

Sustainable Juruti Model: a case of pluralist governance to drive mining and local development in the Amazon region.

FÁBIO ABDALA, Political Scientist, Ph.D. in International Relations -
Sustainability Manager at Alcoa Mining Business, Latin America & the Caribbean (fabio.abdala@alcoa.com.br)

ABSTRACT:

The Sustainable Juruti is a proposed model to promote an agenda of sustainability at Juruti City (Amazon region), where Alcoa established a mine of bauxite. The model is based on a tripod approach with multi-institutional partnership aimed to provide mutual benefits for companies, communities and local government. Its components include: 1) The Sustainable Juruti Council: a permanent forum for dialog and collective action among the parties, considering a long-term agenda, 2) Sustainability Indicators: monitor the development of Juruti and feed the Council with qualified information, and 3) The Sustainable Juruti Fund: finances activities prioritized by the Council and mobilizes resources to generate an endowment fund for present and future generations. This model is considered as a pluralist governance experiment aiming to promote local development based on sustainability and cooperation approaches in the midst of intense conflict of interests.

Key-words: Sustainability; Governance; Indicators; Funding.

INTRODUCTION

The *Sustainable Juruti* project is a proposed model to promote a sustainability agenda for the municipality of Juruti, west of Pará State, due to the installation of an Alcoa bauxite mine, a large-size mining business in the region (ALCOA, 2009). Such enterprises in the Amazon are challenged to overcome social and environmental liabilities, such as the case of the collapse of the Serra do Navio project, which after a period of 45 years of economic boom and welfare resulting from the mining of manganese, in the neighboring State of Amapá, became a symbol of unsustainability for large-size mining projects (TOSTES, 2007).

Figure 1 - Location of the municipality of Juruti, Pará State



This model can be understood as an unusual governance experiment regarding regional mining mainstream, once is promoting pluralistic decision-making processes with multiple actors, from local to global, aiming to development based on new paradigms of sustainability. Such way of governance are demanding capabilities in systems thinking, moderation and conflict resolution skills, positive agendas designing in the midst of an intense divergence of interests and political projects.

GOVERNANCE AND PLURALISM

Krahman (2003) distinguishes the concepts of government from governance as two ideal types based on the concentration and fragmentation of political authority, respectively. Governance structures and processes allow government and non-governmental organizations coordinate their needs and interdependent interests through the co-design and implementation of policies in the absence of a unified authority. Governance would result from the establishment of arrangements for policy making beyond the government sectors, leading to increased inclusion and empowerment of civil and private actors in providing services to the public, aimed at enhancing the effectiveness and efficiency in regulating social and economic arena.

Certainly, this diffusion of political authority is associated with external and internal factors to the state. On the one hand the rise of civil society organizations (CSOs) and corporations in politics is a result of the strengthening of these actors in the institutional arena, developing a political culture that has promoted non-state public goods and collective action. Companies and society tends to overcome border barriers in pursuit of maximizing interests, and have been increasingly successful both locally and globally. On the other hand this kind of governance is related to a dual crisis of the state: 1) limitations of the state apparatus in providing social welfare self-centered to the whole population, and according to the demands of hegemonic economic sectors, and 2) limitations on social responsibility of the State, its ability to be accountable to the public and the consequent loss of social legitimacy. Both factors

result in reduced performance and effectiveness of actions exclusively to the State. The ideological foundations of this conception emphasize the liberal view of empowering civic groups and the insertion of market principles and practices in the governmental administration. Among its major vectors there are the demands for efficiency, quality and transparency in the services provided by the state, streamlining of activities, adoption of projects management, focus on results and consumer services, reduction of the state apparatus, outsourcing, privatization and public-private partnerships to produce public goods and services in contrast to the bureaucratic practices that focus more on processes and departmental management. In same sense, in this approach can also be identify some degree of depoliticization of decision making process to reduce the importance of state factors, as well as share his authority with private actors and communities.

The establishment of governance can be guided both by an elitist approach as pluralistic decision-making (Clemons & McBeth, 2001; Mc Cool, 1995; ALFORD & FRIEDLAND, 1992). The governance of sustainability policies tends to follow a pluralistic praxis of the political process, where decision-making system is permeated by a broader set of actors and interest groups. In the long term, to organize and coordinate differences among political actors would be necessary to involve more directly the forces that shape social conflict and cooperation, incorporating different interests, identities, institutions and values. Pluralists assume that centralized decision-making, planning and large-scale structures are rigid enough to create bureaucratic difficulties to operate in the new environment of diversity and complexities of governance for sustainability.

In this way governance implies a coordination process among different groups with different levels of needs, conflicts and disagreements in search of mutual benefit, fairness and effectiveness. Players involved in the game would be able to generate more cooperation when they can adjust their strategies in response both to the interests of other participants, as a function of the learning generated in the relationship, which allows change its policies and conditions for participation in collective action. The pluralistic governance would imply the implementation of consultative processes, negotiation and collaboration, conflict management and collective learning. Such schemes may be temporary and incremental, if not surpass necessarily conflict, but seek to minimize them, and their decision is interactive, in which the players continually move at different levels of agreement and disagreement, produce adjustments, new problems and opportunities for collective action (Wollenberg, Anderson & LOPEZ, 2005).

Considering the social-private-public participation and control over the Council, the Fund and the System on Indicators in the Sustainable Juruti initiative this model can be understood as a pluralist governance experiment aiming to promote local development. However, if Juruti, sustainability strategies cannot waive the provision of public goods and services often promoted by the state.

MINING AND SUSTAINABILITY

Under the impact of new development paradigms, mining is challenged by two assumptions: 1) the social license is a key element for its sustainability, and 2) the developments, in the long run, would not sustain themselves as an "island of prosperity" while living in an environment of poverty and institutional instability. Therefore, generating multiple benefits is required (ENRIQUEZ, 2007).

The *Sustainable Juruti* model is based upon a tripod of intervention that promotes multi-institutional partnerships (public authorities, communities, civil organizations, enterprises), whose components and purposes are as follows:

1. The Sustainable Juruti Council: a permanent forum for dialog and collective action between society, government and businesses which discusses the common future of public interest, it prioritizes actions and formulates a long-term agenda.
2. Sustainability Indicators: provide the tools for monitoring the development of Juruti and its surroundings and feed the Council with qualified information for the decision-making process
3. The Sustainable Juruti Fund: it complements the local funding to development actions as from council-prioritized indicators, and mobilizes resources to generate financial wealth for present and future generations.

According to its designers, this model was conceived and designed from the core challenge that presents itself in Juruti, namely: *"the installation of a large enterprise in a region of high biodiversity, social organization and public authority unprepared to face a horizon of large and rapid changes, as well as the lack of financial resources to meet the demands of the population. According to this scenario, such insertion carries potentially significant, long-term implications on a wide range of players, with huge social, economic, political and historical differences, as well as on the environment"* (MONZONI, 2008: 8).

In addition to the economic and socio-environmental impacts of the mining development, the promotion of the *Sustainable Juruti* model would be a strategy to generate mutual benefits for all social, public and private sector stakeholders.

Companies would benefit as tensions with communities, governments (local and regional) and other stakeholders are reduced, thus greatly contributing to the operation license. Likewise, there would also be benefits for the image and reputation of the company, from local to global level, by identifying it as the leader of an innovative model that seeks sustainability.

There would be social benefits for the current generation as it takes part in the strategic decisions about the allocation of the companies' socio-environmental investments, connecting them with those prompted by the government, which in turn would benefit from investments in institutional development and planning tools and social participation provided by the Council and the Indicators. There would be environmental benefits stemming from the investments in conservation and sustainable use of natural resources through the Fund.

There would be benefits for future generations in that part of the mineral income would be intended for an endowment fund, thus creating a financial legacy (savings) beyond what is invested in the short term.

ASSUMPTIONS AND INTERVENTION TRIPOD

According to the *Sustainable Juruti* model, three assumptions guide the construction of a local development agenda, based on an intervention tripod as per bellow (MONZON, 2008):

1. The concept of social coordination spaces, thus allowing for broad and democratic participation of the society in building the agenda towards a common future.

2. The approach of territory, which considers the host city as a generator of development in the region.

3. The dialog with reality, which shapes the agenda in view of the local demands, which customizes the agenda in view of the regional public policies, and which contextualizes the agenda within global and business initiatives focused on sustainability.

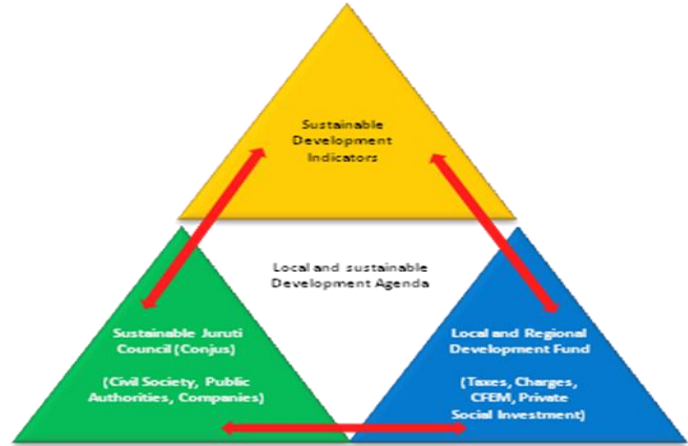


Figure 2 - Sustainable Juruti Model

IMPLEMENTATION, PARTICIPATION AND CONTROL

The governance of the model is based upon the partnership between civil society organizations, communities, businesses and government, for which Sustainable Juruti Council (CONJUS) is privileged institutional forum. Created in 2008, this is a permanent forum for dialog and collective action among partners oriented for the sustainable development of Juruti.

The CONJUS Board of Directors is made up of fifteen members, namely:

| | | | |
|-------------------|----------------------------|---|---------------------------------------|
| Social | 1.Fishermen's colony Z42 | 2.Children Pastoral Commission | 3. Guardian Council |
| | 4.Rural Workers' Union | 5.Women's Association | 6.Commercial and Business Association |
| | 7.Union of Rural Producers | 8.Juruti Association of Disabled Citizens | 9.Construction Workers' Union |
| Government | 10.City Administration | 11.City Council | 12.Emater |
| Companies | 13.Alcoa | 14. GRSA | 15. Hotel Garcia |

Table 1 - Board for the Sustainable Juruti Council

The Council is characterized by pluralism and diversity of participants. It is organized into eight Theme Chambers to discuss key issues in the municipality, namely: Security, Land Issues, Production, Rights, amongst others. Currently, CONJUS is in the process of preparing the Agenda 21 of Juruti from the diagnostic results generated in the first results of the Sustainability Indicators (CONJUS, 2010).

The Sustainability Indicators are the result of the system for monitoring the development dynamics of Juruti and surroundings. This system is implemented jointly with Alcoa, the City Administration and local civil organizations, with the technical support from FGV. It keeps records of what Juruti was like prior to

the implementation of the mining project as well as the recent changes, making up a kind of "thermometer", a tool for municipality management.

For FGV, through that instrument, *it is possible to get to know part of the city's past and present history. And most importantly, discuss its future. The indicators have been discussed in councils, schools, communities, institutions, by the governments and businesses, and are expected to contribute in the planning of actions and public and private investment in the city*" (FGV,2009: 7).

The ultimate goal is to help the public to be aware of the changes they have been experiencing, to collectively define the directions they desire to follow and to evaluate the paths taken: thus strengthening the good actions in progress or, if necessary, correcting the course of its development. The first outcomes are already published in a book so that the indicators can be understood in a didactic way. The information system is also 100% available for viewing on the Internet.

The Sustainability Indicators allow for CONJUS to guide the lines of action for the Sustainable Juruti Fund (FUNJUS), which also represents a partnership amongst the City Administration, local civil organizations, Alcoa (first sponsor) and the Bank of Pará, with the technical support from FUNBIO.

FUNJUS is a long-term financing tool oriented for the sustainable development of the territory by encouraging the creation of value in the four sustainability pillars or capitals: human, social, environmental and economic. It is about a promoter and catalyst, a lever for local development. It adds to, and does not replace, the government as a financial backer of public policies. Given the recent transformations in the city, it considers the impacts, imbalances and perspectives for the stability of Juruti (FUNBIO, 2010). While in the pilot phase of implementation, in late 2009, the first public notice of FUNJUS was issued. It is financing 21 community projects, mobilizing R\$ 550 thousand from an overall amount of R\$ 2 million.

FIRST RESULTS

Up until 2006, the city had a population of 25,000 inhabitants, 60% of which living in the rural area (IBGE, 2007), with a low Human Development Index, the 10th. worst HDI in Pará State (UNDP, 2000), that is, people living on low incomes and with no access to basic social services (health and education). In addition to that, there is the vulnerability of the Amazon environment, both for the fragility of forest ecosystems and the absence of the government. With the implementation of the Juruti Mine, the social and institutional weaknesses have become largely explicit. The company, in turn, was not adequately prepared to deal with social and environmental conflicts that erupted under the leadership of communities and public agencies, even jeopardizing the issuance of the installation and operation license.

In 2006 and 2007, the MPE (Office of the State Public Prosecutor) filed a civil action against the project. At the same time, the relations with the Municipal Administration deteriorated and the communities made several protests against the project, including rallies promoted by the *Movement 100% Juruti* with the slogan "Alcoa Out of Juruti".

The economy was growing along with urban and environmental problems arising from the Mine, and critics wondered: what to do with the mineral income from installing the Mine? How would that income be invested in strategic sectors of local development and how would it benefit the local communities? Will they dig out the bauxite, leave a hole and go away? What would be the sustainability of Juruti with

the Mina, that is, what legacy would be left for future generations? Questions with poor or incomplete answers.

There lacked room for dialog among the stakeholders on local development, as well as "critical mass" to give direction to what was coming up.

As the sustainability tripod was implemented, the stakeholders invested in dialog and building consensus, they began to organize the ideas in the form of action plans targeted at the economic, social and environmental sustainability and created means to implement the actions.

Through the Sustainable Juruti Council it was possible to start a partnership involving the society, the government and the private sector as a space for cooperation and a way for seeking joint solutions. In 2008, the directorate was elected among the City Administration, Alcoa and the Movement 100% Juruti. The level of conflict between the Juruti Mine, communities and the local government was reduced, and also a place was determined to settle controversies, give transparency to the interests and generate agreements between the parties.

The Indicators (more than 80 items in the human, social, environmental and economic fields) qualifies the dialog among companies, communities and government, seeking to balance the social and institutional interests with technical information. For such outcomes to be achieved, technical workshops, community meetings, internet browsing and public hearings were held, which mobilized more than 600 participants from 115 communities and 71 institutions, with 90 contributions through the web. In this process the most important factors are: 1) health, education and safety; 2) water, agriculture, financing, technical assistance and land tenure; 3) transportation, communication, energy and waste.

In view of such outcomes, the parties started to develop a local sustainability plan based on Agenda 21, with common responsibilities but differentiated, namely: the companies contribute, but do not replace the role of government and the society.

The starting Fund seeks to demonstrate the feasibility of new ways to produce (fish, vegetables, services), to preserve nature (fishing and lake management agreements), and to develop the society (environmental education, comprehensive care for adolescents at risk). Today, there are 21 projects implemented in urban and rural areas, mobilizing about R\$ 550 thousand, as shown below:

Table 2 - Projects Funded by FUNJUS - 1st Public Notice - 2009/2010

| <i>Type-1 Projects - Community Associations - Up to R\$10</i> | | | |
|---|-----------------------------------|--|---|
| | Applicant | Project | Objectives |
| 1. | APROFASP | Cheiro Verde | Improve the structure of producers' vegetable gardens |
| 2. | São José Producers Association | Assistance to Poultry Farmers | Renovation and expansion of the poultry breeding farm for chicken breeding |
| 3 | CTPJ | Structuring and Adequacy of flour mill | Construction of a flour mill with structure for production of improved-quality cassava derivatives |
| 4. | Araçá Preto Producers Association | Support for Organic Vegetable Growers | Strengthen the productive activity through the implementation of community garden and legalization of the association |
| 5. | APROs | Farming of Tambaqui fish in net tanks | Breeding Tambaqui fish in net tanks (200 kg of fish) |
| 6. | São Braz Producers Association | Breeding of Native Bees | implementation of bee keeping in the Amazon |

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| | | | |
|--|--|--|---|
| 7. | São Pedro Producers Association | Income generation for Rural Family Production through the breeding of laying hens. | Generate income from the rural household production through the breeding of laying hens |
| 8. | São Benedito Community Association | Amarrando Sonhos | Income generation through handicraft and extractivism for family sustainability |
| 9. | ASPROFAGU | 100% Fingerlings Tambaqui Fish breeding in net tanks | Breeding Tambaqui fish in net tanks (200 kg of fish) |
| 10. | Nova Galiléia and Nova Esperança Producers Association | 100% CURUPIRA - Breeding of tambaqui fish in net tanks | Breeding Tambaqui fish in net tanks (200 kg of fish) |
| 11. | Santa Terezinha and Lago Preto Producers Association | Consolidation and Strengthening of Associations in the Plateau Region | Consolidation and strengthening of APROFASP, APROSEIS and ASPRUFARSHI |
| 12. | Grupo Unidos Producers Association | Consolidation and Strengthening of Associations in the Lago Juruti Velho region | Consolidation and strengthening of associations CTPJ, ASPROFAGU, ASPEFANGE |
| 13. | Santo Hilário Producers Association | Structuring of the Family Vegetable Gardens of the Communities in the Santo Hilário Region | Improve the structure of the producers' vegetable gardens |
| Type-2 Projects - Community and Civil Associations - Up to R\$ 50 thou. | | | |
| | Applicant | Project | Objectives |
| 14 | MOPEBAM | Fishing Agreement at Lago Grande and Curai | Develop and implement Community Fishing Management Plans |
| 15 | Pró-Tartarugas Association | Puxirum of Curumins - First Meeting of the Turtle Club | Hold the 1st meeting of the Turtle Club |
| 16 | APRAPAEB | Juruti Pescados | Enable partners to implement the Project through courses that contribute to the development of skills and expertise of those involved, in order to ensure the success of the fish breeding and marketing business |
| 17 | APRAPAEVID | Pesca Milagrosa – fish breeding in net tanks | Breeding Tambaqui fish in net tanks |
| 18 | ACEJ | 5S Program - Juruti | Creating the culture of Total Quality by implementing the 5S Program (senses of the Use, Sorting, Cleaning, Hygiene and Health, and Self-discipline) in thirty companies in Juruti |
| 19 | Bairro Santa Rita Community Association | Da Rua à Cultura | Rescue children and teenagers of the Santa Rita district and other districts, with the consent of the child protection agency, to integrate the program |
| 20 | Bom Samaritano Association | Building and Feeding with Quality | Provide students of the Rosa de Saron School with quality service in the distribution of school meals by erecting a cafeteria and kitchen |
| 21 | Juruti Artisan Association | Tucumán | Provide capacity-building for handicraft workers and infrastructure for making biojewels |

The *Sustainable Juruti* model is demanding in terms of: 1) qualifying leaderships for dialog using appropriate social technologies, 2) dedicated staff and resources, and 3) mining operations that can be adapted to social and institutional demands.

Benefits may be internal and external to the enterprise. Examples of internal benefits: anticipation, management and (consequently) the reduction of risks arising from social and institutional conflicts

generated by the project; strengthening of the operation license; employee satisfaction for being part of a company recognized positively by the society and its peers in the market; the Company's strengthened brand and reputation in the market. The external examples include: private social investment and corporate responsibility in line with the development goals set by the local society and government, creating convergence and economies of scale; a space for direct, transparent dialog between the stakeholders and the company, without patronage; creation of a financial and institutional legacy generated by the mineral income that stretches beyond the closing of the mine.

The impacts and benefits of this type of corporate approach, jointly with communities and governments, can be observed in the short term, but will be more consistent and durable in the medium and long term.

As short-term results, the following can be emphasized: reduction of conflicts, increased trust amongst businesses, society and government, and a mechanism for dispute settlement; promotion of joint initiatives and mobilizing partnerships (public and private, local, regional and national) to promote local sustainability; the increase of corporate social responsibility and private social investment; increase public transparency on private investments, budget and use of public resources; forwarding of social demands for public services to government agencies, thus allowing for directing private social investment in a complementary and strategic manner.

In the medium and long term, the highlights are as follows: participatory governance of the territory; increased living quality and levels of institutional and social development; increased presence of the State through increased control, supervision and services; gradual withdrawal of investments from the mining project in providing public services (which are typical of the State); social and economic inclusion of communities; development of local value chains (agribusiness, forestry and services) with greater local autonomy in relation to the mineral chain; establishing conservation units of full protection and sustainable use; endowment fund for investments in local development; mine closure without causing a collapse in local society.

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