

Sustainable Juruti: A proposed model for local development addresses the need for such an agenda and provides guidelines for its implementation, taking into account one hard fact: the establishment of a large-scale mining operation in the Brazilian Amazon, more specifically in the municipality of Juruti, on the banks of the Amazon River in the state of Pará.

We hope that this publication will also serve to provoke discussion on the potential forms of intervention that can effectively promote sustainable development and provide guidance for companies, government and civil society on alternative approaches that are more consistent with the expectations and concerns of the local populations.

The engagement of the private sector and the example it sets when implementing initiatives such as these is paramount at a time when society is growing increasingly more demanding in terms of corporate responsibility.



Sustainable Juruti: A proposed model for local development proposes a strategy for setting a long-term agenda for sustainability, based on one hard fact: the establishment of a large-scale mining operation in the Brazilian Amazon, in the municipality of Juruti, on the banks of the Amazon River in the state of Pará.

Sustainable Juruti A proposed model for local development



Sustainable Juruti

A proposed model for local development



The installation of large-scale projects in the Amazon is being accompanied increasingly more closely by civil society, aware of the impact that these ventures have on the environment and on local communities and their social relations.

Some companies that are committed to shifting the paradigm towards sustainability have taken the initiative and are pursuing business practices that not only comply with existing legislation, but also incorporate effective and lasting sustainability, both in their internal operations and in their relations with local populations and with the environment where they set up business.

In spite of this positive context, there are still very few innovative alternative forms of intervention that promote sustainable local development, particularly in regions with a complex socio-environmental configuration.

Sustainable Juruti

A proposed model for local development

**CENTER FOR SUSTAINABILITY STUDIES OF THE GETULIO VARGAS FOUNDATION
ALCOA
BRAZILIAN BIODIVERSITY FUND**



SUSTAINABLE JURUTI: A PROPOSED MODEL FOR LOCAL DEVELOPMENT (2008)

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Sustainable Juruti

A proposed model for local development



SUSTAINABLE JURUTI: A PROPOSED MODEL FOR LOCAL DEVELOPMENT

WAS BASED ON THE REPORT “SUSTAINABLE JURUTI: DIAGNOSIS AND RECOMMENDATIONS”, DRAFTED IN 2006 BY STAFF AT THE CENTER FOR SUSTAINABILITY STUDIES (GVCES) OF THE GETULIO VARGAS FOUNDATION (FGV), AND THE BRAZILIAN BIODIVERSITY FUND (FUNBIO), UNDER THE SUPERVISION OF MARISTELA BERNARDO AND WITH THE SUPPORT OF ALCOA.

THIS PUBLICATION DRAWS ON THE CONCEPTS AND PROPOSALS OF THE 2006 REPORT, BUT IT HAS ALSO BEEN UPDATED WITH NEW ADDITIONS INCORPORATED OVER TIME TO MOLD THE MODEL PRESENTED HERE.

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Executive summary

THE CHALLENGE

In 2006, ALCOA approached the Center for Sustainability Studies (GVces), of the Getulio Vargas Foundation (FGV), and the Brazilian Biodiversity Fund (Funbio) to form a partnership to come up with a draft sustainable development agenda for the municipality of Juruti and the wider region, in the far west of the state of Pará. At the time, ALCOA had recently obtained a license to install a bauxite mining operation in Juruti, which included the construction of a beneficiation plant, a port and a rail link.

Scheduled to come online in the second half of 2008, the project promises to accelerate the process of development in the region. The expectations are for this development to be sustainable, although the ways of achieving this still need to be hammered out.

ALCOA has been investing in a series of actions to minimize and offset its social and environmental impact in Juruti, both as part of the legal licensing conditions and through voluntary initiatives, in line with the principles and values established by the company to assure the sustainability of its activities. By approaching GVces and Funbio, ALCOA wanted to pursue alternatives to guarantee a long-term agenda for the region that, once implemented, would transform the experience in Juruti into a national and international benchmark for sustainability, both for the company and for society. In this context, the project in Juruti is an opportunity to develop a groundbreaking and innovative model of sustainable local development.

In order to understand the context and consider alternatives, the two organizations conducted a survey of the region, an assessment of the municipal and regional public policies in place in Juruti and the surrounding area, and also a literature search for

similar experiences in Brazil and the rest of the world. The search identified the demand for innovative models aimed at effectively implementing sustainability in local intervention contexts. The evaluation of the public policies characterized the region as being debilitated, both as a result of the social and economic hardships of its population and also because of the pressures brought to bear on its biodiversity. And the survey revealed that the local population has high expectations for the project, often transferring to ALCOA the responsibilities of the state, or else expressing concern about the social and environment costs of the mining operation and how these impacts can be effectively minimized and offset.

Based on these results and the extensive experience of the two organizations, as well as the deliberations and discussions that were held and the knowledge acquired throughout this process, **the proposed model was a sustainable local development agenda for Juruti and the surrounding area.** The model is underpinned by four fundamental principles, considered the premises for its implementation, and includes a three-pronged approach to practical intervention.

THE MODEL – THE PREMISES

The model was devised based on the one central challenge presented in Juruti: the establishment of a large-scale project in a region rich in biodiversity, with a social organization and government that is ill-prepared to manage a bout of profound and rapid change, and a lack of financial resources to meet the demands of the population. Given this situation, the project comes with potentially huge and long-term repercussions for a broad range of actors with enormous social, economic, political and historical differences, as well as for the environment.

For the proponent organizations, the response to this challenge consists of creating the right conditions for the course of the

region's development to be steered towards a common future serving the public interest. It is imperative, therefore, for the local development agenda to be set in such a way as to guarantee the proper expression of the various interests, ideas and proposals, the broad and well-informed participation of all stakeholders, and decision-making processes bound by collectively agreed criteria. In view of this, the first premise of the model is for a **broad and effective participation by all society** in setting this agenda.

There is no denying that these large projects bring significant changes to the regions where they are set up: higher revenues, population growth – and the subsequent additional pressure on infrastructure, services and natural resources, not to mention the intensification and diversification of social, political, economic and institutional dynamics. The consequences of these changes are relevant not only for defining and implementing public policies and civil society and private sector initiatives on a municipal level. They also establish new exchanges and flows, potentially beyond the municipal borders, thereby redefining the regional landscape. Another premise of the proposed model, therefore, is a **territorial approach**, recognizing that while Juruti is the hub of the sustainable local development agenda, its scope may spill over across political borders.

The intention of the proponent organizations was to draft a model that could be applied – and replicated – with the certainty that the formulation and implementation of a sustainable local development agenda, given its intrinsic complexity, is not based on prefabricated models. It needs to be firmly grounded in reality, so it can respond to the challenges and seize the opportunities that the reality has to offer. The **dialogue with the global, regional and local context** in which the mining operation in Juruti is located is, therefore, another premise for the agenda to enjoy long-term sustainability and to make sense as part of the existing actions and trends.

Just as the agenda cannot be static and needs to be molded and tailored to the local reality, it also should not be seen by the company as an isolated initiative running in parallel and detached from its overall business strategy. The model specifies that any intervention of this nature must necessarily observe an ongoing process of internal alignment – **an internalization in the company** – so as to incorporate the principles and values of sustainability into its management processes and practices. It is also vital for this process to be closely connected with the economic and production decisions, to avoid two risks: the creation of a “make-believe” world within the company, generating discourse but no practical results, and the improper incorporation of new practices that, discredited and ill-assimilated, can jeopardize the results.

THE MODEL – A THREE-PRONGED INTERVENTION

Having these agenda-setting premises as a backdrop, the model takes a three-pronged, or tripod approach to intervention. The main leg of the tripod is the collective construction of a broad and democratic public space. This is achieved through **the creation of a local forum – or council**, with the effective participation of all the interested parties, to discuss a common future serving the public interest, prioritize actions and formulate a long-term agenda. The recommended format is for the construction of this space to be inspired by the guidelines presented in Brazil’s Local Agenda 21, a local management initiative increasingly disseminated in the country, with the backing of the Ministry of the Environment and various civil society organizations with financing potential.

The second leg of the tripod consists, within the scope of the discussion on a common development agenda, of the collaborative construction – with local and regional stakeholders – **of development indicators to** monitor the social, environmental

and economic changes in the region. A development agenda requires tools to accompany the pace and the quality of this development over time, to guide the public policies, the dialogue forums, the public and private investments and the company itself concerning the changes – undesired or anticipated – in the region. It is also hoped that this essentially collaborative construction will contribute to the empowerment of civil society and the capacity-building of all the actors involved.

In parallel and in response to the shortage of financial resources that can be spent on social demands and on more sustainable conservation and economic activities for the region, the model includes the creation of a **sustainable development fund** that can raise money and invest in actions based on the needs identified during the process of monitoring the development in Juruti and the surrounding area and on the priority targets set in the local dialogue forum.

Sustainable Juruti: a proposed model for local development is not an instruction manual. It presents guidelines – that include both premises and intervention actions – to shape a long-term agenda for the region of Juruti. The quality of the results to be achieved is inseparable from the capacity of all the parties involved to appropriate the model, its concepts and proposals. The primary – and most important – expectation for the model is that, once implemented and fully tested, it will constitute a public asset, within reach and at the service of all society.



PART 1

The challenge



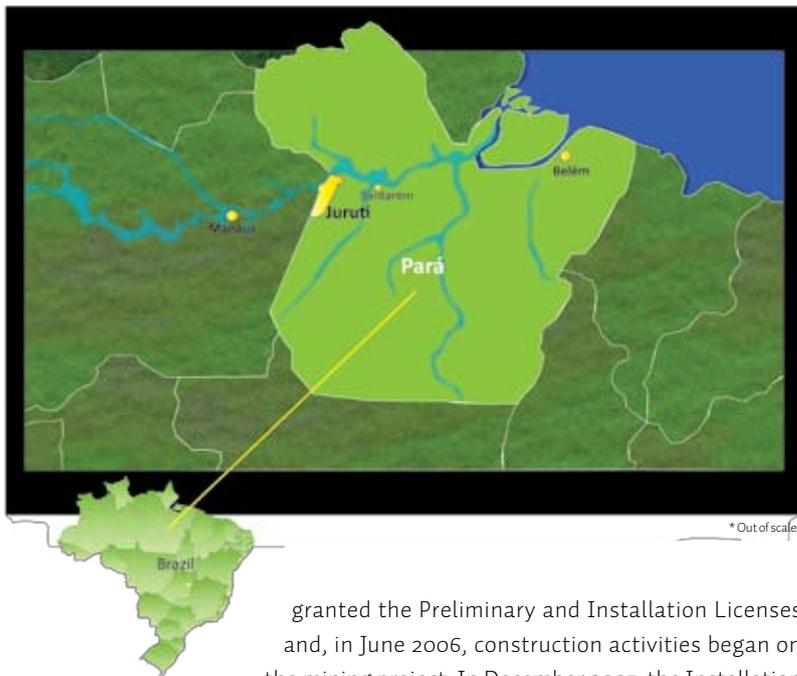
The project

Juruti, located in the far west of the state of Pará, in the region known as Baixo Amazonas, is witnessing the most important event in its recent history: the arrival and launch of mining activities by the company ALCOA in its territory.

The municipality of Juruti was originally founded as a Munduruku Indian village in the 19th century, and the influence of indigenous culture is still strong today. It has a population of 35,000 inhabitants, of which 60% live in rural areas. Juruti has already experienced some important economic cycles, such as the extraction of rosewood and jute, that did not prompt any stable or lasting development. The economy is concentrated on temporary crops, in particular manioc. Fishing, plant extractivism and, more recently, livestock farming and small-scale commerce and services (port services, grocery stores, food outlets) are other activities practiced for subsistence purposes and to supply the local market.

After some years of mineral prospecting throughout the region by the company Reynolds Metals, in 2000, ALCOA – one of the world leaders in aluminum production that acquired Reynolds Metals in the late 1990s – began prospecting in the Cpiranga, Guaraná and Mauari plateaus, located on the Juruti municipal limits. Following the decision to invest in bauxite mining, ALCOA began the licensing process, preparing Environmental Impact Studies (EIA) and an Environmental Impact Report (RIMA), and also staging a series of meetings and public hearings. These actions gave rise to the “35 Environmental Control Plans” – legal licensing conditions – and a “Positive Agenda” – a voluntary initiative implemented by the company in partnership with the municipal government. In 2005, the company was





granted the Preliminary and Installation Licenses and, in June 2006, construction activities began on the mining project. In December 2007, the Installation License was renewed.

With reserves of nearly 700 million metric tons, Juruti has one of the largest deposits of high quality bauxite in the world. Production will begin at 2.6 million metric tons per year. Apart from the mine itself, the project also comprises other facilities. The Juruti port terminal, 2 kilometers from the center of the municipal capital, on the banks of the Amazon River, will have the capacity to handle 75,000-ton ships. The bauxite beneficiation plants, located some 60 kilometers from the town, will be built nearby the Capiranga plateau, the first area to be mined. And the rail link, approximately 50 kilometers long, will operate with 40 freight cars, each with the capacity to hold 80 tons.²



For the population of the municipality and the wider region, these developments are generating some sizable expectations and uncertainties, and also reminding them of previous mining projects in the Amazon. Residents are talking, speculating, making forecasts and outlining plans. They are trying to imagine how it will affect their children, their street, their business, their customs, their stream, their forest, their town. Many see on the horizon opportunities for growth and economic accomplishment. Others, however, are concerned about the impact of the project on quality of life and on the environment.

LOCAL PERCEPTIONS

In 2006, a survey conducted in the municipality of Juruti and in the major cities of Belém and Santarém by the Getulio



Vargas Foundation (FGV) and the Brazilian Biodiversity Fund (Funbio) lent continuity to the contact made at the public hearings, providing more insight and confirming the evaluation on the willingness of stakeholders to engage with the terms of a sustainable development proposal for Juruti and the wider region. At least 40 people were polled³. In Juruti, the survey interviewed local leaders, while in Belém and Santarém, it heard from opinion leaders, specialists and academics, and also from institutions that, given their constitutional prerogatives, have the power to intervene or regulate, such as the Ministry of the Environment's enforcement agency Ibama and the State Prosecutor's Office.

When the survey was conducted, the intention was to capture the perception of the stakeholders at the time. In other words, instead of investigating "how the events unfolded", it sought to understand "how each person felt about the events", which permitted a better evaluation of their willingness to act and obtain results consistent with their emotions, culture, expectations for the future, mental models and allegiances.

The result of this diagnosis was a broad spectrum of perceptions on the risks and opportunities arising from the installation of the mining project in the region, reflecting (i) a wide diversity of personal and group accounts of dealings with the company and its service providers on the different occasions they came into contact; and (ii) difficulties of impartial dialogue between interest groups that are very distinct in terms of economic status, values, political culture, language and the information they have.

Generally speaking, the main concern cited by the stakeholders polled was the institutional inadequacy of government, particularly the municipal and state authorities, in its role mediating and regulating social relations and in delivering public policies to seize and capitalize on the opportunity created by

the new project in Juruti. At the time, there was a tendency by some people to transfer to ALCOA some of their repressed demands and expectations of the state, particularly on education, healthcare and infrastructure, leading them to envisage a relationship with the company that would be paternalist and/or in substitution of the state. For some, ALCOA should, without getting too entangled in state affairs, take a step beyond its basic legal obligations and make a commitment to advancing these policies in return for setting up business in such a deprived area. And, although in the minority, there was also the perception that for the social benefits brought by the company to remain in the long term, they would need to be incorporated into public policy, which would require a greater state presence as mediator, regulator and sponsor of initiatives for this purpose. At any rate, the expectations generated demands and doubts that did not find an outlet in collective management processes for the changes anticipated in the life of the municipality and surrounding area.

There was also a widespread concern that the land ownership situation and the potential conflicts arising from this could stand in the way of a comprehensive and lasting organization of economic and social life in the region.

Some people naturally and subconsciously identified the company symbolically with past mining experiences in the state of Pará, arousing some misgivings about ALCOA and undermining the formation of a relationship built on trust. Nevertheless, a willingness to engage in dialogue was expressed by the vast majority of the local population, even by more resistant groups that saw the installation of the business venture as inevitable.

The overall impression gleaned from people in the town of Juruti, the municipal capital, was a combination of hope and concern. The analysis and evaluation of the project from the



community of Juruti Velho – closer to the site of the mining operation and, at the time, the main focus of local resistance to the arrival of the company – was more critical and took into account a more complex set of factors than in the municipal capital. Stakeholders in the cities of Belém and Santarém, meanwhile, took a more regional and state-wide view of the business venture than those in Juruti, but also echoed their cautious optimism.

Hope and optimism Locally, the feelings of hope and optimism were recurring and associated with the opportunities attributed to the presence of ALCOA, such as:

- » generation of revenues for the municipality;
- » chance for and belief in comprehensive progress resulting from the company's investments in the municipality; and
- » additional public services and economic activities, namely processing fruit pulp; investments in fish farming; development of the fruit, vegetable and farm produce sector; and commerce in general.

The group of stakeholders interviewed in Belém and Santarém, meanwhile, were inclined to view the arrival of the company as a positive opportunity for the state of Pará, particularly in relation to its potential to:

- » support and encourage the state to grow institutionally and technologically stronger and make the mining industry the engine of its sustainable development; and
- » implement an innovative social and environmental mining and metallurgy model in the region.

Caution and concerns The main concerns about the arrival of the project for residents of the municipal capital relate to:

- » disorganized urban expansion and inadequate infrastructure, particularly concerning the water supply and basic sanitation;
- » the climate of competitiveness for the resources and benefits to be generated by the project, which could provoke resentment and give rise to individual and group strategies to access the company, eroding values such as community cohesion and solidarity;
- » the perception that the jobs to be created by ALCOA will only benefit people with training—or, at the very least, who are literate—thereby excluding part of the local population and paving the way for “outsiders” to take advantage of what is seen as an historic chance for growth in the region;
- » the healthcare structure, already deficient, would come under even more pressure given the potentially sharp population increase;

CHRISTIAN KNEPPER / ALCOA



- » apprehension that Juruti will be transformed from a town “where you can sleep with the door unlocked” into a situation similar to Brazil’s big cities, with a rise in crime and juvenile delinquency; and
- » sentiments indicating that the most cherished aspects of the traditional lifestyle led by the local population are already deteriorating.

The primary concerns expressed in Juruti Velho involve:

- » caution in relations with ALCOA, primarily because of the perception that, for the population, the presence of the company diminished once it obtained its Installation License;
- » social injustice, given the potential impact on a way of life in which survival is guaranteed by natural resources;
- » environmental degradation, given the potential loss of biodiversity, landscape and water quality;
- » the uprooting and destruction of values, expressed in the fear of weakening family cohesion and the “loss” of

GLVeas



children, either as victims of an increase in insecurity or a shifting away from family values;

- » the need to create their own economic prospects, especially those involving agroforestry communities.

Finally, the perceptions captured in Belém and Santarém revealed a cautious attitude to the business venture:

- » given the anxiety about causing social and environmental degradation and/or forming enclaves of prosperity with little financial return for the municipal and state governments;
- » in virtue of the perception of contradictory and/or inadequate information on the medium- and long-term prospects for the project in Juruti.





The objective

The project in Juruti represents an opportunity for ALCOA to turn the undertaking into a pioneering and innovative model of sustainable local development, an international benchmark for incorporating sustainability into large-scale projects.

For ALCOA, the innovation proposed in Juruti has its roots in the innovative approaches taken by the company when it implemented its industrial complexes in Poços de Caldas and São Luis do Maranhão, and is in keeping with the company's commitment to sustainability. This approach is compatible with the global targets that have been set in recent decades and that are expressed principally in the application of the treaties and agendas set during the UN Conference on Environment and Development (Rio-92).

This route has been taken by some companies around the world that, aware of their social role, have pursued business practices that go beyond existing legislation, in an attempt to contribute more effectively to sustainable development in all its dimensions.

In Juruti, not only will ALCOA comply with the legal conditions set by the environmental license, it will also pursue, through voluntary and innovative actions, the sustainable development of the region, since it is aware of the transformations that will occur and is prepared to play an active role in this process. According to its own values and principles, "the greatest challenge in Juruti is to earn the right, every single day, to operate the project"⁴.

In order to find alternatives for establishing a sustainable development agenda for the region and to turn the operation in Juruti into a benchmark in corporate responsibility, ALCOA



Sustainable development

*The best known definition of sustainable development is the one enshrined in the report *Our Common Future*⁵, from 1987, which considers development to be sustainable when it “meets the needs of the present without compromising the ability of future generations to meet their own needs”.*

The concept is constantly being refined, since it incorporates the know-how and experience generated by programs around the world. The Declaration of the World Summit on Sustainable Development, held in Johannesburg in 2002, assumes a collective responsibility to advance and strengthen “the interdependent and mutually reinforcing pillars” of sustainable development – economic development, social development and environmental protection – at the local, regional and global levels.

sought a partnership with the Center for Sustainability Studies (GVces) of the Getulio Vargas Foundation in São Paulo and with the Brazilian Biodiversity Fund (Funbio)⁶.

THE ROUTE

There are few practical examples, either national or international, of innovative corporate intervention models that effectively incorporate actions to promote sustainability. This was the challenge posed by ALCOA to the partnership formed by GVces and Funbio. ALCOA asked the two organizations to come up with alternatives for setting a sustainable local development agenda that could raise the standard of living for the population of Juruti and the wider region, as well as promote the conservation and sustainable use of natural resources, in



response to the transformations that will come from the installation of a large-scale mining operation in the territory. In short, a long-term agenda.

The partnership was only possible because of the interest shared by the company and its partners to collaborate in an effort to make Juruti a model of sustainability, since this is the sort of challenge that lies at the heart of both institutions – GVces and Funbio – invited to participate in the process. The partnership also sprang from the premises that such an agenda is feasible given the dedication of the company, since ALCOA has made an effort in recent years to incorporate sustainability into its activities, both in Brazil and abroad.

In 2006, the partners drafted the report *Sustainable Juruti: Diagnosis and Recommendations*, which was prepared after extensive bibliographical and field research that not only presented a diagnosis of the situation in the region, but which also identified





CHRISTIAN KNEPPER / ALCOA

Sustainable local development

In this publication, the concept of sustainable local development rests on promoting an improvement in the quality of life of the population, based on its capacity to manage – which is not limited to public policies – the resources available in a given territory. While local government is considered key to this, the importance of engaging civil society and the private sector in the process has grown over time, not only in proposing alternatives, but also in the decision-making process and in raising the money to finance such a development agenda.

Concerning the territorial locus, the local development focuses primarily on the municipality, although without being strictly limited to its borders, since it will inevitably overflow into the regional context and develop a synergy with the surrounding area.



the concepts and proposals for a potential local development model for Juruti and the surrounding area.

This publication, *Sustainable Juruti: A proposed model for local development*, draws on the formulations made in the 2006 report and supplements its proposals with the results of the deliberations, discussions and actions taken since then and with the new insight gained in the process. The result is a sustainable local development model for Juruti and the wider region that consists, essentially, of four major binding principles – premises – for handling the process and a three-pronged approach to intervention.



INTERVIEW **FRANKLIN FEDER**

LUCIANA DE FRANCESCO



“Our intention is to make Juruti the best mining project in the world”

Franklin Feder is president of ALCOA Latin America and the Caribbean

ALCOA HAS ALREADY OBTAINED THE OFFICIAL LICENSES NECESSARY TO OPERATE IN JURUTI. WHY DO MORE? WHY THE INTEREST IN TURNING JURUTI IN AN INTERNATIONAL BENCHMARK FOR MORE SUSTAINABLE MINING?

ALCOA is a 120-year-old company, which has been operating in Brazil for nearly half a century. And the tradition at ALCOA has always been to do more. The big projects, such as the very installation of ALCOA in Poços de Caldas, in the early 70s, and, in the 80s, the factory in São Luís, in Maranhão, both had this intention to go a step further. This is part of our way of being a company. Furthermore, mining projects like the one in Juruti will operate for several decades. Merely adapting to the terms of the license is absolutely insufficient to guarantee long-term sustainability. We need to set



out based not on today's conditions, but in view of the context 30 to 50 years from now. Our intention is to make Juruti the best mining project in the world. We realize that it might be unattainable, but this target matters to us, it helps us mobilize the hearts and minds of all Alcoans. What does best mean? How do we gauge this? By talking to our stakeholders. Gauging the satisfaction of our clients, our employees, our suppliers and the communities where we do business. Mining in Northern Brazil has seen some very negative experiences. We believe that if we can make Juruti a benchmark, it will be good not only for Juruti, but also for the whole Northern Region, for the mining sector, for Brazil and also for ALCOA. It is a target with great intrinsic value.

“We believe that if we can make Juruti a benchmark, it will be good not only for Juruti, but also for the whole Northern Region, for the mining sector, for Brazil and also for ALCOA”

AT WHAT POINT DID YOU FEEL THAT IT WAS NECESSARY TO ESTABLISH PARTNERSHIPS WITH OTHER INSTITUTIONS?

The last time that ALCOA worldwide opened a bauxite mine was



nearly 50 years ago. So there are very few Alcoans still working today who were involved in the last mine opening, in Australia. This is one point. The other is that the operational hypothesis behind Juruti was that the construction of the mine, the port, the rail link and the beneficiation plant would be relatively easy, while the bigger challenge would occur in the social, environmental and political sphere. So, right from the outset, we decided to assume the position that our main business is aluminum production. We know all about producing aluminum, but we don't know everything about opening a mine in the middle of the Amazon. The conclusion was obvious: let's find the best partners, whether they are in Brazil or abroad to help us with the project. We didn't have the know-how, but we do know that expertise and good ideas are not exclusive to ALCOA, so why not learn and work together? And so came the partnerships.

THE MODEL PROPOSED BY THE FGV AND FUNBIO CALLS FOR A LONG-TERM LOCAL DEVELOPMENT AGENDA WITH CONCRETE ACTIONS (THE CREATION OF A FORUM, INDICATORS TO MONITOR THE DEVELOPMENT, SETTING UP A FUND). WHY DOES ALCOA BELIEVE IN AND STAND BEHIND THIS MODEL?

When the model was first received by the company management, we looked it over and evaluated it, and we were unable to identify whether it contained any flaws, whether an incorrect premise had been used in its creation. So, according to our vision of the region and the project, the model has a very sound logic. The model offsets and resolves several challenges that we still face with other ventures. This model did not come from an analysis of the challenges inherent in our projects, it is a very smart solution. Having said that, there is still an enormous way to go. The council is just getting started, the indicators too. The creation of the fund, its mechanisms, the resources, it's all very incipient. We are playing it by ear. But I have not encountered anywhere across

the ideological spectrum, from left to right, anyone who has told me: “This point is flawed”. I think it is a pragmatic model and I think it addresses all the main challenges.

DOES A PROJECT THAT GOES A STEP BEYOND THE LICENSE REQUIREMENTS ADD VALUE TO THE BUSINESS?

Our belief and our experience tells us it does, to the extent that you earn, on a daily basis, your license to operate. There is the license issued by the proper authorities, and this is very important. But just as important, or perhaps even more so, is the license to operate that is granted by the local community, because this is where you'll be living each day. The world's big mining projects traditionally have walls enclosing the mine, in a restricted area. This is not the case in Juruti. The project in Juruti was conceived as a 21st century project, with no walls or boundaries. The operation is fundamentally integrated into community and at any time, if the community does not grant us its license to operate, it can halt production, whether on the railroad, at the port or in the mine itself. We work with the premise that society today will no longer tolerate static mining projects, in which the board and the management live in gated communities with golf courses, stores and restaurants, in absolutely disparate realities, divorced from what is on the other side of the wall. Society will not tolerate this type of project. Much of what we have done and are going to do involves this concept of going a step further and making Juruti a distinctive and innovative project. We are approaching year three of the installation, with all kinds of challenges, but the progress has been remarkable, exciting and a sign that we – and when I say we, I

“We work with the premise that society today will no longer tolerate static mining projects, in which the board and the management live in gated communities with golf courses, stores and restaurants, in absolutely disparate realities, divorced from what is on the other side of the wall”





don't mean just ALCOA, but ALCOA and its partners – are very possibly on the right track.

CAN YOU GIVE AN EXAMPLE?

The results of the survey conducted by Ibope, in early 2008, illustrating that 89% of the population of Juruti sees the installation of the company in the region in a positive light, is a good sign. But one excellent example is the formation of the Sustainable Juruti Council, which originated from the diagnosis and the model proposed by FGV and Funbio, and which for me was very exciting. This council is formed by members of the community, ALCOA and the local authorities. Although

the council is still finding its feet, it is innovative and, particularly in the face of such enormous challenges, it is very distinctive. The simple fact that local authorities, civil society and business have joined up and said: "Let's work together", with the business operator as only one part, one voice within this group, speaks volumes about the three sides involved. It says a lot, first, about civil society in Juruti. After all, if we look at the HDI and other indicators, we might ask ourselves: "Can the civil society really organize itself to such an extent?" Second, it says a lot about the Juruti authorities, which, needless to say, lack resources and face a host of challenges and difficulties. Finally,

I am very proud of the position taken by ALCOA, which made a conscious decision to say: “We want to be involved too”. For a company with the tradition, the weight and, what’s more, the complexity of ALCOA, doing something like this was a huge step forward. Another example occurred recently: a number of land occupations were staged in the region, not just on ALCOA’s land but also on the property of other private owners. The council met and came to a very reasonable and considered decision that impressed and moved me, given the maturity of the response. First, because the council took a position and, second, because of the position it took. I know we are only at the beginning, still constructing and implementing the project, with 60 years ahead of us, but they are significant signs. If we can make working together a permanent commitment, we really will have a chance to turn this into a benchmark project. Naturally, I don’t want to underestimate the challenges, since there are all kinds of new challenges emerging every day. However, if this conduct can be preserved by us at ALCOA, by the public authorities and by the community, then I will be very satisfied.

IS IT POSSIBLE TO EQUATE THE WEIGHT OF A COMPANY THE SIZE OF ALCOA WITH A LOCAL GOVERNMENT WITH SCARCE RESOURCES AND A SMALL COMMUNITY? HOW DO YOU BALANCE OUT THE DIFFERENCES SO EVERYONE HAS A VOICE?

Each of us will play a different, distinct role. In the latest challenge involving the occupation of private land, part of the final solution consisted of registering the occupiers, finding somewhere to relocate them, building housing, etc. The Juruti authorities do not have the resources for this. Neither is it up to ALCOA to do this. But the federal government has specific measures for this type of situation. So, how do the parties in the council work? Since we are a business with a certain standing, we can help by scheduling meetings with ministers and the president’s of-



fice. But a business operator turning up at the Ministry of Cities or to the Chief of Staff with a report on land occupations is not going to achieve much. What is absolutely vital is for the local authorities, the mayor, the president of the town council to be present in these meetings. Moreover, if they are accompanied by the council's civil society representatives, then they carry even more weight. This is a classic example of how the three parties, acting in conjunction, can resolve a very difficult social issue. Could ALCOA do this alone? No. Civil society? No. The local authorities? Unlikely. But, together, there is hope for a solution. The council is in its early infancy and I believe that, in the years ahead, it will learn to work in conjunction.

“Could ALCOA do this alone? No. Civil society? No. The local authorities? Unlikely. But, together, there is hope for a solution”

ISN'T LONG-TERM DEVELOPMENT THE RESPONSIBILITY OF THE STATE? WHAT ROLE DOES ALCOA ENVISAGE FOR ITSELF?

An aluminum company rests on two pillars: electrical energy and bauxite. The bauxite in Juruti, where there are large reserves, is high quality. Why are we in Juruti? Because at ALCOA, an aluminum producer, we need high quality bauxite at a competitive price. But it is not our tradition to address this need from a purely economic point of view. When we started out in Poços de Caldas, we were already mining differently. Our initiatives in revegetation and remediation are case studies. And it is initiatives like these that enable us today, 40 years later, to continue operating a factory that is extremely well regarded in the town. The shareholders have benefited from this, ALCOA has benefited, the community likewise, and the environment has been preserved. I understand the importance of the role of business, not only as a sponsor, but as a catalyst. I can't comprehend how a business can be absent, it just doesn't fit the context of a project like this.

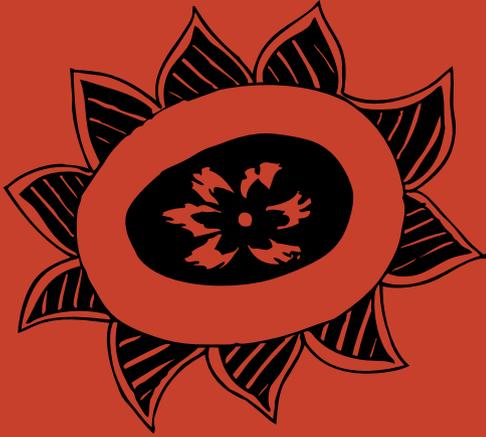
WERE ANY CHANGES TO THE CULTURE OF THE COMPANY MADE AFTER THE INSTALLATION IN JURUTI?

I think this process has already had, is still having and will continue to have an impact on our internal culture. We are a very youthful company, the average age of Alcoans in Brazil being 33 years old. So, many Alcoans joined the company after the installation of the factory in São Luís and witnessed several years of positive news, of successive acknowledgements. The project in Juruti, which posed numerous and varied challenges in the community, namely with the local authorities, suppliers and employees, did indeed affect the culture of the company. And the initiatives that were taken, to confront all the challenges head on with full transparency, will leave behind some important seeds for future leaders to run the company.

DOES THE FACT THAT ALCOA IS NOW SITTING DOWN WITH THE GOVERNMENT AND THE COMMUNITY MAKE ANY DIFFERENCE?

Not only sitting down and working together, but also engaging with the various partner organizations and institutions. We have always had this tradition of partnership and dialogue with society. But there is always room for improvement. This was the case with relations between Alumar and the metalworkers' union of São Luís, which used to be routinely tense. There used to be 30 to 35 rounds of talks before any agreements could be reached, demonstrations at the factory gates. Over the past two years, we have been working closely with a research firm connected to the [trade union federation] CUT called *Observatório Social* [Social Observatory]. We asked *Observatório Social* to visit the factory, make an appraisal, talk to the employees and publish a report. The latest negotiations with the São Luís union were the quickest and best we've ever had. I think this attitude of "let's sit down, talk and find a solution that's good for you and good for us" is the answer. I think this message is permeating and will continue to permeate throughout the company and, who knows, perhaps we can influence other companies with this vision.





PART 2

The premises



The premises

The model for implementing a sustainable development agenda for Juruti and the surrounding area is grounded in four binding principles



PREMISE 1

A BROAD AND EFFECTIVE PARTICIPATION of all society in shaping the agenda, representing interaction between stakeholders in pursuit of a common future and answering the question: “Act with whom?”

PREMISE 2

A TERRITORIAL APPROACH, which considers that the transformations arising from the project will extend beyond the borders of the host municipality, with Juruti as its hub, and answering the question: “Act where?”

PREMISE 3

DIALOGUE WITH REALITY, which puts the agenda into context, based on the global debate on development and corporate sustainability initiatives, and on regional and municipal public policies.

PREMISE 4

INTERNALIZATION IN THE COMPANY, which acknowledges the need to assume an ongoing process to reinforce the company’s sustainability strategies and practices.

PREMISE 1

A BROAD AND EFFECTIVE PARTICIPATION

The model should be grounded in the social process of negotiation, consensus building and decision making, assuring the effective involvement of all interested parties, so as to realize the public interest.

The challenges posed by the arrival of the project in Juruti are not easily resolvable, although they are normal in such a plural environment as the one found in the region, with its striking cultural differences, political conflicts, poor access to information, not to mention the historic reminders of the social and environmental impacts resulting from previous mining projects in the state of Pará. Therefore, a local development agenda needs to be set in such a way as to guarantee the proper expression of the various interests, ideas and proposals, the broad and well-informed participation of all stakeholders, and decision-making processes bound by collectively agreed criteria.

A local development agenda needs to be set in such a way as to guarantee the proper expression of the various interests, ideas and proposals, the broad and well-informed participation of all stakeholders, and decision-making processes bound by collectively agreed criteria.

For dialogue to be productive, all discussion needs to be essentially public. That is, the support and the joint actions between the company and the interested parties need to be conducted in the public eye and submitted to review by the proper groups, namely councils, committees and forums, in order to enlist new partners and identify and prevent risks and errors. The model for the sustainable local development agenda is, therefore, grounded in

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CARLOS ALVES / ALCOA



the social process of negotiation, consensus building and decision making, in order to realize the public interest – without losing sight of its effective implementation – emphasizing the values inherent in the concept of sustainable development, such as ongoing dialogue, respect, effective stakeholder engagement and adherence to the process.

Dialogue forms the basis of the processes aiming to preserve a harmony between the pillars of sustainability (economic, social and environmental). It should not be considered only as a means of minimizing risk, since this would open the door to unilateral persuasion strategies. True dialogue only exists when there is a climate of mutual trust and a willingness to listen to others, understand their arguments and then change or alter your initial opinion based on empathy and the knowledge acquired from the exchange.

In the public arena, the attention and deference paid to others hinges essentially on the acceptance of differences and an appreciation of diversity, which are recognized as being important for collective growth. This *respect* for others exists when we understand that other people's opinions are just as valid as our own and ought to be taken into account as a matter of equal rights.

Participation is one of the principles of democracy and concerns the right and the duty of every person to take part and to take responsibility for what happens in society. Despite significant progress in participative citizenship, there persists in Brazil a deep-rooted culture of exclusion that often uses participation symbolically to legitimize undemocratic situations. Genuine democratic participation only occurs when there is full access to information, coupled with the competency to process and interpret it, which means that training is vitally important for participation to really exist.

Finally, concerning the *process*, sustainability is not a place one can arrive at, but rather a method that generates ongoing interchange and learning along the way. The quality of the process is important given its capacity to provoke behavioral and cultural changes. This concept has special meaning in the corporate world, where the culture is firmly based on strict and self-serving goals and targets, with no room for adherence to the process.

For these values to become instilled in society and support sustainable relations, we need to channel our efforts and open ourselves up to ongoing learning, so the “how” becomes just as important as the “what” and the “do for” is transformed into “do with”, which implies facing up to the challenge of changing cultures and mental models.

And finally, for these values to be effectively incorporated into a local development agenda, we need, first and foremost, to give the process time and respect the differences in behavior and familiarity with forms of dialogue and participation. This would guarantee that all the interested parties – particularly the local community – have enough time to engage in the dialogue and to participate broadly and effectively.





PREMISE 2

A TERRITORIAL APPROACH

As the locus of the relations resulting from the installation of the project, Juruti is the territory of reference for organizing the local development agenda. But it is still important to identify the risks and the synergies between Juruti and its surrounding area.

Addressing development from an angle that takes the territorial concept as a reference is an approach that has been hotly debated. For Milton Santos, knowledge of the geographic “space” is based on the relationship established between society and the space, while the space is considered as the means of production of reality⁷. The concept of the territory cannot be separated from the humans that inhabit it and that are constantly modifying it. Just as the territory is a “form”, or a system of objects, like the structures of a satellite image, it is also a “function”, or a system of actions represented by anthropic activities that alter this landscape. The territory may also be interpreted as the result of the historical, cultural, political and economic activities of various individuals who appropriate it and transform the course of its history, in a metamorphosis of the space⁸.

The activities of the agents of a particular territory may extend beyond its juridico-political definition, spilling over its outer limits and revealing that, within the same territory, heterogeneous and overlapping aspects not only define the dynamics of the actors, but also set the limits of their interactions.

This territorial approach is adopted in the proposed model as the basis for evaluating the scope of the



It is necessary to define the territory that is to be monitored, in order to identify the risks and synergies of the development process that originates from the installation of a large-scale mining project in Juruti.

disruption unleashed by the transformations in Juruti. The central hub of the business activity may be physically located within the municipal limits, that is, the “radiation epicenter” may be well defined, but we must also consider the intensity – and diversity – of the transformations resulting from the development produced in the territory as a whole. It is necessary to define the territory that is to be monitored, in order to identify the risks and synergies of the development process that originates from the installation of a large-scale mining project in Juruti.

The activities of ALCOA will introduce significant changes to the municipality: higher revenues, population growth – and the subsequent additional pressure on infrastructure, services and natural resources, not to mention the intensification and diversification of social, political, economic and institutional dynamics.

The consequences of these changes will be relevant not only for defining and implementing public policies and civil society and private sector initiatives on a municipal level, but they also will establish new exchanges and flows, potentially beyond the municipal borders of Juruti, thereby redefining the regional landscape.

Territorial analysis seeks bonds of identity and cooperation based on the shared interest in protecting and valuing what a given territory has in resources or capital¹⁰: the environment, its natural resources and environmental services (natural capital); its infrastructure and economy



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In Brazil

The territorial approach, in Brazil, is included in countless federal and regional projects and initiatives, from different points of view. Initiatives such as the National Program for the Sustainable Development of Rural Territories, of the Ministry of Agrarian Development, works with the concept of territory as “a geographically defined space (...) characterized by multidimensional criteria, such as environment, economy, society, culture, politics and institutions, and a population with distinct social groups that can be distinguished by social and cultural elements”. The program explores “the identity existing between the population and the physical space that it occupies, enhancing the social and territorial cohesion, so that this process can identify the potentials and build the paths to sustainable development”⁹. The federal government’s 2008 Citizenship Territories Program is also consistent with this approach (see Appendices).

The territorial approach of the Ministry of Agrarian Development (MDA)

Among the reasons for adopting a territorial approach to rural development, the MDA lists:

- » *That the municipal scale is very restrictive for planning and organizing efforts to promote development. And, at the same time, the state-wide scale is excessively large to deal with the heterogeneity and the local particularities that need to be mobilized with this type of initiative.*
- » *The need for the decentralization of public policies, with the attribution of competencies and responsibilities to local spaces and actors.*
- » *The territory is the unit that does the best job of gauging the strength of the bond between people, social groups and institutions that can be mobilized and converted into a crucial trump card for the establishment of development initiatives.*

For the MDA, in the territorial approach, development is the result of the creation of the conditions for local agents to mobilize around a vision of the future, around a diagnosis

(produced capital), the human inhabitants, their knowledge, whether traditional or not, capacities and individual skills (social capital). These types of capital also take different forms: in their physical, or tangible form, they include elements such as forests, minerals, machinery, buildings and people; in their intangible form, they can consist of knowledge, networks or the very landscape. The use or conservation of these forms of capital permits a flow of



of their potentials and constraints, and around the means to pursue their own development projects. The territorial perspective allows a proposal to be formulated focusing on people, taking into consideration the points of interaction between the sociocultural systems and the environmental systems, and taking account of the productive integration and the competitive capitalization of these resources as means of making possible the broad cooperation and co-responsibility of various social actors.

It is, therefore, a vision that integrates spaces, social actors, markets and public intervention policies, which is intended to attain: the generation of wealth with fairness, respect for diversity, solidarity, social justice and social inclusion. These values and results can only be achieved if development is not considered as merely a synonym for the economic growth of these territories, but instead as something that involves multiple dimensions – economic, sociocultural, politico-institutional and environmental, each one contributing in its own way to the future of a territory.

goods and services to be used for the well being of society, both now and for future generations.

Therefore, the spatialization and definition of territories should be based on the resources or types of capital in their respective internal and external relations, and the municipality of Juruti is the focal point for generating and verifying the occurrence of these relations and forms of social regulation.

PREMISE 3

DIALOGUE WITH REALITY

The construction of a sustainable local development agenda requires the real situation on the ground in Juruti to be confronted from the point of view of global trends and also the regional and municipal policies underway.

The formulation and implementation of a sustainable local development agenda cannot be based on prefabricated models. The agenda needs to be firmly grounded in reality, so it can respond to the challenges and seize the opportunities that the reality has to offer. An understanding of the global, regional and local context for implementing the mining operation in Juruti is, therefore, one of the premises for building a long-term agenda that will effectively become a benchmark in sustainability.

The formulation and implementation of a sustainable local development agenda cannot be based on prefabricated models. The agenda needs to be firmly grounded in reality, so it can respond to the challenges and seize the opportunities that the reality has to offer.

GV/tes



In Juruti, three levels of reality need to be analyzed and incorporated into the process to build a sustainable local development agenda:

- (I) the global agenda for sustainability**, aimed at discussions on sustainable development and its incorporation into the business practices;
- (II) regional policies and initiatives** on environmental conservation and development that apply to the planning and management of Juruti and its territory;
- (III) municipal policies** geared towards territorial planning and sustainable local development.

THE GLOBAL AGENDA FOR SUSTAINABILITY

The local development agenda for Juruti should be consistent with the latest definitions of development on the global stage and also with the pioneering attitude of companies that are incorporating sustainability into their principles and values. The opportunity being presented to ALCOA, the government, civil society and the proponent organizations is extremely important for the creation of solid references in the field of sustainable development.

The global situation and the engagement of ALCOA in recent initiatives aimed at sustainability indicate that there is a leadership opportunity for the company in Juruti. Understanding the scale of this opportunity – including the obvious inherent difficulties and the diversity of the stakeholders involved – is essential to create an environment in Juruti that is conducive to a multidimensional process of learning and action.



It is important, therefore, to place the situation in Juruti in the broader context of perceptions about the evolution of the concept of development worldwide and the role to be played by companies in building solid references in sustainable development.

The evolution of the concept of development

The economic growth that followed the Second World War prompted the conception that development was measured by the degree of industrialization of national economies. However, in some emerging countries, the incipient industrialization of the 1960s did not produce the anticipated development, particularly in the fields of education and healthcare, and, at best, only resulted in the “modernization of their elites”¹¹.

This fact raised suspicions about the perception of economic growth as a synonym for development, a dogma that began to be challenged by economists from the developing world in the early 1960s, particularly important being the studies carried out by the Economic Commission for Latin America and the Caribbean (ECLAC) of the United Nations (UN).

Throughout the 1970s, the international debate flourished on the search for development models that could combine economic growth, social justice and the conservation and sustainable use of natural resources, despite the growing acceptance of the argument that high population growth in developing countries was primarily responsible for their high levels of poverty and environmental degradation.

*This new global agenda began to take shape in 1972, when the Club of Rome published the report *Limits to Growth* and the UN*

Corporate responsibility Although the concept of corporate responsibility is being embraced by a growing number of companies, its evolution exposes the changing perceptions about the role of the private sector in this area.



staged the Conference on the Human Environment, in Stockholm. Meanwhile, two broader approaches to development gained strength, echoing two decades of debate on the need for this process to mean more than just the expansion of Gross Domestic Product (GDP) per capita.

*In 1987, the concept of sustainable development was officially presented to the world in the report *Our Common Future* and, in 1989, the Human Development Index (HDI), which combines GDP per capita with measures of life expectancy and education, began to be formulated. Published for the first time in 1990, in the *Human Development Report*, the HDI rapidly became the best alternative for measuring the progress of countries. It is published annually by the United Nations Development Program (UNDP). The United Nations Conference on Environment and Development, sometimes called *Rio-92*, consolidated the global movement for a form of development that is economically sustainable, socially just and environmentally balanced. The conference produced documents that are considered references for improving governance and guiding the policies of a global society at the end of the 20th century, namely the *Rio Declaration on Environment and Development*, the *Convention on Biological Diversity*, the *Framework Convention on Climate Change* and *Agenda 21*.*

The first wave of this movement, which still persists - and remains hegemonic, encompasses a sizable number of business leaders who consider sustainable development to be a necessary evil, entailing legal obligations, additional responsibilities and higher costs of doing business. Consistent with this attitude, their business responses boil down to mere assistential or philanthropic actions that are completely detached from their corporate activity, such as donations to community programs.

However, some already acknowledge that the complexity of today's society poses new risks to be administered. According to this still nascent approach, the corporate responsibility practices are not limited to assistential actions and are instead motivated by the company's reputation and its moral obligations to the societies where it operates.

Finally, for a small - but astute - portion of the business community, the concept of sustainability today represents a whole new way of doing business, by transferring to compa-

In Brazil

The MSSD conducted a survey in South America to determine what civil society considered a priority in the mining sector's adjustment to sustainable development. The research carried out in Brazil identified the following national priorities:

- » *Local development (59%)*
- » *Environmental performance of mining (50%)*
- » *Structures and mechanisms for participation by civil society (46%)*
- » *Instruments and capacity of government (46%)*

nies the challenge of seizing the opportunities and producing innovative solutions that not only generate shareholder value, but also contribute to sustainable development.

A host of opportunities present themselves to anyone who wants to introduce models that are built on the premise that sustainability hinges on the competent management of its natural complexity and on the capacity to consider, in business planning, the legitimate interests of different stakeholders and the impact on the environment.

The mining sector and sustainability In 2000, with Rio+10 on the horizon, nine of world's largest mining and metals companies started the *Mining, Minerals and Sustainable Development (MMSD)* project¹², to determine how the sector could adjust to the objectives of sustainable development. The MMSD gathered more than 40 sponsors, among them ALCOA, the World Bank and the United Nations Environment Program (UNEP). The premise was that the mineral production process could help society to achieve other important and lasting social, environmental and economic objectives, while also meeting the demand for mineral products that are essential for our contemporary economy. Furthermore, it acknowledged that in the places where it does not take these goals into account, the sector has faced mounting problems and failed to obtain a "social license" to operate.

The project painted a challenging picture for South America. Besides the efforts to reevaluate their own culture, the companies have to deal with the weakness of the public institutional framework, the lack of data to support decision making, deficiencies in the provision of formal and informal educational opportunities and the lack of infrastructure. Meanwhile, social participation in the govern-



ment has increased, with greater use of democratic mechanisms in the formulation, implementation and evaluation of development initiatives. As a result, conditions such as transparency, accountability and flexibility have started to become qualities that are expected of public and private institutions and of civil society organizations.

To confront this situation, the MMSD identified distinct, but integrated, problems for the state, companies and society. The governments would consolidate an agile, democratic and transparent framework that protects social rights, besides ensuring a healthy and stable investment climate, in order to attract companies with the highest standards of social and environmental performance. The companies, meanwhile, without undermining the role of the state, would be more sympathetic to the communities and show more commitment to local development, building citizenship and strengthening governance. And, finally, the civil society would exercise its right to participate and acknowledge the responsibility to the future it shares with governments and the private sector. The evaluation of the MMSD provided input for the principles of the *International Council on Mining & Metals* (ICMM), an international association created in 2001 that represents the mining and metals industry. When adopting these values, the ICMM emphasized the sector's commitment to sustainable development.

REGIONAL POLICIES AND INITIATIVES

At the time of the diagnosis, in 2006, there were numerous public policies and initiatives geared towards sustainable territorial management in place in the region, the majority run or supported by the federal government, as a result of pressures related to the socioenvironmental impacts of paving the BR-163 highway that links Cuiabá to Santarém. A number of

state-level projects are also underway, such as the Ecological and Economic Macro-Zoning (ZEE) of the state of Pará.

The regional context signaled weaknesses in the region around Juruti and a demand for innovative and long-term interventions. The initiatives identified in the area drew attention to the need both to regularize land ownership and create local agroforestry production chains, and they highlighted the vocation of Juruti to host the current mineral expansion in Pará. Given the configuration of territorial regional policies in recent years, Juruti has become the only municipality fully designated for the consolidation of economic activity, and it coincides with the zone



Regional context

THE SUSTAINABLE AMAZON PLAN (PAS) *The PAS was devised in 2003 as a series of strategies and instructions for federal and state government policies to identify development strategies for the Amazon and included: sustainable production activities with technological innovation; social inclusion, citizenship and access for the regional population to universal healthcare, education, public safety and welfare policies; infrastructure works in the areas of transport, energy and communications, in conjunction with territorial planning strategies; financing for employment and income generation, reducing inequalities, sustainable use of natural resources and the incorporation of techno-scientific knowledge into production; environmental management and territorial planning, prioritizing the regularization of land ownership. The PAS established three macroregions in 2003, with Juruti located in the Central Amazon Macroregion, in the subregion of Vale do Amazonas, where the strategies set by the PAS are geared primarily towards controlling the expansion of soy, regulating fishing, installing and strengthening potential local*



production clusters and planning the frontiers of occupation in the territory, including investments in the regularization of land ownership. The PAS was officially launched in 2008, although with some significant alterations compared to the initial proposal (See Appendices).

THE SUSTAINABLE BR-163 PLAN The Sustainable Development Plan for the Area of Influence of the BR-163 Highway (Cuiabá–Santarém), created in 2004 by an interministerial group in collaboration with the state governments of Pará, Amazonas and Mato Grosso, municipal governments and various

sectors of society, addresses four central themes: territorial planning and environmental management; support for production activities; infrastructure for development; and social inclusion and citizenship. It also includes actions to strengthen civil society, mechanisms for participation and public oversight, and also monitoring and evaluation. For Juruti, the plan establishes support to consolidate existing rural settlements and to create new settlements, prioritizing formats adapted to the Amazon region. It recommends granting concessions for the use of floodplain areas, by drafting natural resource management plans and strengthening family and community level agroecology and forestry production chains. The region of Juruti is

described in the plan as one of the areas with the greatest potential for mineral exploration anywhere in Brazil, and as currently experiencing an increase in production. Of all the investments in the region (bauxite extraction in Oriximiná, reopening Vale mines in Paragominas, expansion of Alunorte and Albrás operations in Barcarena, installation of a Vale refinery in Barcarena), the plan asserts that the most important “is the opening by ALCOA of a new mining frontier in Juruti, accompanied by an alumina production plant”¹³. The plan highlights the need for effective environmental protection measures, to “establish guarantees that any investment by ALCOA in Juruti will not be made to the detriment of poor families from the region”.

SUSTAINABLE FOREST DISTRICT & CONSERVATION UNITS

The federal government has invested heavily in establishing new Conservation Units (UCs) in the West of Pará, in response to increased political tension and to the land conflict violence. The expansion of the Amazon National Park and the creation of seven new UCs in early 2006 increased the total amount of the region’s protected areas by 6.4 million hectares. All the new UCs are part of the first Sustainable Forest District, which

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is designed to promote the installation of a logging industry in the region that employs technological excellence and sustainable methods. The district was established based on the new regulatory framework for the forestry sector, the Public Forest Management Law, whose backdrop is the complex land ownership situation in Pará. The law is intended to reduce what is known as “grilagem” (fraudulent land grabbing) in the region, based on public forest management. The mosaic of new UCs is also a response to the pressures and demands from different stakeholders in the region that have resulted from the paving of the BR-163 highway. Given this new regional configuration, Juruti is now the only municipality in the area that is fully earmarked for the consolidation of economic activity, which coincides with the zone of consolidation and expansion of production activities of the Ecological and Economic Macro-Zoning of the State of Pará.

ECOLOGICAL AND ECONOMIC MACRO-ZONING (ZEE) OF THE STATE OF PARÁ This initiative is intended to guide the macro-policies on the use and occupation of land in the state of Pará, establishing a disciplined implementation of plans, programs and projects of strategic interest to the public and private sectors. The municipality of Juruti is located in the region of Baixo Amazonas, in a zone designated for the consolidation and expansion of production activity. There are two guidelines for the region of Baixo Amazonas. The first deals with already occupied floodplain areas, which should be used to consolidate economic activities associated with small-scale agriculture. The second is for the plateau areas, where there is still significant vegetation cover, and it encourages logging activities, since there is strong market demand for forest species that are found in large numbers in the preserved areas of these plateaus.

of consolidation and expansion of production activities in the ZEE of the state of Pará. It is very likely, therefore, that the municipality will come under heavy pressure to convert its forests into relatively unsustainable economic activities, which indicates a strong probability that Juruti will experience, in the near future, high rates of deforestation in its surrounding area. This scenario constitutes an enormous challenge for implementing a sustainable local development agenda.

MUNICIPAL POLICIES

On the municipal level, two initiatives increasingly implemented in Brazil were identified as potentially able to help shape a local development agenda for Juruti: the Participation Master Plan and the Local Agenda 21¹⁴.

Participation Master Plan This Master Plan, which the Brazilian Constitution makes mandatory for all cities with more than 20,000 inhabitants, is a fundamental piece of development and urban expansion policy. Theoretically, these master plans play an educational role and create opportunities for institutional, technical and political training for local governments and communities. The participa-

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tive methodologies inherent in the plan provide lessons on productive relationships and diversity, and on the rights and duties that come with citizenship, as well as consolidating a culture of joint responsibility for our common destiny. They constitute, therefore, an important component of democracy. The plans are also mechanisms for improving the public administration, since they make the public aware of the numerous legal and institutional means of participating in decision-making in the territory and in the formulation and execution of public policies, through development programs and projects.

In the Amazon, these master plans have acquired some characteristics that are specific to the region. The first is the inevitability of the concept of “territorial management”, which is particularly useful when tackling the challenge, inherent in the region, of development aligned with complex solutions for environmental conservation. The second is the fact that the Master Plan appears in many communities as the first orderly discussion on the process of development, earning it a greater significance.

Finally, in spite of logistical problems and deficient formal education in the Amazon, the challenge is to explore the full participative, educational and training potential offered by the master plans. The state of Pará has teams that, with the support of the Ministry of Cities but primarily with the participation of several local institutions, develop the expertise to implement master plans that are suited to the characteristics of the Amazon region¹⁵.

In Juruti, at the time of the diagnosis, the Master Plan was being formulated by the municipal government, with the support of ALCOA as a condition for its environmental license, and under intense legal time pressure. It was finally officially created in October of 2006.

Local Agenda 21 Agenda 21, one of the main documents approved at Rio-92, identifies a series of actions to apply the concept of sustainable development. The Brazilian Local Agenda 21 was approved in 2002 and consists of six priority issues: natural resource management; sustainable agriculture; sustainable cities; infrastructure and regional integration; reduction of social inequalities; and science and technology for sustainable development. It began to be implemented in 2003 and was later upgraded to become part of Brazil's four-year Pluriannual Plan (PPA 2004-2007), enhancing its institutional identity in the public policy arena. And it is widely encouraged in Brazil.

The Local Agenda 21 is a governance tool, since it unites the public authorities and society around training and strategic planning for the municipality. It identifies and discusses the main problems, in their various dimensions, and pursues integrated solutions. It is implemented through the creation of a Forum, which in some municipalities can become a veritable development agency, debating and proposing public policies. Another characteristic of the Local Agenda 21 is integration with other processes for discussing and drafting Master Plans, Municipal Pluriannual Plans, Management Plans, River Basin Plans and regional versions of Agenda 21.

In 2006, at the time of the diagnosis, not a single process was in place to create a Local Agenda 21 in Juruti. In 2008, however, the first steps were taken in this direction (see *Appendices*).





PREMISE 4

INTERNALIZATION IN THE COMPANY

The sustainability of structured projects also hinges on the assimilation of the compacts and commitments of the long-term development agenda into the business management strategies, processes and practices.

Although the business community is now more open to the concept of sustainability and, in some cases, it effectively incorporates the interests of its various stakeholder groups, companies are still entrenched in a culture dominated by defensive relationships, without facing challenges that require attitudes and skills aimed at collaborating, learning and “working together”. Many corporate strategies in local communities fail because, although they have some grounding in new concepts, they end up being built

on old models, expressed in day-to-day attitudes, with the subsequent contradictions and discredit.

Nevertheless, some experiences have illustrated that the more that individuals, sectors and institutions are committed to the intended results of sustainability and the resulting responsibilities, becoming partners in the quest for a common future, the more they accrue knowledge and experience that prompts not only advances in cost-effectiveness, efficiency and productivity, but also innovative public policy solutions and a greater durability and consistency of the agreed actions. What's more, this new attitude improves dialogue and negotiation skills, essential conditions for properly embedding companies in our present-day society.

In this context, another premise of the proposed model is for the company to embark on a journey of internal alignment, acknowledging the need to adopt an ongoing process to incorporate the principles and values of sustainability into its management processes, strategies and practices. The long-term development agenda for Juruti and the wider region must not be seen by the company as an isolated initiative running in parallel and detached from its overall business strategy. Instead, it needs to be widely promoted, understood and its principles continually incorporated.

This internalization process in the company calls for changes to assimilate a form of management consistent with the new parameters of sustainability and their outcomes.

First, the company needs to take interdependent and simultaneous initiatives to secure a commitment from its workforce – including key suppliers – and form a united front behind the commitments and principles of



sustainability. This includes demonstrating its readiness externally, to partners and stakeholders either directly or indirectly associated with the company, which requires discipline in the daily changes in conduct and the signals sent to stakeholders. The principles, premises and objectives of the company's actions need to be imprinted in the pronouncements and acts of all its representatives, at all levels of dialogue. And this calls for a review of internal conduct, which is usually governed by strategies that focus on production planning and meeting targets and deadlines that, while legitimate in the corporate context, runs the risk of creating a fragmented picture of the context's other variables.

Second, by trying to integrate economic efficiency with a process of transparent legitimacy, the presence of the company in the municipality implies seeing itself not as the main protagonist, in the molds of conventional corporate culture, but instead as one of multiple protagonists whose visions and demands should all interact on a level playing field, regardless of their political or economic stature. The company needs, therefore, to review its sense of belonging to the local and regional reality, in order to be seen and to behave like one of the many actors, incorporating into its strategic actions the agreements reached by this group, in a dimension beyond the strict confines of corporate goals. Such maturity, in this complex context interwoven with formal and informal communication channels, requires the establishment of a "chain of coherency" designed to generate trust, respect and a willingness to engage in dialogue and work in partnership.

Finally, it is vital for this process to be closely connected – even adapting existing actions – with the economic and production decisions, to avoid two risks: the

It is vital for this process to be closely connected with the economic and production decisions, to avoid two risks: the creation of a “make-believe” world within the companies that generates discourse but no practical results, and the improper incorporation of new practices that, discredited and ill-assimilated, can jeopardize the entire process of building and implementing sustainability.

creation of a “make-believe” world within the company that generates discourse but no practical results, and the improper incorporation of new practices that, discredited and ill-assimilated, can jeopardize the entire process of building and implementing sustainability as part of the business strategy.



INTERVIEW **MARIO MONZONI**

LUCIANA DE FRANCESCO



“Building solutions in the field of sustainability involves big dilemmas”

Mario Monzoni is the chief coordinator of the Centre of Sustainability Studies (GVces) of the Getulio Vargas Foundation (FGV)

WHAT LED GVces TO ESTABLISH A PARTNERSHIP WITH ALCOA?
GVces accepted this partnership for two reasons. First, because it was a sincere request from the president of a large company to build a long-term agenda for a business project in a small municipality in the Amazon with rich biodiversity and very specific social relations. Like I said, it was a sincere request, because the company recognized the scale of the challenge and that it would need to forge strategic partnerships and be prepared to make changes to its organizational culture. Second, because the partnership is in keeping with our own mission at GVces, to build solutions in the field of sustainability, working with frontline issues that in most cases involve big dilemmas.



WHAT DID ALCOA WANT?

ALCOA wanted a proposal for the responsible operation of a mining project in the Amazon that could become a benchmark. To begin with, we created a consortium to build a long-term agenda, in partnership with Funbio, and we conducted a broad diagnosis. We then built a model based on a number of premises. The first is for the agenda to be built collectively. The second involves the acknowledgement that the transformations produced by the project will extend beyond the Juruti municipal limits. Third, that these transformations will take place within a local and regional context, that is, they will not come out of nowhere, since a series of debates and discussions on development and citizenship was already underway in the region and would have to be taken into consideration. And fourth, that it is crucial for there to be an ongoing and profound internalization of sustainability and corporate responsibility issues inside ALCOA itself.

HOW DOES THE MODEL WORK IN PRACTICE?

Bearing in mind these four premises, the model is based on

three pillars. The first – and the most important – is the creation and articulation of a public space for social mobilization, to decide on the course – “a common future” – that the local community wants to take for its own development – a type of Agenda 21 Forum or local development council. However, to know what direction this development is taking over the long term, it needs to be measured and monitored. Therefore, the second pillar is the creation of sustainable development indicators, developed by the community itself, to diagnose and monitor the development over time and correct any diversion there may be from the desired bearing. And, finally, the third pillar is a financial instrument – a fund – to support conservation and preservation activities. This fund could also be a window of support for social projects in the area of education, healthcare, security and, primarily, to support sustainable production chains. This would raise the opportunity cost of activities potentially devastating to the social and environmental balance that will inevitably appear in the region. In our model, the indicators and the fund are the tools supporting the flagship, which is the social mobilization. The indicators monitor whether or not things are going in the right direction and the fund will be a financial compensation instrument to try, with fine-tuning, to steer the development towards where it should be headed, but it will obviously not resolve everything on its own. However, the crucial part is the social mobilization and constructive dialogue between the company, the government and the community.

“In the model (...) the indicators monitor whether or not things are going in the right direction and the fund will be a financial compensation instrument to (...) steer the development. But the crucial part is the social mobilization and constructive dialogue between the company, the government and the community”

WHAT IS THE ROLE OF FGV IN THE SUSTAINABLE JURUTI PROJECT?

ALCOA thinks the model makes sense and that it should be implemented as soon as possible. So, FGV's role is to develop, with the local community taking charge, a set of indicators that diagnose and monitor the local development. We are midway through this process. To begin with, we performed a literature review of the reference projects that work with sustainable development and the indicators they use. We also drew up a cross-section of what Juruti was like before the arrival of ALCOA, based on official data. From there, we prepared a series of group seminars and workshops, both in Juruti and in Belém and Santarém, to build the indicators together. It was important to ask people what they understood by development and how it can be measured. It is not FGV that is going to set the indicators that will be used. We comprised more than 90 indicators that address different issues, like society, the economy, infrastructure, the environment, etc., which will be put to the municipality's rural and urban communities, so the communities themselves have the chance to say what they think. And we are also holding talks with the surrounding area, following the premise that the territory to be monitored will inevitably be larger than Juruti.

GIVEN THE DISPARITY IN THE WEIGHTS AND MEASURES – ON THE ONE HAND A SMALL COMMUNITY AND ON THE OTHER A MULTINATIONAL MINING COMPANY – HOW DO YOU ADMINISTER THE DIALOGUE? HOW DO YOU ENSURE THAT EVERYONE UNDERSTANDS EACH OTHER?

This is a challenge for the model and for each of the three pillars: for the council, for the indicators and for the fund. It is essential for them to be embraced by the community.





“The community needs to be on the same wave-length. (...) Our main concern is not to create something unrealistic”

The community needs to be on the same wavelength. We need to give it enough time for this to happen and invest a lot in capacity-building, in meetings with the community, in preparation. In the case of the indicators, in addition to the collective construction and the broad public consultation, we have created a follow-up group with members of the community that has been monitoring our work. Every month we sit down together to give them an update and talk, to see whether what we are doing makes sense to them, since we are developing this together. And the feedback has been very positive. Our main concern is not to create something unrealistic.

HOW MUCH COMMITMENT TO THESE INDICATORS IS NEEDED FROM ALCOA, THE COMMUNITY AND THE GOVERNMENT?

It's important to remember that indicators are tools. They are a means to an end, not an end in itself. They can identify courses of action and they may be used to transform a reality, but what the indicators really do is measure the reality, whatever that reality may be. One of the challenges is for these indicators to be empowered, that is, for the community, the government and ALCOA to embrace these indicators so that they can – through the bodies created by civil society, by public policies and through the power of corporate intervention and private social investment – correct, throughout the process, the course of the development if it does not follow the path that all consider ideal.

BUT ISN'T THE WEIGHT OF THESE PARTIES VERY DIFFERENT? HOW DO YOU CORRELATE THESE INTERESTS SO THEY ARE EVENLY BALANCED?

I think that any solution will have to come organically from this society, and from the capacity that it will have, politically, to resolve its problems. I had the opportunity to be in attendance on the day that the Provisional Council (*one of the three pillars of the Sustainable Juruti model*) was founded and, as a Brazilian citizen, I was pleasantly surprised to see that a municipality in the interior of Pará had managed to set a political agenda for dialogue and had placed completely different interests inside the same room and decided, in conjunction, to discuss development in a council. This is a very important gesture of citizenship that rarely happens. I think that the groundwork is in place to shape a very innovative course of action. Civil society appears to be well represented in the council. Now, the economic forces will no doubt act and the community will have to get organized.



HOW DO YOU EVALUATE THE PROCESS THAT ALCOA IS UNDERGOING GIVEN WHAT IS HAPPENING IN JURUTI?

I think it's a big challenge, primarily from the point of view of internalizing all this into the culture of the company, which is not only a matter for ALCOA, but for the business community as a whole. The business community has been "educated" to operate in accordance with business plans, action plans and timetables, in a very mechanical way. To operate in the context we are proposing, the process itself is perhaps more important. And since a process is intangible, this tends to require a big change in the organizational culture of a company, which is something that doesn't happen overnight. You're not going to get a transatlantic cruiser to make a "handbrake turn". These things happen slowly. What's important is that today, after two years of hard work, there is a very strong perception that the process matters; that, when you are working in the context of developing civil society, with social movements or the church, you have to invest and give the process time. Any setback trying to get a quick fix undermines the long-term goals. Obviously, to permeate throughout an entire organization, this takes time, because the corporate community has been doing business in the same way for 200 years.

DO YOU BELIEVE THAT ALCOA IS ON THE RIGHT TRACK TO OBTAIN A SOCIAL LICENSE TO OPERATE IN JURUTI?

I think it's been a tough two years, but the result is that society as a whole, including ALCOA, has matured. I think that we have before us an opportunity to implement an experience that has never been seen before in the Amazon, particularly where mining is concerned. This doesn't mean that the route will be a well-signed four-lane highway with no potholes. A host of problems are going to emerge along the way, and the key will be not to sidestep them, but rather to

work out how to confront them head on. They are dilemmas we face in today's world and this is the beauty of it, discovering how to deal with them. Because sitting on the sidelines throwing stones is rather convenient. Our role, our mission, is to meet these dilemmas and challenges face on.



DO YOU THINK FGV IS RUNNING ANY RISK FOR HAVING EMBARKED ON THIS PROJECT?

Yes, of course. But these large developments, from the point of view of methodology and potential for replication, will emerge in environments where the risk is greater, where the problems are on the table.

We are prepared to take the risk and I think the solutions can be replicated in other similar contexts: a big gas pipeline, hydroelectric or highway project. We believe that the model makes sense for any company, for any big

“When you are working in the context of developing civil society, with social movements or the church, you have to invest and give the process time. Any set-back trying to get a quick fix undermines the long-term goals”

project. There are many other variables at play that can steer projects one way or another: local and regional political articulation, organizational culture, a supplier with a different DNA, all this can increase or decrease the chances of success. But we've been back and forth many times and we've always come to the same conclusion: we need to create a public space for dialogue and mobilization where society can decide its own future so this big company is one actor within this context, instead of just setting up a counter to respond to short-term demands and creating all kinds of privileges. In the short term, the company would actually resolve some emergency problems, but in the long term it will blow apart all social relations and destroy its social license to operate.



PART 3

The Model



A three-pronged intervention

To shape the agenda, the model proposes the creation of a local forum that, by using indicators to monitor development in Juruti, sets priority goals both for its own actions and for the investments financed by a regional fund

Having established four key premises as a backdrop for setting the agenda – broad and effective participation, territorial approach, dialogue with reality and internalization in the company – the model takes a three-pronged, or tripod approach to intervention in order to practically implement the local sustainable development agenda. This tripod consists of:

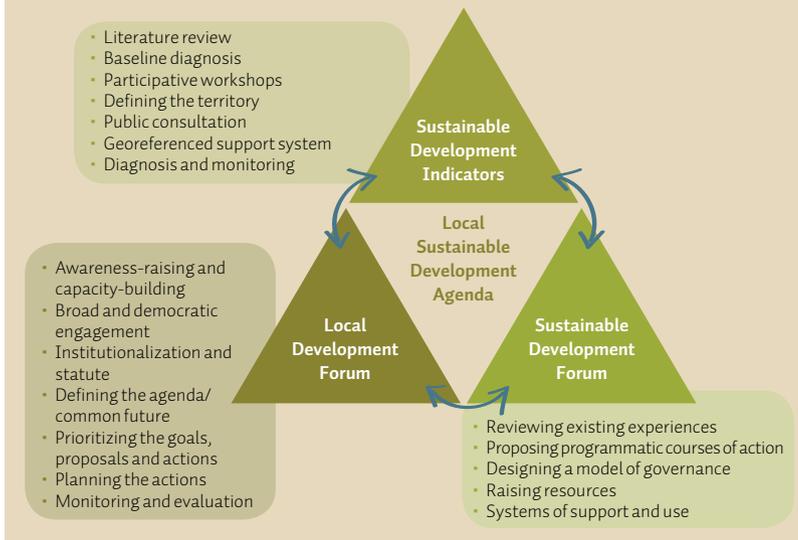
- 1. CREATION OF A LOCAL DEVELOPMENT FORUM**, with the effective participation of all the interested parties, to discuss a common future serving the public interest, prioritize actions and formulate a long-term agenda.
- 2. CONSTRUCTION OF SUSTAINABLE DEVELOPMENT INDICATORS**, to institute the process of monitoring the development of Juruti and surrounding area and contribute to the public decision-making processes.
- 3. CREATION OF A SUSTAINABLE DEVELOPMENT FUND**, to raise money and invest in the demands identified when monitoring the development in Juruti and surrounding area and by the priority targets set in the forum.



The social mobilization and collaboration to create a local forum has prompted a public space for dialogue to take shape with broad and democratic participation. This opening of dialogue is the first step for work to begin on the construction of development indicators, based on local demands and perceptions, to accompany – or monitor – the social, environmental and economic transformations taking place in the region over time. In parallel to this, the creation of a development fund provides financial support for the demands identified when monitoring the development and discussed in the local dialogue forum.

SUSTAINABLE JURUTI: A PROPOSED MODEL FOR LOCAL DEVELOPMENT

Premises of the model » Dialogue with reality » A broad and democratic participation » A territorial approach » Internalization in the company



1. LOCAL DEVELOPMENT FORUM

The first form of intervention is intended to organize the social process of negotiation, consensus building and decision making, in order to shape a common agenda that effectively considers all interests and concerns

The first – and main – pillar of the model is aimed at organizing the social process of negotiation, consensus building and decision making, in order to expose and realize the public interest, based on the values and principles of sustainable development, especially the principle of broad and effective participation (*Premise 1*). This proposal is in keeping with the concept of “dialogue spaces”²¹⁶, or fo-

GVces



rums, where a new democratic culture grows from the mutual and daily exercise of respecting differences and from the quest for equality, justice, transparency and efficient social investment that caters to everyone.

Although a culture of grassroots organization does exist in Juruti, in local movements, unions and other such bodies, it has not generated any interaction between them, to the extent that they come together in more encompassing forums or committees. Therefore, the creation of a comprehensive dialogue forum is intended to set in motion a process to address the issues and challenges facing Juruti, in an organized, transparent and systematic manner that is ongoing over time. These talks will be collective, engaging all local actors on their shared objectives.

In this environment of transparency, learning and co-responsibility, it will be possible to incorporate the different forces and competencies, transforming them into a collective competency, to propel the municipality and the region into a long-term integrated development dynamic, in which the role, the limits, the responsibility and the potential contribution of the different actors to the development agenda are clear to everyone.

For companies, engagement with stakeholders in a dialogue forum ought to be a systematic exercise of effective dialogue to establish a shared ethical code. However, this is a new culture in the corporate world and is still not fully established. Besides being a good practice from the point of view of values, this type of engagement is a powerful tool to mitigate risks, reduce costs and add value to the company. The social license to operate is one of the most obvious benefits of this process, but it also generates new knowledge for the company, thereby producing new opportunities.

Opting for Agenda 21

While some alternatives do exist in the Brazilian local planning experience, the recommendation of Agenda 21, in the proposed model, has its roots strategically linked to the politico-institutional variables of both the Brazilian and Amazon context:

- » Agenda 21 is familiar to social movements, environmental organizations and governments, and is also an incentive for potential partners;
- » As one of the main documents of Rio-92, it is part of a network of interactions and strategic interchange to help companies find interventions that are global references in sustainability;
- » The implementation of Agenda 21s in Brazil is growing quickly and they are increasingly more adapted to the country's characteristics;
- » Brazil has a national network local Agenda 21s, which codifies and disseminates knowledge and methodologies from the experiences either already implemented or still underway;
- » It is a local planning tool with a broad spectrum for structuring inclusive social processes that are sustainably-minded and, by definition, engage all the various levels of government;
- » There exists, within the group of Local Agenda 21s in Brazil, an Agenda 21 for the Amazon, coordinated by the Ministry of the Environment;
- » The local and regional Agenda 21 was chosen as one of the priority tools for structuring the Sustainable Amazon and the Sustainable BR-163 plans;
- » Joint efforts have begun between the Ministry of the Environment and the Ministry of Mines and Energy to develop an Agenda 21 for Mining in Brazil.



The existence of an organized dialogue forum also serves to promote the regional inclusion of the municipality and will be useful to attract, in a planned and consensual manner, external partners to the municipality and the region, whether for small initiatives or for more substantial projects. These partners could include the federal government, international cooperation agencies, non-governmental organizations and foundations, companies and academic and research institutes.

For the forum to cater to the needs of this context – to foster dialogue and organization in order to interact efficiently with the opportunities that are created – the model recommends adopting the Local Agenda 21 – and consequently the Local Agenda 21 Forum.

Local Agenda 21 The Local Agenda 21 calls for the creation of a formal institutional space for long-term intersectoral dialogue and planning, in a continual process of review and application. This choice can – and should – be in agreement with the guidelines and activities of the Local Participation Master Plan, prompting important synergies and lessons in the construction and development of a permanent dialogue forum and consolidating a culture of ongoing participative planning.

The initiative to create a Local Agenda 21 can come from government, non-governmental or private sector organizations, or from a governance body created in the municipality that represents society in all its forms. What is important, though, is for the participation of local government and civil society to be guaranteed. Even though the conditions may not be in place immediately, the joint action ought to be pursued through all forms of negotiation and pressure, since it is at the heart of Agenda 21 to

The implementation of the Local Agenda 21 will be more successful the more it is made-to-measure, catering to the local reality and local knowledge.

take the treatment of the public interest to higher levels of governance, making the participative process reach a platform where its products and proposals are internalized in government planning and budgets, so they are expressed in public policies.

The implementation of the Local Agenda 21 will be more successful the more it is made-to-measure, catering to the local reality and local knowledge. However, to fulfill its

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role, it must from the very outset have the capacity to mobilize and, primarily, to disseminate reliable information among all sectors of society. An analysis of the initiatives employing Local Agenda 21 in Brazil reveals that they all go through relatively similar stages after the formation of the initial commission:

- » Raising the awareness of the community and the government



- » Basic training about the process
- » Institutionalization, with the creation of the Agenda 21 Forum
- » Agreeing on the rules of operation
- » Drafting the Participative Diagnosis
- » Defining issues and debates and formulating proposals
- » Drafting a local sustainable development plan
- » Implementing the plan
- » Monitoring and evaluation

Since it is a special framework for strategic planning, Agenda 21 requires a methodology that includes techniques devoted to participative processes, while also open enough to be reshaped and enriched according to specific characteristics. Both the methodology and the management of the Forum should involve simple procedures that are easy to master and apply. They need to be efficient in an environment that is extremely diverse and that, very often, has had little or no previous contact with such an initiative. This care needs to be taken from the very first meetings.

First steps The proponent group should start by mobilizing the community, presenting to strategic sectors and groups in the municipality its intentions and some basic information on the nature and the characteristics of Agenda 21 and its potential to promote local development. Once the group increases in size, which occurs naturally after this mobilization, the Pro-Agenda 21 Commission for the municipality should be established. The first steps in the process to install the Agenda 21 Forum are strategic. It is vital, before widening the circle, for its members to have properly assimilated all the information about the

Agenda, and also to have conducted an assessment of the institutions present in the municipality (without eliminating any sector) and a strategic evaluation of the priorities for the initial contacts. It is also very useful to liaise with the Agenda 21 Program of the Ministry of the Environment and the state of Pará and also to draw on the advice of the facilitation team.

Establishing the forum The creation of the Agenda 21 Forum formalizes the process of constructing and implementing this Agenda. The Forum should establish a statute or an internal regulation containing all the rules that the participants deem necessary for the democratic organization of its work and to assure an even balance in decision making. A board is generally elected for the Forum, preferentially mixed and periodically rotated, to avoid the crystallization of power and political tension.

The first job of the Forum is to establish a consensus about its vision for the future, about “where we want to get to”. The role of the Forum is to translate this vision into actions, tasks and responsibilities for all the participants and, primarily, to include it in the municipality’s planning processes, budget and policies. Meanwhile, the Forum will also identify the potentials of the community to reach its objective and the obstacles that could stand in its way.

These potentials and obstacles can be identified through a participative diagnosis that will provide the population with knowledge about themselves; it will also be a special opportunity for capacity-building, training and forming leaders. But the diagnosis can – and should – enable the Forum to consult the surveys and the planning that exists in the municipality, gathering all the available information. The codification of the diagnosis will ultimately permit a



comparison between the current situation and the desired future scenario. It will also be the basis for producing indicators to evaluate and monitor the Sustainable Local Development Plan, the final product of Agenda 21.

Key guidelines The creation of Agenda 21 and primarily the establishment of its Forum should observe the following key guidelines:

- » **Diversity is a fundamental principle**, as is the inclusive nature of the entire process. In other words, anyone who wants to participate should be able to do so at any time, provided they follow the agreed rules.
- » Always bear in mind **the goal to incorporate the decisions of the forum into the tools of the municipal government**: budget law, planning programs, administration and investment.
- » **The Agenda is an exercise in dialogue and learning that can provide its participants with collective gains** (consolidation of democratic public administration, citizenship, more efficient public spending, and permanent community organization) and individual benefits, by broadening each person's horizons with new knowledge, skills and relationships.
- » **The basic methodology – learning by doing – should be present in everything**. The agenda is not a model whereby the leaders do and the rest give their seal of approval. On the contrary, collective growth is an essential condition. This is why it must respect the cultural time and the learning time of the community.

- » The primary focus should not be placed on drafting the document of the Agenda, but on **the consolidation of the forum as an ongoing process where the community can identify its strengths, weaknesses and resources, and make choices.**
- » Although there may be resistance, **the presence and active participation of municipal governments** will prompt, beyond the intention to institutionalize the process, important advances in the functioning of the public sector.
- » **The Agenda is non-partisan** (although political parties are free to participate) and every effort should be taken to stop electoral disputes from undermining it.
- » **Genuine representativeness is a quality to be pursued.** This implies a requirement for the participants to be chosen by members of their sector, and with whom they should maintain close dialogue and validation procedures.
- » **The integrated dimensions of sustainable development – social, cultural, economic, environmental and politico-institutional – must not be interfered with.** Certain contexts lead to the temptation to steer the Agenda towards a more traditional socio-economic focus, which would be out of character. Similarly, if Agenda 21's close identification with the environment leads to the underrepresentation of the other variables, this will also weaken the process.
- » **Much of the success of the Agenda will depend on the maturity of the initial group of partners** when dealing with obstacles such as: the lack of a culture of participation, the lack of data on the territory and the logistical and financial obstacles standing in the way





- of obtaining it, and the difficulty analyzing the issues with a focus on the public interest and the long term.
- » Mutual complications in relations between civil society organizations, the public authorities and the private sector are to be expected. Experience shows that, with competence, **clear rules of participation and joint responsibility**, this resistance will tend to diminish, often surprisingly so.
 - » **Obstacles that could hamper the process need to be handled with care**, namely: the assistentialist culture; political manipulation; individualism or excessive competitiveness; intersectoral distrust; language and communication barriers; prejudice; a sense of impotence over the magnitude of the problems, leading to a conformist approach; and low self-esteem, prompting a loss of faith in the power of the community.
 - » **The participants need to feel that their contribution to the solution actually matters and that it will be taken into account.**
 - » **It is necessary to find a common language and explore all means of communication** (from conversations during home visits and group reading sessions to newspapers and radio) that can help mobilize, increase the network of participants and make the information accessible for the majority.
 - » The search for consensus, which is essential for the Agenda, is not the same as approval by the majority. It is characterized by the use of methodologies and mediation that helps shape **a common understanding in accordance with pre-established criteria, within sufficiently long timelines and based on the commitments made by the participants.**



- » The final result that is intended must be clear to everyone. The goals need to be concrete, realistic and structured over time, in the short and long term.
- » The successes (successful stages) should be celebrated communally, to strengthen bonds and a sense of community in the struggle for a future with a better quality of life.

The sustainable local development plan The Ministry of the Environment has recommended that the Sustainable Local Development Plan should, at the very least, contain: (a) a strategic vision of the community, including the desired future scenario to be shaped throughout the process; (b) the objectives, opportunities, problems and priorities raised in the participative diagnosis; (c) specific goals; (d) concrete and specific actions to achieve these goals; (e) definitions of the responsibilities of each of the institutions and stakeholders involved; (f) strategies and means to implement the actions, including the existing links with the government planning process in the municipality or the region; and (g) recommendations, strategies for reviewing the Plan and the agreements that are signed up to. The Plan should be clear and concise, so it can be understood by everyone. The implementation of Agenda 21 should begin as soon as the Plan has been completed. Nevertheless, even while the diagnosis and the Plan are being prepared, the Forum may agree to take any emergency actions it considers necessary. Once the Plan is ready, a document – the municipal Local Agenda 21 – should be published giving an account of the process, its products (the Plan and others) and participants. The next stages in the process are the implementation, monitoring and periodic evaluation of the Plan.



2. SUSTAINABLE DEVELOPMENT INDICATORS

A development agenda requires tools to accompany the pace and the quality of development over time, to guide the public policies, the dialogue forums, the development fund and the company itself concerning the changes – undesired or anticipated – taking place in the region.

The second pillar of the three-pronged intervention consists of constructing – with local and regional stakeholders – a set of social, environmental and economic development indicators to institute the diagnosis and monitor the dynamics of development in Juruti and the surrounding area over time.

The initial diagnosis and the ongoing monitoring of the local development can – and should – contribute to the dialogue unfolding in what will ideally be a local development forum – the first pillar of intervention – by providing information on the changes that are taking place in Juruti and the wider region and on the emergence of new variables. It should also be used to influence public policies, private social investment in the region and financial instruments available to the community, improving local planning and continually building the capacity of all stakeholders. The indicators can also be used to demonstrate how the social, environmental and economic conditions of the region are closely interconnected, providing valuable data for the construction of future scenarios.

A series of national and international references add to the debate on how to monitor the development and reveal a broad range of existing instruments that can be used to help structure the sustainable development indicators¹⁷.



CARLOS ALVES / ALCOA

Nevertheless, these instruments need to be put into a Brazilian context, and more specifically an Amazonian context, so they reflect the local characteristics, expectations and territorialities¹⁸ (*Premise 3 – Dialogue with Reality*).

The participative creation of the Juruti Indicators is not only a working tool for measuring the development over time, it is primarily an ongoing process of learning and awareness-raising for everyone.

It is important for this catering to the local reality and the creation of “made-to-measure” indicators to be developed as part of a process that is broadly inclusive and participative (*Premise 1 – Broad and Effective Participation*), giving all the various sectors of the local and regional population the opportunity to express their opinions and give their perspectives. A comparison of the indicators created together with the local population with preexisting refer-



ences can produce development indicators that, based on a combination of different knowledge, can “customize” general concepts to a specific context, preventing the final indicators from being detached from the local reality, which would compromise their implementation¹⁹.

Indicators developed in a collaborative way also encourage a broad dialogue on the sustainability of the region. This dialogue raises the overall understanding of the problems in the region and the priorities of the people involved, while also empowering communities to respond appropriately to the changes taking place. It also helps in the formulation of political decisions aimed at local development²⁰. In this context, the construction of the sustainable development indicators for Juruti is not only a working tool for measuring the development over time, but it is also an instrument of transformation and an ongoing process of learning and awareness-raising for everyone.

Construction of the indicators The first step in the construction of the indicators should be to conduct broad research on the experiences from around the world and the literature that addresses the definition and the use of indicators to measure human development, local development, quality of life and the sustainability of ecosystems, as well as projects that use indicators to evaluate the impacts of the mining sector. The purpose of this is to provide input for discussions during the construction process. Meanwhile, an initial social, economic and environmental diagnosis of the municipality of Juruti should also be made using secondary data, which will serve as a first baseline for accompanying local development. This diagnosis will be based on information gathered from of-

ficial sources and publications and will constitute an initial “snapshot” of the quality of the local development, taken, whenever possible, in the time frame immediately prior to the installation of the project in the region.

The next step should be to stage local and regional workshops to inform, engage and build together with local leaders and sectoral representatives a set of development indicators for Juruti and the surrounding area, and also to consult with regional government and organized civil society. The resulting set of indicators should then be subject to public consultation in Juruti and the wider region, promoting active involvement and informed participation, and enriching the decision-making process. It is necessary, therefore, to establish a broad process to engage these actors, which means releasing information with suitably long circulation times and in a language and format consistent with the reality of each target public and with their ability to access the information. This provides the different stakeholder groups with knowledge and understanding, and enables them to evaluate the process and the results achieved thus far. The contributions received from the public consultation process should be analyzed and added to the preliminary results, and then consolidated to form the final version of the local development indicators for Juruti, which should be widely publicized.

Once the set of indicators has been consolidated, it is necessary to develop verification and traceability standards and protocols for each one, to facilitate the collection and recording of data and to preserve the methodology. The involvement of the public sector and organized civil society in this stage is also vital, especially in identifying the local and regional stakeholders who



can contribute to the collection and evaluation of the data. Accordingly, workshops need to be held with the public sector, sectoral specialists and other interested parties. The final part of the process is to consolidate the results and draft the final version of the sustainable development indicators for Juruti and the surrounding area, with the respective standards and protocols. After the consolidation, the first diagnosis of the development of Juruti should be conducted, in accordance with the consolidated development indicators and criteria, followed by a public presentation of the results.

Defining the territory to be monitored As already stated, one of the premises of the proposed model is the recognition that the way of looking at the territory is vital. Given this context, the construction of the indicators also includes a definition of the territory to be monitored, to determine in which territory, that is, where the changes that are taking place will be tracked. The methodological options for specifying the territory to be monitored can include consulting the local

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and regional perceptions of the exchanges, flows and transformations resulting from the development in Juruti, field research in the area around Juruti and an assessment of the references existing in public policies for territorial zoning and political divisions in the region (*Premise 2 – A Territorial Approach*).

Management support system The construction of indicators and the subsequent monitoring of local development should also include the preparation and operation of a territorial management support system, with the objective to support decision making, whether by government, civil society or private initiative, on issues related to the local development of Juruti and the surrounding area. The additional challenge is to make this system operational. To create the system, it is necessary to develop a georeferenced database, on compatible scales, to store the information on territorial characteristics, and on land use and occupation, from various available sources – maps, satellite images, records, etc. – and through partnerships with research institutions and non-governmental organizations with know-how and experience in the region. Simultaneously, a system mirroring the territorial dynamics needs to be developed to monitor, analyze and simulate socio-economic and environmental processes in the territory. This system needs to permit an analysis of scenarios of socioenvironmental and environmental change, so it can provide the necessary information to support decision making.





3. SUSTAINABLE DEVELOPMENT FUND

A long-term agenda requires financial instruments that provide the resources to guarantee improvements to the economy and infrastructure, and to the quality of life of the population, promoting the development of both human and social capital, and also the conservation and sustainable use of natural resources.

The third pillar of the three-pronged intervention involves designing, developing and operating a long-term financial instrument – a fund – to serve Juruti and the surrounding area. Its purpose is to handle the financial and material resources to be invested in projects that combine social, economic and environmental aspects and that promote the development and well-being of the population of Juruti and the wider region.

This fund is a response to the lack of financial mechanisms available to promote sustainable economic activities, good practices in soil use and in conservation, and use of natural resources, as well as projects to develop human and social capital, which are extremely necessary for the configuration of territorial management and the potential changes resulting from a large-scale project in such a socioenvironmentally sensitive and delicate region.

The creation of the fund caters to the need – identified in the dialogue with the local and regional reality (see *Premise 3*) – to introduce or strengthen actions to structure sustainable production activities and to support initiatives that promote social improvements and conservation. Juruti and the wider region lacks investments to harness the market forces in order to develop production activities that are underpinned by the principles of conservation and the



sustainable use of local biodiversity, and the capacity to generate income and employment and improve the quality of life of the population. In general, these economic alternatives do not come close to matching the competitiveness of traditional predatory activities in the region. Illegality (especially in logging) and the scale and technology employed (especially in large-scale agricultural and livestock production) make it difficult for innovative and sustainable local initiatives to compete.

The creation of this fund is expected to ward off pressures and unilateral negotiations between specific actors and ALCOA, which not only erode relations between the company, the public authorities and the community, but also undermine the progressive construction of a system of integrated development in the region. The fund will enable the company's support for the region to be given through a financial instrument with identity, governance and independent administration, so it can be channeled within a model of strict negotiation governed by neutral and universal criteria.

The fund also can – and should – attract and raise additional funds from other donors, which would mean opening and pluralizing its governance and operation, since it would have to start reconciling resources, conditions and requirements of new contributors.

It is a strategic move to transform the arrival of a new economic activity with potential impacts into a development opportunity.

In addition to the structural elements typical to the formation of a fund – such as governance, financial and institutional arrangements, support systems, processes and criteria for soliciting and selecting projects, among

others – the plan is to adopt a process of interaction and dialogue. This would be done not only with the potential beneficiaries of the fund, but also with other public and private organizations that could be interested in either participating in its financial composition or in the results of its contributions to the sustainable development of the region.

By accepting the suggestion to start constituting a fund for the development of Juruti and the surrounding area, ALCOA is joining a contemporary global movement that acknowledges the new standards of corporate responsibility. It is worth pointing out that the project behind the proposed model is located in the Amazon. It is the largest and one of the last global reserves of tropical rainforest, responsible for providing the environmental services that today are considered vital for the quality of life for much of the planet. The speed at which this biome is being destroyed and the public reaction to this destruction appears regularly in the media, lending visibility and

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sensibility to any new initiative aimed at increasing the exploration of the region's natural resources. In this particular case, Juruti is found in an area rich in biodiversity²¹, surrounded by Conservation Units and designated by the territorial planning policies as an "area reserved" for the expansion of production activities, meaning that it can attract predatory activities that result in the concentration of income. Therefore, the inclusion of a large-scale mining project in the region could end up compounding and magnifying this fragile situation.

It is a strategic move, then, to transform the arrival of a new economic activity with potential impacts into a development opportunity. It will be a direct expression of commitment to corporate responsibility, by ALCOA, to assure that new and independent resources will be available to support legitimate initiatives that respond to the needs and solve the main problems of the local population.

Review existing experiences and programmatic proposal

The first step in the process to create a fund involves a broad review of literature and existing experiences in the structuring of funds to support sustainable development on a regional level, to provide input for the formulation of this new fund. Over the past two decades, a significant number of financial instruments have been developed and created to support the practice of corporate responsibility. Funds or foundations have been set up by countless large companies²², some of which sponsor national environmental funds that operate in Brazil, meaning they could be potential partners in a fund for Juruti and the surrounding area. Following this review, and drawing on planning and management documents already developed for the region, and also on field trips, the needs and opportunities

for the social, economic and environmental agenda will be identified and programmatic courses of action will be proposed for the fund.

Governance and financial instrument Taking into consideration the experiences that are reviewed, the fund should design a model of governance and a type of financial instrument that are consistent with the lessons learned, while also incorporating the singularities of the Amazon context. To validate this stage, experts, partners and interest groups from the region should be consulted.

Raising resources and systems of support and use The development of the fund should include road shows organized in national and international capitals to enlist partners to contribute resources to the fund, based on a fundraising model designed to make up the amount of funds available for investments. Finally, the development process should establish systems of support and use of the funds and criteria for soliciting and selecting projects. A preliminary proposal could be submitted for analysis and validation in workshops in Juruti and the wider region, to define the priorities and criteria for using the funds.



INTERVIEW **PEDRO LEITÃO**

LUCIANA DE FRANCESCO



“If we manage to set up this fund, it will be a huge innovation, a milestone”

Pedro Leitão is general secretary of the Brazilian Biodiversity Fund (Funbio)

HOW DID FUNBIO START WORKING WITH ALCOA?

ALCOA approached Funbio in search of know-how, that is, in search of another strategic resource: models, information, knowledge, relations. ALCOA needed to go into the field and wanted to develop a strictly sustainable operation. There was also a market issue. The market today demands this and the mining sector itself is marked and heavily regulated. ALCOA wanted to implement a sustainable territorial intervention model. Funbio already understood the need to develop an integrated territorial model because of the advantages that this action could produce with different agendas. Addressing social, economic and



environmental issues in an integrated manner would be more powerful and would represent a better solution for the loss of biodiversity. When ALCOA appeared, as a result of the scale of Juruti, the opportunity arose to develop this model concretely.

WHAT PART OF THE MODEL WAS FUNBIO RESPONSIBLE FOR?

We went to Juruti, in partnership with FGV, and it was an extremely interesting experience. We discovered that there were some very ambiguous attitudes about the project. Some people had high expectations that ALCOA was going to bring development, while others were extremely critical. A lot of the work we did in Juruti, together with FGV, was to reestablish a series of socioeconomic relations enabling dialogue to resume with ALCOA and consider what could be done. When we arrived on the scene, these relations were rather strained, shaken. So, we presented an initial diagnosis, which served as the



basis for the work being presented here. ALCOA accepted the diagnosis, but there was also a sense of “hang on, we are getting things done too”. ALCOA had all the official licenses and had already set aside 10 million dollars for the community, but it still needed to reinforce the sociopolitical “consent” to do business in the region untroubled. I think this was what we achieved with our work: helping overcome some of the relationship problems that had developed between some local leaders and the company.

FROM FUNBIO’S VANTAGE, HOW WAS THE MODEL ESTABLISHED?

The project was offered in three parts, conceived from a single logic. We are talking about the construction of a mine, 50 kilometers of railroad and a port, all 2 kilometers from a town that for decades has had a population of around 10,000. In 2007 alone, ALCOA sent 4,000 men to the town. The impact was enormous. Imagine what happened to the price of land. Imagine the impact these 4,000 men had on the demand for food, accommodation, etc. The population grew by a third, and this triggers drastic changes, for good and for bad. What we suggested was this: when conducting an environmental impact study, forecast what will happen when the mining begins. On the other hand, indicators already exist to gauge the impact of mining, port and railroad activities. So, why not place these impact indicators in a georeferenced system and keep track of the changes? As if we were taking pictures of the changes. Another measure would be the social one: why not codify, through periodic quantitative and qualitative opinion polls, these impacts, whether they are real or perceived? The proposal was for these two information systems to feed a third element, which

would be a financial mechanism: a fund. And this fund should be geared directly at supplementing the mitigating measures already planned, promoting a sustainable form of regional development.

AT WHAT STAGE IS THE WORK OF FUNBIO CURRENTLY AT (IN 2008)?

We've already been to Juruti four times, we've produced a survey of several international experiences of mining funds, which have been presented to ALCOA. We've been in contact with the community and we are now drafting a proposal for a fund specifically for Juruti. Defining the amounts, the type of agenda, the type of governance and the type of structure for this fund.

HAS IT BEEN DECIDED WHO WILL MAKE THE CONTRIBUTIONS AND HOW BIG THE FUND WILL BE?

Our proposal is for the initial contribution to come from ALCOA, but this has yet to be agreed. We still don't know how big this contribution will be. It will all depend on a better understanding of the demand.

HAVE THE CRITERIA BEEN STUDIED FOR DEFINING WHAT TYPE OF PROJECTS WILL BE SUPPORTED?

Not exactly criteria, but we think that this fund could support initiatives that strengthen local enterprise, such as bakeries or food and hotel services, one of the many economic opportunities that are being created from the presence of ALCOA. The fund could also be used to support social actions that do not blur the line between the role of ALCOA with the role of the state, or environmental initiatives that mitigate the impacts caused by the company. If, for example, while we are



developing the project we notice that some areas of forest are being cleared excessively, then the fund could be used to carry out the reforestation. If we find that waste is being pumped into watercourses or into the port, then we can use these resources to mitigate the impacts. This should be the purpose of the fund.

WILL THE FUND ONLY PROVIDE FINANCIAL SUPPORT OR ALSO TRAINING?

We have not yet reached this level of detail in our talks with ALCOA, but the experience of Funbio is to keep track of projects at the street level. You don't hand over money to a community, a cooperative or some other organization without providing some training, incubation services, so it can account for the funds it receives and achieve its purpose. Our role is not to audit the use of the resources, but instead to guarantee that the supported activity is well developed.

BESIDES ALCOA, ARE ANY OTHER CONTRIBUTIONS EXPECTED TO BE MADE TO THIS FUND?

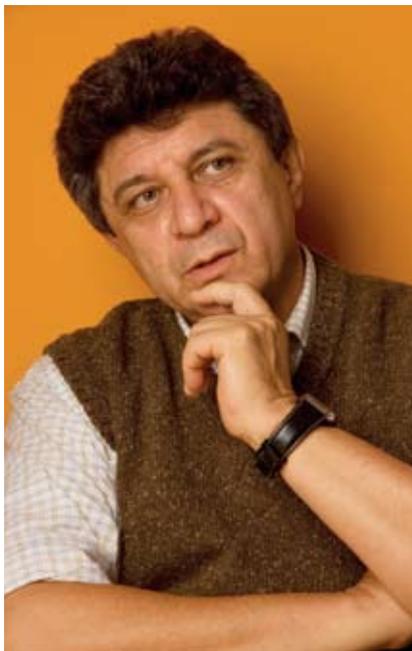
Yes, we clearly propose for these resources to be reserved for leverage. I think we should be able to use these initial funds to leverage others. For example: we have recently heard news that Vale is going to move in close by. If this turns out to be true, a management of synergies and cooperation would make a lot of sense, since the impacts of the actions of the two companies in the territory would almost certainly cross paths.

HOW DO YOU CALCULATE HOW MUCH NEEDS TO BE INVESTED FOR THE IMPACT TO BE GENUINELY MITIGATED? ALL TOO OFTEN, GIVEN THE DISPARITIES BETWEEN THE IMPACT

OF A COMPANY AND THE AMOUNT IT INVESTS IN MITIGATION, THESE INITIATIVES END UP BEING JUST FOR SHOW.

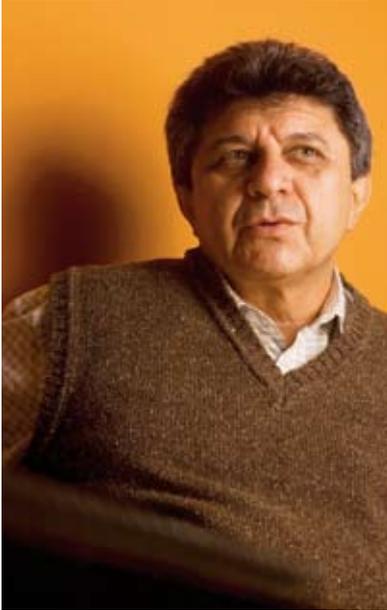
I think that if ALCOA was only doing something for show, it would run into trouble. ALCOA is an old company, with broadly dispersed ownership, and no majority owner. Its capital is distributed internationally. There are a number of pension funds and investment funds that own a significant portion of its stock. Furthermore, ALCOA has

some important environmental representatives serving on its main board. As soon as this project began, four or five members of the company's international board came to Brazil and went to visit the local communities. These people made a commitment to the communities; they stood before the administrators, the president of ALCOA Brasil and the president of ALCOA Latin America and said they were instructing the management of ALCOA to deliver a sustainable solution. So, I think there is very strong pressure from ALCOA for this operation in Juruti, from a global governance point of view. And it is very exposed, with negotiations held openly with the community. I don't think ALCOA is going to have an



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easy time if it doesn't establish a give-and-take relationship. The times have changed. The international market has started to demand that these multinational companies genuinely exercise their social and environmental responsibilities.

SO WILL THE FUND BE CAPABLE OF BALANCING THE IMPACTS?

I think that this is a complex issue, with several points to consider. The main one deals with the size of the fund, that is, how big this fund will have to be to make it significant. One way of establishing the size would be to take the company's investment in Juruti as a reference

and allocate a percentage of this investment to the fund. Another option would be to make an estimate of the profit and figure out the contribution to the fund this way. Yet another would be to calculate the amount based on the size of the impact. These are all possibilities. All this still has to be negotiated. Nothing has been defined.

ASIDE FROM THE STUDIES ON THE CRITERIA AND VALUES OF THE FUND, ARE YOU CONDUCTING AN ASSESSMENT OF THE MITIGATING ACTIVITIES THAT SHOULD ALREADY BE IN PLACE?

But it's not ALCOA that's going to decide how to spend the money in this fund. Personally, I think a financial device like this should be designed explicitly so ALCOA can keep its distance. We need to professionalize the ad-

ministration of this fund. And guarantee that it has independent governance. ALCOA can, and perhaps it should, have a seat on the board of the fund. Or it could set criteria within its limits: I'll finance this but not that, although the governance does not necessarily have to be exercised directly by ALCOA. The company could say: "I'm not going to build schools, because I'm not the state, but I will develop a project to enhance the capacity of the local government to set up a fund for education or healthcare". I think the fund should be open to other contributions. And, once the fund has structure, once it is off the ground and up and running, it'll take on a life of its own. ALCOA will become no more than a donor, the main donor, but the fund will stand on its own two feet. ALCOA will not want to remain involved for long in a regional fund that is not part of its core business. What matters is that Juruti has had this experience of creating a lasting financial arrangement. I think this could be a very worthwhile and innovative experience, however hard it is proving for the community, for us and for

ALCOA. If we can muster enough energy and determination to move things forward on these terms, if we manage to set up this fund, it will be a huge innovation. It could set a very interesting example, both for what it gets right and what it gets wrong. A milestone in the development of the mining sector in Brazil. I can't guarantee that we'll get everything right, but the very fact that we are trying is, in itself, very telling.

"If we manage to set up this fund, it will be a huge innovation. It could set a very interesting example, both for what it gets right and what it gets wrong. A milestone in the development of the mining sector in Brazil!"



DO YOU THINK OTHER COMPANIES THAT HAVE ALREADY EXPERIENCED THIS CAN SEE THIS INVESTMENT AS SOMETHING THAT ADDS VALUE?

I think that ALCOA sees all this as an investment. It's the price you pay for a socio-politico-environmental license. The return on this investment is to be at peace with the community, to be a legitimate and full member of this community. But then take a look at the portfolios that invest in sustainable companies, look at the results of the Bovespa stock exchange's sustainability index. This kind of social and environmental responsibility pays a much greater return than just the ability to do business in peace. What's more, I think we need to establish a new standard of production and consumption. What is behind the environmental crisis? Us humans, in our huge numbers? Yes, in part, but also the growth of industrial production since the advent of modernity, about whose environmental impact we had no idea until a few decades ago. Now that we know that our patterns of production and consumption were established to meet the "needs" of a human population unaccustomed to limits, now that we understand the full impact of global production activities, creating a harmonious balance is now more than just a necessity; it

“The return on this investment is (...) to be a legitimate and full member of the community. But then take a look at the portfolios that invest in sustainable companies (...). This kind of social and environmental responsibility pays a much greater return than just the ability to do business in peace.”

has become a market opportunity. The aim now is to develop production activities in sustainable formats. Is it possible to mine bauxite without digging holes? No, it isn't. Does the world need bauxite? Yes, so the mining industry needs to offset its impact. It'll have to make obligatory and

“The rule of thumb being discussed today is to leave the biodiversity the same or in a better state than when the production activities began. This is a standard that will be demanded of all companies.”

voluntary compensatory payments relative to the impacts it imposes on society and on the planet, in the present and for the future. The rule of thumb being discussed today is to leave the biodiversity the same or in a better state than when the production activities began. This is a standard that will be demanded of all companies. And we need to be smart enough to do this not only as a matter of survival, but also to seize the market opportunity.



Final considerations

The opportunity unfolding with the challenge in Juruti is as relevant as it is demanding, which means that it requires the will and determination of all the participants. It is a springboard for change for personal, community and institutional experiences that share the challenge of sustainable development on a concrete, real life level. And this is why it is so interesting. This is why it causes controversy but, at the same time, it can also achieve enormous synergy. It also requires a good deal of courage, just to sit down at the same table with different parties – often considered adversaries – and together sign up to rules so that mutual trust and identity can be genuinely built, not reduced to mere discourse.

From ALCOA, the situation calls for a profound awareness of the consequences of going above and beyond the legal requirements and voluntarily engaging in an experiment called the future. Financial resources will be the smallest of the investments. Determination will be far more important. Therefore, the company needs to measure the risks and benefits of its sustainable existence and understand the complex and sophisticated way they affect the market equation that is the *raison d'être* of the company. Sealing a partnership with a university, sharing information with a non-governmental organization, engaging in advanced forms of environmental conservation, participating in a forum to collectively define development agendas; all this has to make sense within the context of the company. ALCOA will not be transformed into social welfare institution, nor will it take on the responsibilities of the state, but it must be clear about the fact that it is incorporating a new dimension into its per-



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sonality, which will result in permanent commitments, responsibilities and relationships. From the public authorities and civil society, the model requires the same willingness to engage in dialogue, the same transparency and the same commitment to the construction of a common future serving everyone's interest.

The suggestions proposed in this model serve as a kind of compass to guide the process in this direction, which does not necessarily mean that each step has to be taken sequentially or at a given speed. It allows for choices and combinations, thereby creating a situation of comfort and learning in which to make progress.

Sustainable Juruti: a proposed model for local development is not an instruction manual. It presents guidelines to shape a long-term agenda for the region of Juruti. But the quality of the results to be achieved is inseparable from the capacity of all the parties involved to appropriate the model, its concepts and proposals. The primary – and most important – expectation for the model is that, once implemented and fully tested, it will constitute a public asset, within reach and at the service of all society.

APPENDICES

A brief update

The sustainable local development model for Juruti outlined in this publication was presented to ALCOA in 2006. Since then, some changes have occurred in the implementation of local and regional policies and lots of progress has been made implementing the pillars of the proposed three-pronged intervention.

IMPLEMENTING THE THREE-PRONGED INTERVENTION

THE LOCAL DEVELOPMENT FORUM

In February of 2008, the Sustainable Juruti Provisional Council was officially established following planning and discussions between ALCOA and the local community that began in September 2007. The Council was formed, according to its Statute, as a “*permanent space for dialogue and collective action between civil organizations, the public authorities and companies interested in the sustainability of local and regional development*”. Three companies, three representatives from the public authorities and nine from social movements in Juruti form the Council, which consists of eight technical chambers – Rural Development, Education, Health, Culture & Tourism, Environment, Security, Infrastructure & Sanitation, and Economy & Employment. The technical chambers meet periodically to discuss an agenda of thematic priorities. Standing out among the issues discussed in the first half of 2008 are the staging of the 1st Business Meeting of 2008 and the management of Lake Jará – which, besides its symbolic value for the town, also constitutes its largest water basin. The Council also discusses issues emerging in the municipality, serving as a public forum for settling socioenvironmental conflicts. In the first half of

2008, one such topic was the irregular land occupations in the town. The Council plans to get involved in the system for monitoring the development of Juruti and the wider region and with the regional development fund, both of which are still under development. In May of 2008, the Council embarked on a process to raise awareness about Agenda 21, including exchange visits and community meetings, in order to prepare the diagnosis and the sustainable development plan for Juruti. In August of 2008, the Sustainable Juruti Council staged its General Assembly. (Source: ALCOA)

THE SUSTAINABLE DEVELOPMENT INDICATORS

The Getulio Vargas Foundation (FGV) was asked by ALCOA to take control of the second pillar of the intervention model. Work on the construction of the development indicators for Juruti and the surrounding area began in the second half of 2007 with a broad literature search, baseline diagnosis using secondary data and preparatory visits to Juruti, Santarém and Belém. In early 2008, workshops were held in Juruti, Santarém and Belém, with more than 140 participants, including community and social movement leaders, state and municipal government representatives, researchers and environmentalists. A Follow-Up Group was also established, formed by some 15 local leaders representing the urban zone and the rural zone, both from the floodplains and the plateaus. This group meets on a monthly basis to keep track of the work developed together with FGV. More than 90 indicators were presented in the workshops, in addition to potential precepts, sources of data and information on the territory to be monitored. In June of 2008, FGV also began, in partnership with FGV's Public Administration and Government Studies Center, a qualitative survey of the exchanges and flows between Juruti and its surrounding area, to provide additional input for

defining the territory to be monitored. In July of 2008, the public consultation of the indicators began, with workshops in rural communities attended by more than 300 local leaders, as well as meetings in the municipal capital and in Santarém. (Source: FGV)

THE SUSTAINABLE DEVELOPMENT FUND

ALCOA asked the Brazilian Biodiversity Fund (Funbio) to develop the sustainable regional development fund. Work began in 2007 and by early 2008 several trips had been made to the region, as well as an assessment of the various international experiences of funds created through the programs of mining companies. In June of 2008, a proposal for a specific fund for Juruti was being prepared, complete with amounts for the initial contributions, the programmatic agenda, the types of governance possible and the structure of the fund. (Source: Funbio)

THE LOCAL AND REGIONAL REALITY

THE SANCTIONING OF PAS

In May of 2008, the Sustainable Amazon Plan (PAS) was officially launched by the federal government, albeit with significant alterations made to the original proposal drafted in 2003. According to environmentalists, the final version lost much of its innovation and it has also been criticized for not having been broadly discussed by society. One of the main alterations was the withdrawal of the sub-regional approach. The original proposal had specific policies for three micro-regions, divided up into sub-regions. In the final version, however, this subdivision no longer appears and the regions are kept intact. The final document continues to defend the need for a territorial approach to successfully deliver development policies that

are tailored to the different regional realities in the Amazon, although it is based on existing regional divisions for territorial management plans – in the case of the Juruti region, on the Sustainable Regional Development Plan for the Area of Influence of the BR-163 Highway (Cuiabá–Santarém). Another alteration concerns standards for financing, which previously established a central command for the different sources of funds for the region, which was abandoned in the final version. One of the measures that has been praised is the so-called “forest pledge”, which makes public funds available for reforestation and forest management in the North, Center-West and Northeast of Brazil. According to the final document, the PAS “is not an operational plan, but a strategic plan”. However, according to its critics, the lack of a performance report in the final version of the PAS represents a real risk that the Plan will fall through. (Source: www.agenciabrasil.org.br, www.amazonia.org.br, www.oeco.org.br, www.socioambiental.org)

THE SUSTAINABLE BR-163 PLAN

In June of 2007, the one year anniversary of the launch of the Sustainable BR-163 Plan was met with protests from social and environmental movements. The demonstrators were protesting the fact that after a year the Plan has still not been implemented and still lacked a management model, which is vital for the collaborative implementation of the initiatives planned to mitigate the socioenvironmental impact of paving Highway BR-163 (Cuiabá–Santarém). In December of 2007, the federal government set up the Executive Committee of the Sustainable Regional Development Plan for the BR-163 Highway, whose job it is to monitor and coordinate the actions set forth in the Plan. However, the civil society movements are of the opinion that these actions are being implemented at a snail’s pace, that they are ineffi-

cient and that they do not satisfy the urgent demands of the communities located in the highway's area of influence. As a result of bureaucratic hurdles and lack of investment, the paving of the highway is also taking time to get started. In May of 2008, a public hearing on the bidding process for the contract to pave the highway marked the resumption of the work on the BR-163, on the stretch linking the state of Mato Grosso to the municipalities of Itaituba and Santarém, in Pará. At the time, the forecast was for work to get underway in 2009. (Source: www.amazonia.org.br, www.dnit.gov.br, www.fase.org, www.socioambiental.org)

CITIZENSHIP TERRITORIES

In 2008, the federal government launched a program to support sustainable regional development and guarantee social rights, entitled Citizenship Territories. It aims to promote economic development and universalize basic citizenship programs in the most deprived regions of Brazil, by integrating federal government and state and municipal government initiatives and drawing on the participation of organized civil society. The program will embrace 60 territories in 2008, with investments of R\$11.3 billion for three key areas: support for production activities; citizenship and protecting rights; and improving infrastructure. The Brazilian North region will receive R\$2.5 billion. In the state of Pará, five territories will benefit: Marajó, Nordeste Paraense, Baixo Amazonas, Sudeste Paraense and Transamazônica, which together will receive R\$1.2 billion for investments. In March of 2008, the Articulation Committee was established in Pará. Each territory included in the program consists of a group of deprived municipalities that were selected according to criteria such as low Human Development Index (HDI) rankings, reduced levels of economic dynamism and the concentration of family farmers,

families settled by agrarian reform, indigenous populations and *quilombo* communities (formed by runaway slaves in colonial times). In Pará, the state government launched the Participative Territorial Plan, which shares many interfaces with the federal program. (Source: www.mda.gov.br/sdt)

PARTICIPATION MASTER PLAN AND AGENDA 21

In 2006, at the time the model was being proposed, the municipality of Juruti's Master Plan was being developed by the Juruti municipal government, with the support of ALCOA, as one of the legal licensing conditions. And, in early 2008, the first overtures to implement a Local Agenda 21 in the municipality of Juruti were being made in the Sustainable Development Council that had been created.

IBOPE POLL

A public opinion poll conducted by Ibope in Juruti in early 2008 indicated that 89% of the municipality's population sees the ALCOA mining project in a positive light, with 54% of the respondents in favor of the project and another 35% accepting it unreservedly. A total of 600 people were polled from 37 communities in the region, including urban areas.

NOTES

- [1] GVces
- [2] <http://www.ALCOA.com.br>
- [3] Interviewees in Juruti: Mayor Henrique Costa; former Mayor Isaías Batista; Finance Secretary José Rocha Amazonas; Agriculture Secretary Fernando Esteves; President of the Municipal Council Edjânio Peruano; Deputy Health Secretary Ariadne (Association of Women Workers); Environment Secretary Expedito Repolho; Education Secretary Heriana; Culture Secretary; Otávio Barbosa (President of the Trade Association); Rosineide Barroso (Association of Friends of Pastoral da Criança); Maria (Pastoral da Criança); Jader (Projeto Casulo); Francisco Coelho (NGO ADEG); Hedon Batista (Mundurucus/teacher); Ney Juruti (Muirapinimas/teacher); Marcília (Maria Pereira School); Raimundo dos Santos (Z42); Reginaldo and Mailson (Union of Rural Workers); Safira (School in Juruti Velho); José Pimentel (Juruti Velho); José Maria (Juruti Velho); Gerdenor (Juruti Velho); Sebastião Serik (Juruti Velho). Interviews in Santarém: Maria Assunta and Maria José (Studies and Training Center for Rural Workers of the Baixo Amazonas – CEFTBAM); Rosária Sena – CNPT IBAMA. Belém: Carlos Souza and Paulo Amaral (Imazon); Manuel Amaral and Gordon Armstrong (International Education Institute of Brazil – IEB); Jader (Casulo); José Maria Cardoso da Silva (Conservation International – CI); José Maria de Sousa Melo (Fetagri); Lúcio Flávio Pinto (*Jornal Pessoal*); Oriana Trindade Almeida, Rosana Gisele da Costa and Socorro Pena (Environmental Research Institute of the Amazon – IPAM); Raimundo Moraes (MPE); Ubiratan Cazetta (Public Prosecutor).
- [4] <http://www.ALCOA.com.br>
- [5] United Nations - World Commission on Environment and Development. *Our Common Future*, New York, Oxford University, 1987.
- [6] Intermediated by the World Resources Institute (WRI).
- [7] SANTOS, M. *Território e Sociedade*: Interview with Milton Santos. São Paulo: Fundação Perseu Abramo, 2000.
- [8] SANTOS, M. *A Natureza do Espaço: Razão e emoção, técnica e tempo*. São Paulo: Hucitec, 1996.
- [9] Capital can be considered a stock of materials or information which exists at a point in time (COSTANZA, R. et al. "The value of the world's ecosystem services and natural capital". *Ecological Economics*, n. 25, 1998).
- [10] <http://www.mda.gov.br>
- [11] FURTADO, C. *O Mito do Desenvolvimento Econômico*. 2ª ed. Rio de Janeiro: Paz e Terra, 1975.
- [12] The project was supported by the World Business Council for Sustainable Development (WBCSD) and the International Institute for Environment and Development (IIED) of London. <http://www.iied.org.uk/mmsd>
- [13] <http://www.planalto.gov.br/casacivil/arquivosPDF/BR163.pdf>
- [14] In 2005, the Ministry of the Environment officially released federal funding from the National Environment Fund to support the "Strengthening of Environmental Management and Territorial Planning" for municipalities located in the area of influence of Highway BR-163. Funds

were made available for projects that integrate the planning and management methodologies and concepts of Agenda 21, ZEE and the Participation Master Plan. In 2006, the Brazilian Network of Local Agenda 21s was launched to strengthen and codify the experiences already underway and encourage the expansion of this process. Also in 2006, the Ministry of the Environment's Department of Policies for Sustainable Development and the Ministry of Mines and Energy's Department of Mines and Metallurgy formed a commission to integrate mineral sector initiatives into Local Agenda 21 processes.

- [15] A good example is the "Public Policy Observatory on Knowledge and Social Movement in the Amazon – COMOVA", the result of a partnership between the Federation of Social and Educational Assistance Bodies (FASE Pará/National Amazon Program) and researchers from the Federal University of Pará (UFPA).
- [16] The concept of "space" is used to mean "public space" and therefore encompasses the bodies – forums, councils, committees – where transparent processes of dialogue, negotiation and decision-making take place on issues of collective interest.
- [17] A series of national and international references have guided the debate on sustainable development indicators. According to the latest *Compendium of Sustainable Development Indicator Initiatives*, 836 sustainable development indicators have been recorded. Featuring among those that address the issue in a multisectoral way are the Calvert-Henderson quality of life indicators, the British Government's Indicators for Sustainable Development, the Sustainable Development Indicators of the United Nations, the Millennium Goals, the Human Development Index (HDI) and the indicators of the World Bank. In addition to these, another group of references presents environmental sustainability indicators, such as the Genuine Progress Indicator (GPI), the Dashboard of Sustainability and the Barometer of Sustainability. A number of indicators and documents were also identified for the mining sector: the ICMM principles, the mining supplement of the Global Reporting Initiative (GRI) and ALCOA's own indicators from a project in Iceland.
- [18] FENZI, N. Estudo de parâmetros capazes de dimensionar a sustentabilidade de um processo de desenvolvimento. In: *Perspectiva do desenvolvimento sustentável: uma contribuição para a Amazônia 21*, cap. 1, p. 1-31. Belém: Universidade Federal do Pará/Núcleo de Altos Estudos Amazônicos/ UNAMAZ, 1997.
- [19] FRASER et al. "Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management". *Journal of Environmental Management*, v.78, Issue 2, Jan 2006, pp. 114-127.
- [20] Reed M.S.; Fraser, E.D.G.; Dougill, A.J. "An adaptive learning process for developing and applying sustainability indicators with local communities". *Ecological Economics*, 59, pp.406-418, 2006.
- [21] The region of Juruti is considered an "extremely high priority" in the categories defined by the Project for the Conservation and Sustainable Use of Brazilian Biological Diversity (PROBIO) which assists the Brazilian government in defining priority areas and actions for the conservation of biodiversity in the country.
- [22] Such as ALCOA, Citigroup, Ford, Hewlett, Kellogg, MacArthur, Moore and Rockefeller, Starr, among others.

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