection of a citizen's rights, given the harm caused by Public Authority.¹⁹⁹ The Brazilian State is implicated in Art. 37, §6° of the Federal Constitution of 1988, through "legal acts, illicit acts, material behaviour or omission of Public Authority."²⁰⁰

In this sense, Art. 37, §6° of the Federal Constitution of 1988 establishes that "legal entities of public law and those of private law that provide public services shall be liable for damages that their agents, in this quality, cause to third parties, ensuring the right of recourse against those responsible in cases of fraud and negligence."²⁰¹ In this manner, when a citizen is harmed by action or omission on the part of the State, there is a state duty to provide reparation, regardless of proof of fraud and negligence of the Administration or its agents, since Brazilian law adopted the theory of administrative risk as a foundation of objective responsibility. Even in cases of liability by omission, in Brazil the majority chooses the system of objective responsibility.²⁰²

In the situations examined in this report, one can observe cases of responsibility of Public Authority through acts or omission. After analysis, it is clear that the state of Maranhão, through its State Environmental Secretary, allowed these enterprises to be licensed without duly considering the impacts to the health of the population, despite the insalubrious caused by the ongoing industrial activity. In addition, there is also public liability in the failure to enforce existing legislation, in particular regarding environmental legislation.

Although the illegality of the implementation of these enterprises in the region examined in this report cannot be proven, public authority has allowed their installation and must therefore answer for damages these activities caused to individuals. "In light of the potential of the State to cause harm to third parties, the theory of administrative risk establishes a duty to indemnify through pubic resources the harm caused by the activity..." being that such liability "takes into account the potential of harmful actions of the State, whether normal or abnormal, licit or illicit."²⁰³

In terms of liability by omission, the Public Authority had the duty to stop damage caused by irregular activity of a private initiative. In other words, while the State of Maranhão or the Municipality of

200. DI PIETRO, Maria Sylvia Zanella. Administrative Law. 19. ed. São Paulo: Atlas, 2006. p. 617.

201. Unofficial translation.

^{194.} Commission on Human Rights, "Study Concerning the Right to Restitution, Compensation and Rehabilitation for Victims of Gross Violations of Human Rights and Fundamental Freedoms, Final Report Submitted by Mr. Theo van Boven, Special Rapporteur", UN Doc. E/CN.4/Sub.2/1993/9 (2 July 1998), para. 13. See also Human Rights Committee, « The Nature of the General Legal Obligation on States Parities to the Covenant », UN Doc. CCPR/C/21/Rev.1/Add.13 (2004), §16.

^{195.} Restitution consists in the re-establishment of a situation of the victim back to its original state prior to the rights violation.

^{196.} Rehabilitation constitutes a person's recovery through medical and psychological attention, along with a guarantee for legal services and social necessities for these ends.

^{197.} Indemnization refers to compensation for all harm that results as a consequence of a violation and that can be economically valued, addressing both interrupted earnings and damages, considering the criteria of "life project" adopted by the Inter-American Court of Human Rights

^{198.} Measures of satisfaction and non-repetition refer to the duty of the Brazilian State to adopt adequate measures so that these or other victims will fall victim again to such violations.

^{199.} ZANCANER, WEIDA. The extra-contractual responsibility of Public Administration. São Paulo: RT, 1981. p. 21.

^{202.} SCHIER, Adriana da Costa Ricardo. Legal Consultation. The Responsibility of Public Authority for Damages to the Population in the Region of Acailândia. p. 02.

^{203.} BACELLAR FILHO, Romeu Felipe. Reflections on administrative right. Belo Horizonte: Forum, 2009. p. 305.

Açailândia were not the direct authors of the damage, their omission or deficient oversight on the companies allowed as a consequence the damages that the population suffers from today. The civil extra-contractual liability of the State figures under both hypotheses highlighted above: through the authorization given to the companies (action) and through the lack of oversight of their activities (omission).²⁰⁴

In the first hypothesis, the action that specifically shows the liability of the State of Maranhão is the act of granting licences allowing companies to operate in the area. In effect, when granting such licences, the State of Maranhão assumed the responsibility for the damages that would eventually be caused by the activity, as per the theory of administrative risk stated above. In the case of omission, the legal doctrine says that this should be legally relevant, and to do so two elements are necessary: (i) material – a finding, facts, passivity or inertia on the part of the Administration; and (ii) formal – the infraction of a legal or constitutional duty to act, that makes the material omission illegal.²⁰⁵

In the situations related in this report, there is no doubt that the Public Administration was subject to a constitutional duty to act. The Brazilian Constitution expressly guarantees in Art. 196 that health is a right for all and a **duty of the State**. Treated as a fundamental social right, the right to health in Art. 6 of the Federal Constitution of 1988 is derived from the right to life itself. As a result, the state is unequivocally obligated to take necessary measures to impede actions by private parties that could damage the health of the population. In the case in question, the use of environmental control mechanisms could have constituted such measures.²⁰⁶

Therefore Public Administration had a constitutional obligation to safeguard public health and guarantee that the environment would not be damaged, through due exercise of environmental monitoring power. Hence there was a *formal* act of omission (the existence of a legal duty to act.) However, as amply proven in this report, Public Administration neglected to use measures at their disposal. It can therefore be concluded that *there was an illegal omission for which the State is responsible* (material element), given that state and municipal administrations did not comply with the constitutional mandates cited, which resulted in serious harm to the population.²⁰⁷

The lack of due oversight on the activities of these companies, principally environmental monitoring, also contributed to the damages. This conclusion is supported by such examples as the damages noted in Box 4 of this report, which addresses the technical report from the State Environmental Secretary in April 2008 which stated that "The Environmental Control Plan that served as the basis for the licensing was false (....)". In addition, and as mentioned earlier, it was not possible to obtain copies of environmental documents about control mechanisms on company activities mentioned here from the State Environmental Secretary of Maranhão.

The damages suffered by the people of the communities in Piquiá de Baixo and Califórnia are related to the activities of the companies cited. As such, there is an unequivocal public obligation to indemnify the residents of the region, given the harm resulting from actions and omission of those who are forced to live in a so-called zone of sacrifice, deprived of the necessary conditions to live a dignified life. Therefore there is joint responsibility for the damages caused to the population, with fundamental responsibility resting on the State, as per Art. 37, § 6 of the Federal Constitution of 1988.

^{204.} SCHIER, Adriana da Costa Ricardo. Legal Consultation. The Responsibility of Public Authority for Damages to the Population in the Region of Açailândia. p. 05.

^{205.} PUENTE, Marcos Gómez. The inactivity of the Administration. 3. ed. Navarra: Aranzadi, 2002, p. 62.

^{206.} SCHIER, Adriana da Costa Ricardo. Legal Consultation. The Responsibility of Public Authority for Damages to the Population in the Region of Açailândia. p. 06.

^{207.} SCHIER, Adriana da Costa Ricardo. Legal Consultation. The Responsibility of Public Authority for Damages to the Population in the Region of Açailândia. p. 07.

4) Responsibility of Vale and the Pig Iron Plants for damages in the communities of Piquiá de Baixo and Califórnia.

Companies' responsibility to respect: exercising due diligence

At the international level, in the UN Human Rights Council adopted in 2008 the framework proposed by the the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises. In doing so, it recognised the responsibility of companies to respect human rights. Such responsibilities include:

"(a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur;

(b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."²⁰⁸

The "activities" include both "actions and omissions"; and its "business relationships are understood to include relationships with business partners, entities in its value chain, and any other non-State or State entity directly linked to its business operations, products or services."²⁰⁹ For companies, such responsibility implies an obligation to exercise due diligence on the conduct of its operations.²¹⁰ One of the factors that enters into the determination of the appropriate action to comply with the process of due diligence is the enterprise's leverage over the entity that caused the violation. A relationship is considered "crucial" to the business relationship "if it provides a **product or service that is essential** to the enterprise's business, and for which no reasonable alternative source exists."²¹¹

In the current case, it is worth recalling that Vale supplies ore to the plants by railway and is then responsible for the transport of pig iron to steel companies or for part of its export. According to this report's findings, the pig iron and charcoal production companies are those that directly cause the pollution that harms communities affected, such that the health damages mentioned in this report to the residents of Piquiá and Califórnia would probably not have happened without the contribution of these companies. In this way, Vale contributed and continues²¹² to contribute to charcoal production through the UPR that affects the health of the residents of Califórnia settlement. The pig iron producers have caused tremendous pollution that has equally affected the health of residents of Piquiá de Baixo.

Elements related to Vale's alleged complicity

Even though the complicity of legal entities (the companies) in rights violations continues to be debated on the international level, there has been reflections led by international experts on corporate

^{208.} Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, March 21, 2011, A/HRC/17/31, Guiding Principle13.

^{209.} Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, March 21, 2011, A/HRC/17/31, Guiding Principle13. Commentary.

^{210.} Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, "Protect, Respect and Remedy: A Framework for Business and Human Rights. April 7, 2008. A/ HRC/8/5, §54-55. See also Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, March 21, 2011, A/HRC/17/31, Guiding Principle15(b).

^{211.} Report of the Special Representative of the Secretary-General on this issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, March 21, 2011, A/HRC/17/31, Guiding Principle19. Commentary.

^{212.} Until phase out at the end of 2011, according to Vale.

complicity in international crimes. While international crimes do not fall under the scope of the current report, analysis by International Commission of Jurists expert legal panel can help with understanding the responsibility of the companies in this case study.

Among the principal criteria for the analysis of complicity are: cause, knowledge and foreseeability, proximity.²¹³

1) **Causation (contribution):** the company's conduct enables²¹⁴, exacerbates²¹⁵ or facilitates²¹⁶ the gross human rights abuses.

In the case of Califórnia, this is obvious: in relation to the impacts generated by the plants: Vale is the only ore supplier and is the company responsible for the transport of processed ore.

2) Knowledge and Foreseeability: the company knew or should have known that its conduct would contribute to gross human rights abuses.

In this case, Vale should have known that its business partners' activities could cause harm, particularly since it had been directly informed by the affected communities and because recommendations on measures to address safety and environmental protection in the operations of the plants. For example, Vale cannot ignore the Environmental Expert report undertaken for the District Judge of Açailândia.

3) Proximity: the company is close or proximate (geographically or in terms of the duration, frequency and/or intensity of the interactions or relationship) to the victims or the principal perpetrator of the human rights abuses.

In the case of Califórnia, physical proximity is obvious: in the case of Piquiá de Baixo, Vale is the most important mining company in Brazil, and is the principal supplier of iron ore to the plants involved. Beyond its role as principal coordinator of the implementation of the Grande Carajás Project, one could say that Vale had control, power, and crucial influence on these business partners.

Due diligence at the national level

Foreseeable risk is intrinsic to the precautionary principle found in the Law on the National Environmental Policy and the federal constitution of Brazil.

The omission of public authority; in all three branches of government, to respect its constitutional obligation to protect the environment does not exclude individual responsibility for harmful conduct, given the existence of damage and the link with the contaminating source.

More precisely, the precautionary principle is found in Article 4, clauses I and IV of the Law on the National Environmental Policy (Law 6.938 of August 31, 1981) that expresses the need to have a balance between economic development and the rational use of natural resources, including an evaluation of the environmental impact.

The Federal Constitution of 1988 later incorporated the principle into its text, specifically in Article 25. It is aligned with the concepts of risk prevention and safety for future generations, along with

^{213.} International Commission of Jurists. Corporate Complicity and Legal Accountability. Vol. 1: Facing the Facts and Charting a Legal Path. 2008. Available at: icj.org

^{214.} Ibid. pp.9, 11. Enable: "meaning the abuses would not occur without the contribution of the company [...] the company has inserted itself in the chain of causation by a crucial act or omission that 'enables' another actor to commit the gross human right abuses."

^{215.} Ibid. p.12, Exacerbate: the principal perpetrator carries out the human rights abuses but the company's conduct increases the range of human right abuses, the number of victims, or the severity of the harm suffered.

^{216.} Ibid. p. 2. Facilitate: the company's contribution made it easier to carry out the abuses or changed the way in which the abuses were carried out, even if it did not aggravate or exacerbate the harm.

environmental sustainability in human activities. It implies action that anticipates the occurrence of environmental damage or that guarantees full efficacy in selected environmental measures.

Precaution demands that the State or society take environmental measures to impede the initiation of activities that could potentially harm the environment. However, precaution also comes into play when environmental damage has already occurred by taking actions to end the damage or at least minimize its effects.

The recognition of the precautionary principle led to the emergence of a new concept regarding the obligation to provide scientific evidence of environmental damage. As a result, when an activity represents a threat of damage to the environment, regardless of scientific certainty, environmental measures must be applied to avoid environmental degradation. In addition, scientific certainty of harm, when proven, requires the immediate application of environmental measures. It is generally accepted amongst scholars that when there is scientific uncertainty regarding the potential damage or when there is a risk of irreversibility, the damage must be prevented, and even more so when scientific certainty exists.

The National Environmental Policy, and later, the Federal Constitution of 1988 established an objective responsibility on the civil level for companies and polluting agents, regardless of fault. The polluter is obligated to indemnify or remedy the damages caused to the environment and third parties affected by this activity. As a result, the precautionary principle reverses the burden of proof in favour of a healthy environment. Scientific uncertainty works in favour of the environment, placing the burden of proof on the interested party to prove that the intended interventions do not carry undesired consequences to the affected environment. The likely author of the harm needs to demonstrate that the activity will not cause damage to the environment, and that there is therefore no need to adopt preventive measures.

In terms of the National Environmental Policy, Law No. 6.938/81 established objective responsibility with the "polluter"²¹⁷ which is obligated to indemnify or remedy the harm caused to the environment and third parties affected by their activity regardless of the existence of fault.²¹⁸ Therefore, this responsibility principle does not require to the proof of guilt, since it suffices to prove that the damage is related to the action or omission of the polluter (the nexus of causality.)

In this regard, in the case of environmental damage eventually caused by the pig iron industries, Vale could be considered as an indirect polluter on whom responsibility would also fall for the harmful act and as a consequence must remedy the damage, according to precedent the Superior Court of Justice of Brazil set in a case of environmental damage involving Petrobrás in the city of Cubatão in the state of São Paulo.²¹⁹ In this case, Superior Court stated that "Petrobrás S/A, although it did not directly perpetrate the damage, shared liability for environmental damage through its participation or collaboration in such harmful acts or fault in the lack of monitoring or the choice of business partners."²²⁰ The same reasoning can be applied to the company Vale in the present case, establishing its liability.

As such, since Vale is by and large the impulse behind the Grande Carajás Project, and given its undeniable business relationships with the pig iron industries through its supply of iron ore and other services, such as pig iron transport by the Carajás railway, Vale could be thought to share liability

^{217.} Defined as being physical or legal entity, public or private, who is directly or indirectly responsible for activity that harms the environment.

^{218.} Article 14, §1, of Law no. 6.938/81.

^{219.} Resp. n. 67.285/SP, Rel. Min. Castro Meira. Excerpt of the Agreement available at: www.stj.jus.br (last accessed on November 14, 2010.)

^{220.} Unffocial translation. REsp. n. 67.285/SP, Rel. Min. Castro Meira. The decision is available at www.stj.jus.br (last accessed on November 14, 2010.) The idea of fault through supervision and fault by choosing are legal concepts related to liability of superiors or contractors for damages caused by people or entities under its supervision or chosen by the first to develop a task or work.

for the harmful acts by the pig iron industries in Piquiá de Baixo, even if it was not through its direct action.

It should be recalled that in all these years, the pig iron industries - directly responsible for serious environmental damages - have operated without any environmental impact studies. Vale did not take sufficient measures to avoid the occurrence of these damages and never stopped supplying primary material to providing other services to these industries. It can therefore be concluded that Vale also benefited from part of the profit made by these companies at the cost of the environment.

In addition to the civil liability of the companies involved in the case, Brazilian law includes the possibility of criminal liability for companies when they cause environmental damage. Article 225, paragraph 3, of the Federal Constitution of 1988 explicitly addresses criminal liability of legal entities for conduct that harms the environment²²¹ and the Law on Environmental Crimes, Law 9.605.98 passed in 1998, recognises companies' liability (as legal persons) as complementary to liability for natural persons²²², which does not prevent criminal prosecution of legal entities.²²³

In order to recognise the liability of legal entities in environmental crimes, Article 3 of Law 9.605 demands that the conduct of the company be based on a decision of one of its representative or director which would have led to the environmental infraction.²²⁴ Environmental crime is one type of environmental infraction presented in Article 29 and the following articles of this law.

According to the facts presented in this report, it is possible to identify a possible compatibility with Article 54 of Law 9.605 of 1998, which addresses the crime of pollution: "To cause pollution of any nature at levels that result or can result in damages to human health or that provoke mortality in animals or significant destruction of flora."

The environmental expert report cited earlier²²⁵, which states that the production levels of the company close to the population "are certainly harmful to human health" in Piquiá de Baixo and the reported increase in upper respiratory infections among the local population (see Section II, Part B), would be relevant examples in this case.

Given that the conduct of the companies involved in the violation of human rights have likely caused health problems for the residents of Piquiá de Baixo and Califórnia settlement, they could therefore eventually be identified as environmental crimes of pollution under Article 54 of Law 9.605 of 1998, opening the door for these companies to be held criminally liable.

In conclusion, both Brazil's domestic law as well as international standards demand that companies involved, in this case Vale and the pig iron companies, act with precaution or due diligence to *prevent* environmental and social damages that may be caused by its activities or its business relationships. The externalization of risks on the part of the companies or the value chain should not absolve the companies involved from liability to prevent or remedy the direct or indirect human rights violations. The influence that an entity such as Vale exercises over its business partners in the iron mining chain and the importance of Vale in the commercial activity of the pig iron plants are additional factors to justify immediate action on the part of all companies involved.

The health damages addressed in this report were caused by dust and smoke from the pig iron and charcoal producers which did not respect the precautionary principle. The environmental and social

^{221.} Federal Constitution of 1998, Art. 225, paragraph 3. The conduct and activities considered harmful to the environment are subject to infractions, legal entities to penal and administrative sanction, independent of the obligation to remedy damages caused.

^{222.} Law 9.605/98, Art. 3: "The liability of legal entities does not exclude physical people, authors, co-authors, or participants."

^{223.} Although there was internal discussion about the constitutionality of criminal liability for legal entities, the Superior Courts had declared in favor of it, only requiring the person responsible for the decision that caused the damage for criminal prosecution.
224. Law 9.605/98, Art. 3:"Legal entities will have administrative, civil and criminal liability according to this Law, in cases where an infraction is committed through the decision of legal or contractual representative, or board, in the interest or benefit of the entity."
225. ALBINO, Ulisses Brigatto. Environmental Expert Report. Imperatriz, 2007.

measures that should be adopted are mitigating in nature, since the damage is already done. Given the damages suffered by the families, the companies have a responsibility to remedy and act in a preventive manner, as well as to immediately act in conformity with Brazilian socio-environmental legislation. FIDH, Justiça Global and Justiça nos Trilhos therefore address recommendations to both the State and the companies, with a view to encourage the adoption of both preventive and remediation measures.

Section V Recommendations

FIDH, Justiça Global and member organisations of Justiça nos Trilhos recommend:

>The authorities of the State, the state of Maranhão and the municipality of Açailândia to:

Recalling the obligation of States to protect all people against human rights violations committed by third parties, including companies:

1. Regarding past human rights abuses in Piquiá de Baixo and Califórnia settlement, and to ensure access to justice and the right to and effective remedy, including victims' right to reparation :

Immediately open **impartial and independent investigations and corresponding legal action** of civil and/or criminal nature, in order to investigate and sanction those responsible for violations committed, guaranteeing integral legal assistance for the victims;

In relation to Piquiá de Baixo: ensure the 21 legal actions filed in 2005 before the Second Judicial Chamber of Açailândia be dealt with as expeditiously and satisfactorily as possible, taking into account elements gathered as a result of the different fact-finding processes, especially the expert report of Mr. Ulisse Brigatto Albino;²²⁶

Recognize, through the Attorney General of the state of Maranhão, Public Prosecutor and Judicial Authority the situations of Piquiá de Baixo and Califórnia settlement as urgent priorities, assigning personnel from these institutions to act in a dedicated and permanent manner in the investigations and legal actions proceedings;

Immediately undertake technical studies by competent, credible and impartial professionals or institutions without cost to the victims, in order to determine the actual quality of the air, water and soil, the existence of contamination, and its relation to the illnesses caused by the industrial effluence from the metals-mining and charcoal activities located near the communities of Piquiá de Baixo and Califórnia settlement, along with the eventual measures needed to comply with applicable national and international standards;

Undertake **technical studies** to determine the pollution of air, water and the soil as a result of the use of chemical fertilizers and pesticides used in mono-cultivation **of eucalyptus** and its impact on people's health. Also determine the scope and impact of the measures that need to be taken to comply with existing legislation;

Once the damages are proven and responsible actors identified, ensure the affected communities

^{226.} ALBINO, Ulisses Brigatto. Environmental Expert Report. Imperatriz, 2007. The environmental expert Ulisse Brigatto Albino performed a study on the air pollution in Piquiá de Baixo at the request of the District Judge of Açailândia as part of a lawsuit on the part of 21 families. The study concluded "the position of the company in relation to the residents mentioned in this report, in the conditions in which it operates at the moment of this report is incompatible with the presence of the residents." The report also indicated that "the emissions of soot, water with metallic residues and noise are certainly harmful to human health," and "ideally, the community should be relocated."

receive **reparation measures** for damages suffered. These must be applied in their individual and collective dimensions according to their four different modalities whenever possible: measures of restitution, rehabilitation, compensation, and, finally, measures of satisfaction and guarantees of non-repetition;

In relation to the residents of Piquiá de Baixo and considering the actual recognition of the incompatibility between the current industrial activities and the residential site of the settlements located close by, **fully and immediately relocate all families residing in Piquiá de Baixo** to areas chosen with the participation of the residents, through – if necessary – an expropriation of the chosen area for social interest purposes. The relocation process must respect national and international standards including delays, along with the opinion, wishes, life style and productive vocation of the residents, providing effective possibility for residents to pursue sustainable livelihoods in their new housing location.

In relation to the current area of Piquiá de Baixo, ensure complete environmental recovery of the residential location degraded by the pollution.

On the right to health and a healthy environment

Immediately assess, through competent, reputable and impartial professionals or institutions without cost to the victims, the level of compliance to requirements for existing environmental licences and suspend the granting of new licence concessions for metals-mining enterprises in Açailândia in the industrial district of Piquiá until the conflicting situation in question is resolved in a satisfactory manner and until adequate monitoring procedures are in place as per Brazilian law;

Require that the charcoal producers and the metals mining plants, along with the ore suppliers and pig iron transport companies, **immediately install permanent monitoring equipment for pollution emissions and for air quality** and produce monthly reports to be sent to public monitoring agencies and the communities of Piquiá de Baixo and Califórnia;

Require the metals-mining companies to adopt the measures recommended by the expert Ulisses Brigatto Albino²²⁷ in his report, such as: a) the installation of anti-particle filters; b) the installation of gas incinerators; c) the installation of a drainage network along with waste water treatment; the installation of enclosed sheds for any type of grinding activity; e) the removal of any type of waste (whether from iron ore or charcoal) in containers and be transported in vehicles in closed areas;

Involve the appropriate agency and require that each company involved prepare and publish a **Solid Waste Management Plan – SWMP**, containing information on the generation, characteristics, storage, transport and final destination of their solid industrial waste;

Given that the pig iron company Gusa Nordeste is the located the closest to Piquiá de Baixo and that its newest steel mill to be built in Açailândia will likely receive pig iron from other plants, it is recommended to ensure **the granting of authorisations and licences**, environmental and others, **for this new infrastructure be contingent on the resettlement of the residents of Piquiá de Baixo and after effective measures be undertaken to comply with the law** with regard to pollution emissions and other potential damages;

In the light of the current impacts on the community, IBAMA should immediately suspend and review the **environmental licensing process related to similar activities along the Ferro Carajás Railway**, to ensure compliance with current law and by requiring Vale to perform adequate environmental impact assessments;

^{227.} ALBINO, Ulisses Brigatto, Expert Environmental Report. Imperatriz, 2007.

Ensure that Vale, owner of Ferro Gusa Carajás, faces the legal consequences on both administrative and judicial levels, for non-compliance with one of the conditions of the environmental licence, which, if it had complied, would have require Vale to install and put into operation 16 gas burners, as recommended by the technical report by the Environmental Analyst of the Secretary of the Environment and Natural Resources of the State of Maranhão, Mr. Antonio César Carneiro de Sousa;

Ensure the urgent implementation, by public monitoring agencies such as the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), the Chico Mendes Institute for the Conservation of Biodiversity (ICMBio) and their counterparts in the state of Maranhão, of **new regulation on charcoal** used by metal-mining companies in Açailândia: **and to evaluate the environmental impact of the deforestation and use of charcoal** from native wood with due application of sanctions for those found responsible of causing environmental damages;

Municipal health secretaries should include respiratory illnesses among their compulsory disease notifications.

On the right to information

Ensure that annual public hearings on the impact of the companies operating in the area of Açailândia be called and coordinated by the Attorney General of the state of Maranhão, and that the hearings address the monitoring public analysis of data provided, in particular regarding remediation measures taken vis-a-vis the communities.

Monitor, via the Attorney General and the Public Defender of the state of Maranhão, compliance on the part of the metals-mining companies in Açailândia to Directive 111 of the Maranhão Environmental Secretary, demanding **biannual reports** and their disclosure through **public hearings** held by the city of Açailândia every six months;

Adopt measures, through **SEMA**, to facilitate access to information contained in the environmental licences, such as the creation of a database, ensuring respective documents are available in digital format to be accessible by any interested citizen within a reasonable period of time; its inclusion in the National Environmental Licensing Portal could lead to greater transparency and accessibility of licenses granted. In this regard, it is also recommended that the city of Açailândia keep copies of the EIS/RIMA and conditions, along with SEMA environmental monitoring reports that should be at the disposal of the residents;

Adopt legal reforms regarding financial disclosure, ensuring higher disclosure requirements for risks that are not considered 'material', including company disclosure of the human rights and environmental risks and impacts of their activities and operations, in accordance with relevant standards. It is equally recommended that measures be taken, including the possibility for shareholders to register formal complaints before those in charge – to ensure that the applicable corporate law is not interpreted in a strict manner and that shareholders can openly express social and environmental concerns that could affect all shareholders.

>The companies, in particular Vale and the metals-mining companies along with the companies in the pulp and paper sector to:

Recalling companies' responsibility to respect all human rights

Adopt measures to remedy the impacts created by the pollution in the communities of Piquiá de Baixo and Califórnia settlement and to remedy the human rights abuses of the affected people. In particular, the companies involved, including Vale, should guarantee (including financially) the immediate and complete relocation of all the resident families in Piquiá de Baixo;

Implement or adopt internal grievance mechanisms to receive and address complaints related to human rights abuses and to solve extra-judicial conflicts that would require remediation. Such a mechanisms would be responsible for reviewing petitions and should include a multi-stakeholder committee, composed of representatives from the company, civil society and public authorities;

Vale and the metals-mining companies must refrain from taking any action – including legal – that is intended to intimidate or denigrate people who act in defence of those affected by their business activities, in accordance with international standards of protection for human rights defenders such as the Declaration on Human Rights Defenders, adopted by the UN General Assembly December 9, 1998.

On the right to health and a healthy environment

Strictly follow applicable Brazilian law on the environment and human rights (including labour) and with recognised international standards regarding companies' responsibility to respect human rights, which applies across their activities. In particular, companies should not benefit from human rights abuses and the degradation of the environment caused by their acts and/or the omission of State authorities;

Exercise **due diligence in operations management**, which implies taking all necessary measures to identify, prevent, and remedy adverse impacts on human rights and the environment, particularly through human rights impact assessments carried out prior, during, and after the conduct of its activities and with the meaningful participation of individuals and/or communities potentially affected by these activities;

Adopt, in this case particularly Vale, preventive internal measures to ensure the respect by its *business partners* (including suppliers and clients) for existing provisions for the environment and human rights in accordance with national and international standards as well as contractual clauses included in its internal policies. In case of non-compliance by one of its business partners, contractual relations should cease immediately.

On the right to information

Act with transparency, including through the dissemination to shareholders of complete and accurate information on environmental, social, and corporate governance matters including problems encountered and solutions adopted.

>The Brazilian Development Bank, as investor and financier of Vale, to:

Act with due diligence through a social and environmental audit on the impacts caused by the chain of operations coordinated by Vale throughout its entire area of influence covered by the Carajás Railway. This should include the equal participation of organisations representing those affected by the company's projects in these areas. This initiative could serve as a basis for the elaboration of procedures on current and future BNDES financing of Vale and other companies involved in the mining and steel industry;

Suspend any support contemplated for other Vale projects until recommendations in this report have been complied with, including legal proceedings related to investigated cases;

Commit, as investor and financier of Vale, to the creation and implementation of a new social development fund that would benefit all the towns located along the Carajás railway corridor and that would be managed by representatives elected by the communities whose human rights are directly and/or indirectly affected by the metal and mining industry;

Provide information on the projects financed in the region, clarifying each project beneficiary, objectives, project value and financing, financing conditions (spread, grace period and payment term), expected social and environmental impacts and socio-environmental conditions in the financial contracts along with contacts of those responsible in the Bank for the approval and/or oversight of project implementation.

>The investors committed to socially responsible investment (SRI) and clients of Vale and the metals-mining companies to:

Demand of Vale that all necessary measures be taken to ensure respect for human rights in the conduct of its own operations, and to ensure its business partners in the metal and mining chain equally respect human rights;

Demand of the metals-mining companies in which they invest that they take immediate measures to respect human rights and environmental standards.

With a view to prevent future human rights and environmental abuses, , it is recommended that Brazilian authorities:

Ratify the Optional Protocol to the International Covenant on Economic, Social and Cultural Rights;

Given the socio-environmental impacts caused by each of the operations coordinated by the company Vale along the area of influence of the Carajás Railway and in the absence of development means to improve the living conditions of the surrounding populations, **create a study group** (composed of state and federal legislative powers, social organizations and companies) mandated to establish a **new social development fund** for the entire impacted area of the Carajás corridor. This area would comprise municipalities along the Carajás corridor and the fund could recover the institutional funds from the time of the state-run Companhia Vale do Rio Doce (CVRD) and be co-managed by both public powers and civil society;

Ensure that all public organs responsible for environmental monitoring be in a position to: critically and impartially assess licence petitions, impose conditions and ensure compliance with the law and applicable requirements, including through site visits, audits and complaints when needed;

Take advantage, in particular federal authorities, of the opportunity given by current legal reform processes on mining to include legal norms to ensure the non-repetition of incidents such as those highlighted in this report, particularly through a participatory consultation process and by taking into consideration civil society's concerns.

List of people met and site visits – Individual and collective interviews

STATE OF MARANHÃO

Municipality of Açailândia

- --Residents of the Community of Piquiá de Baixo, in May-June-July 2010
- --Residents of Califórnia settlement, in May, June-July 2010
- --Representatives of the Health Clinic of Piquiá de Baixo, 5 July 2010
- --Coordinator of the FHP (Family Health Program) of Açailândia, 16 July 2010
- --Representatives of the Secretary for the Environment of Açailândia (SEMA), 9 July 2010
- --Representatives of the Municipal Health Secretary of Açailândia, 27 August 2010
- --Representatives of the District Attorney, 14 September 2010
- --Representatives of the Union of Iron Industries of Maranhão (SIFEMA), 14 September 2010

Municipality of São Luis

- --Representatives of the State Secretary for the Environment, 12 July 2010
- --Representatives of the Attorney General of the state of Maranhão
- --Representatives of the Public Defender of the state of Maranhão, 12 July 2010

BRAZILIA

Federal District

- --Representatives of the Ministry for the Environment, 15 September 2010
- --Representatives of the Health Ministry, 15 September 2010
- --Representatives of the Secretary for Human Rights, Presidency of the Republic, 16 September 2010
- --Representatives of the Brazilian Institute for the Environment (IBAMA), 16 September 2010
- --Representatives of the Attorney General of the Republic, 16 September 2010

STATE OF RIO DE JANEIRO

Municipality of Rio de Janeiro

- --Marcel Firpo, FIOCRUZ researcher, 29 June 2010
- --Representatives of Vale and Vale Foundation, 17 September 2010
- --Representatives of the Brazilian Development Bank (BNDES), 17 September 2010

fidh

Keep your eyes open

Establishing the facts – Investigative and trial observation missions

Tustica nos Trill

Through activities ranging from sending trial observers to organising international investigative missions, FIDH has developed, rigorous and impartial procedures to establish facts and responsibility. Experts sent to the field give their time to FIDH on a voluntary basis.

FIDH has conducted more than 1500 missions in over 100 countries in the past 25 years. These activities reinforce FIDH's alert and advocacy campaigns.

Supporting civil society – Training and exchange

FIDH organises numerous activities in partnership with its member organisations, in the countries in which they are based. The core aim is to strengthen the influence and capacity of human rights activists to boost changes at the local level.

Mobilising the international community – Permanent lobbying before intergovernmental bodies

FIDH supports its member organisations and local partners in their efforts before intergovernmental organisations. FIDH alerts international bodies to violations of human rights and refers individual cases to them. FIDH also takes part in the development of international legal instruments.

Informing and reporting – Mobilising public opinion

FIDH informs and mobilises public opinion. Press releases, press conferences, open letters to authorities, mission reports, urgent appeals, petitions, campaigns, website... FIDH makes full use of all means of communication to raise awareness of human rights violations.



Justiça Global is a human rights NGO and member of FIDH, dedicated to the promotion and protection of human rights, and the strengthening of civil society and democracy. Our actions aim at denouncing human rights violations, influencing the formulation of public policies through a rights-based approach, encouraging the strengthening of democratic institutions, and calling for the effective guarantee of human rights for marginalized people and victims of human rights violations.

Justiça nos Trilhos is a coalition of NGOs, social movements, parishes, unions, and academics dedicated to the defense of the rights of communities living in areas affected by Carajás railway, in the states of Pará and Maranhão. The network is articulated at the national and international levels around the denunciation of social and environmental harm caused by the mining and steel industry in the region and looks at less aggressive models of resources and territories management.

Director of the publication: Souhayr Belhassen

Authors: Justiça Global: Andressa Caldas, Gustavo Bezerra, Isabel Mansur, Luciana Garcia, Tiago Botelho. Justiça nos Trilhos: Antonio Soffientini, Danilo Chammas, Dario Bossi, Federico Veronesi, Guilherme Zagallo, Ilaria Arcara. FIDH: Laure Aviles, Geneviève Paul, Elin Wrzoncki with the support of Isabela Figueroa, Javier Mujica e Nathalie Nunes.

Coordination: MST-Açailândia: Divina Lopes, Junior Mendes. Piquiá Residents Association: Edvar Dantas Cardeal, Anísio Pereira. Assentamento California: Joana Pereira da Silva, Zé Luis Costa.

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FIDH represents 164 human rights organisations on 5 continents



of person. Article 4: No one shall be held in slavery

or servitude; slavery and the slave trade shall be prohibited in all their forms. Article 5: No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. Article 6: Everyone has the right to recognition everywhere as a person before the law. Article 7: All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination. Article 8: Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law. Article 9: No one

ABOUT FIDH

• FIDH takes action for the protection of victims of human rights violations, for the prevention of violations and to bring perpetrators to justice.

• A broad mandate

FIDH works for the respect of all the rights set out in the Universal Declaration of Human Rights: civil and political rights, as well as economic, social and cultural rights.

A universal movement

FIDH was established in 1922, and today unites 164 member organisations in more than 100 countries around the world. FIDH coordinates and supports their activities and provides them with a voice at the international level.

• An independent organisation

Like its member organisations, FIDH is not linked to any party or religion and is independent of all governments.

fidh

FIDH - International Federation for Human Rights

17, passage de la Main-d'Or - 75011 Paris - France / CCP Paris: 76 76 Z Tel: (33-1) 43 55 25 18 / Fax: (33-1) 43 55 18 80 www.fidh.org

Find information concerning FIDH's 164 member organisations on www.fidh.org