

A HISTORIC LANDMARK 10 million Brazilians out of the darkness

Light for All

A HISTORIC LANDMARK

10 million Brazilians out of the darkness

Electric Power Concessionaries and Rural Electrification Cooperatives Governments

State



Ministry of Mines and Energy



CORRESPONDENCE

MINISTRY OF MINES AND **ENERGY**

ELECTRICAL ENERGY SECRETARIAT

PROGRAM LIGHT FOR ALL

A HISTORIC LANDMARK 10 MILLION BRAZILIANS OUT OF THE DARKNESS

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Programa para todos









RIGHT BET

The electric power finally came to his community and he won the bet

DEVELOPMENT

Partnerships create conditions for employment and income in the communities

SPECIAL ASSISTANCE

Settlements, Indians and Runaway Slave Descendents Communities are among the priorities of Light for All.

INCLUSION

Before the Light for All, the cost of connection was incompatible with families' income







JEREMOABO

The garment production is now even exported to Italy

PARATY

A jam factory has added value to banana production in the region

ALCÂNTARA

Electric power helps to preserve the tradition and culture of the Runaway Slave Descendents Communities



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PONTA PORÃ

The link between two programs served more than 2,800 families in just one farm

RESULTS

Better quality of life for the inhabitants of the rural region

POMERANIANS

Hurray for the light or "leewend licht!" reflects the joy of community in Santa Maria (ES)

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NEW CHALLENGES

A new moment and with it the most challenging task

MOVING THE ECONOMY

the program has created nearly 300 thousand new direct and indirect jobs across the country

PASSOS MAIA

Capelleti Family is held together with the arrival of light

ISOLATED

Examples why bringing electricity to remote locations



MOVING STORIES FROM NORTH TO SOUTH

ot long ago, storing food in refrigerators, attending night classes or even offering a simple glass of cold water were non-imaginable situations for million of residents in rural areas. Many of them spent decades without even seeing a light bulb on, and the lack of electric power prevented them to walk towards development and improvement of life conditions.

Electricity was a dream for the 2 million families identified by Census 2000 from the Brazilian Institute of Statistics and Geography, and it started to become reality when the Federal Government on November 2003, launched the Program "Light for All".

For the first time in Brazil, the access to electric energy reaches 10 million peasants with free installation. This makes all the difference once 90% of them that used to live in the darkness had income below three monthly minimum wages.

The arrival of "Light for All" has promoted a true revolution in the rural areas and in Brazil as well, once the Program has been contributing to modify the picture of social exclusion. The electric

Presentation

power benefits are countless and have encouraged families to stay in the country and to develop productive activities, improving quality of life and generating job and income. Even those families that had left their lands towards the great centers are coming back to their origins.

The following pages gather some examples of the change that "Light for All" has brought to rural areas. Throughout the country, impressive and touching stories as the sensation to watch, for the first time, a TV show, the chance to start a small business, to safely store foods, or to access a computer, at last, the accomplishment of many dreams.

The Program "Light for All" is much more than the possibility to turn the light on, it is one of the greatest programs on social inclusion existing in the world, which brings to families the rescue of dignity and the accomplishment of citizenship.

Ministry of Mines and Energy



Municipality of Itapecuru-Mirim - Maranhão







ELECTRIC INCLUSION IN RURAL BRAZIL

he secular exclusion of great part of the Brazilian population to access electric power, exclusion that today still reaches, mainly, inhabitants of rural areas, contributed decisively for the great social disparity throughout the country. The families that used to live in rural areas with no access to electric power - and often no access to their own land - were condemned to socioeconomic and cultural stagnation and to the low productivity of their rudimentary means of production. They would survive under a precarious regimen of subsistence.

The absence of electric power in rural areas, associated to low productivity and scarce access to technology, resulted in a limited level of economic development, aggravated by the lack of infrastructure on healthcare, sanitation and water supply, in addition of low literacy rates of the population. In other words, there was no perspective of quality of life improvement. Through the Program "Light for All", this reality started to change: more than ten million people have already access to light, leaving the darkness.

Background

According to Census 2000, from the National Institute of Geography and Statistics, 2 million families in rural areas used no live without electric power.



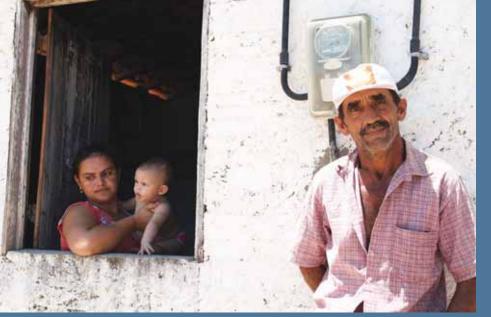
City of Araioses- Maranhão

THE HISTORY OF RURAL ELECTRIFICATION

The rural electrification started in May of 1923, in the city of Batatais, state of São Paulo, when farmer João Nogueira de Carvalho ordered the first service to the local concessionaire, named Indústria Ignarra Sobrino & Cia, to have electric power installed in his property. The connection service was made, but he was accountable for all expenses related to the line set up, connections, and maintenance costs. After this pioneering initiative, several others farmers from the region held identical contracts with the concessionaire.

Almost 20 years later, thanks to the involvement of state and municipal governments, the first cooperatives of rural electrification, responsible to make feasible the electric power in rural areas, appeared in Brazil. In the state of the Rio Grande do Sul, by influence of European immigrants, which already knew the benefits of electricity, the cooperatives acted with more dynamism, taking care of villages and districts. The first lines of rural distribution were installed in the state in 1947.

Several state initiatives have promoted rural electrification from Sixties, but still insufficient to supply the growing need of rural areas. The unfavorable relationship between cost-benefit did not attract the concessionaires.



City of Beberibe - Ceará

To minimize this deficit, Decree 62.655, May 3rd 1968, established that "The services of rural electrification, for privative use, could be executed by standard individuals or by companies." Thus, this principle guided the growth of cooperatives in Brazil.

Such measure, however, and others that arose, were not enough to answer the demand for electric power, and the electrification situation in Brazil remained critical. Thus, according to the Rural Census of 1980, 83.3% of the Brazilian rural properties still did not have electric power services.

Later in 1991, there was an attempt to reactivate rural electrification, by initiative from the Ministry of Agriculture. The strategy was to gather U\$\$ 2.2 billion to electrify large and medium size rural properties. The initiative, however, failed and it was forgotten.

In 1999, the Program "Light in the Country" was created through a presidential decree. The goal of the Program was to take electric power to 1 million rural homes, in a period of four years. However, there was an obstacle: the farmer interested to access electric power would be accountable for all expenses, since the construction of the electric network until the residential installation.

The investment was financed by the Program and the farmer would have a deadline to pay the debt. However, some obstacles stopped the benefit to reach a great number of people: the Program did not reach some states, such as Amazonas, Amapá, and Maranhão, and, moreover, the cost of the connection was incompatible with the income profile of the families who needed electric power the most.

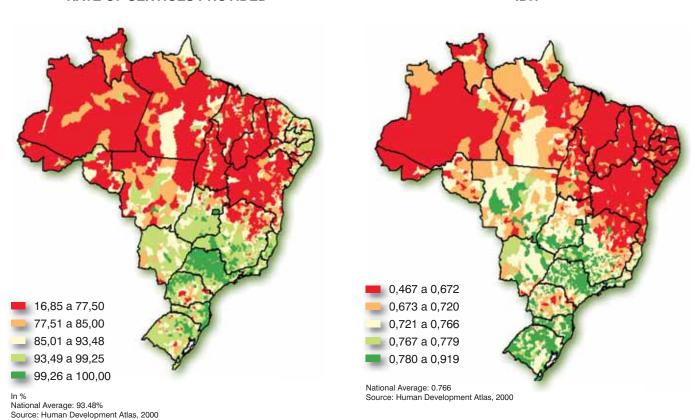


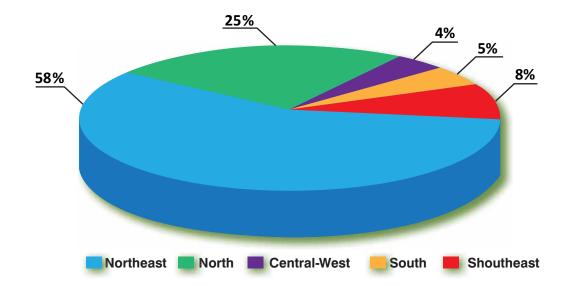
The picture of electric power exclusion, from 2000, shows how much more needs to be done. Also, it indicated the social condition of who lived without electric power.

ELECTRIC EXCLUSION RATE OF SERVICES PROVIDED

HUMAN DEVELOPMENT RATE - IDH

IDH









TEN MILLION PEOPLE HAVE ALREADY LEFT DARKNESS

long with the challenge to promote the inclusion of million of Brazilian citizens from rural areas to access electric power, the Federal Government created, in November 2003, the Program "Light for All". Its goal suggested to take electric power to 10 million inhabitants living in rural areas, corresponding to the addition of inhabitants from the states of Piauí, Mato Grosso do Sul, Amazonas, and from the Federal District. The operations of the Program began in 2004. The challenge - to end electric power exclusion in Brazil – was starting to be faced.

Brasília, January 2nd 2007. First workday of the President of Republic, Luiz Inácio Lula da Silva, in his second term. First public hearing. On the agenda, the commemoration of the reach

half the goal of Light for All Program, which is the equivalent of Five million people served with free electricity in Brazil.

Gabriel Silva Gonzáles, president of São Jorge Association, from Iporá Settlement, located in the city of Rio Preto da Eva, state of Amazonas, was at the event. In that community, three thousand people were benefited from the Program "Light for All". Emotionally affected, Gabriel said that it was the "first time that the Brazilian small farmer could heartfelt thank the government for this accomplished benefit".

Marcos Luidison de Araújo, chieftain of the Xucurus Indian community, city of Pesqueira, state of Pernambuco, was also thankful for the arrival of light: "This is a historical moment in the life of each one of us". The quality of life of more than 10 thousand inhabitants of the tribe has improved with the electric power.

Today, two years later, other five million people can also celebrate. They are ten million inhabitants from rural areas who can count on free electric power installations made through "Light for All." Since the first talks on the implementation of the program, in 2003, the evaluation made by technicians from the Ministry of Mines and Energy was of that it would be an audacious and gigantic project.

For this, it would be necessary to adjust the existing local infrastructure to handle the demand that would be created. One

Light for All

The goal to benefit 10 million brazilians has been accomplished!



of the instructions from President Lula was, through the accomplishment of the Program, to encourage local job generation, to hire staff to perform the services, and also to produce poles for the network set up. In some places, plants that were closed were then reactivated; in other places, it was necessary to implement them. Even the electric power concessionaires had to adjust their plans to execute projects in large-scale.

WHERE THERE IS ENERGY, THERE IS CITIZENSHIP

According to data gathered by Census 2000, performed by the Brazilian Institute of Geography and Statistics (IBGE), there were in that year, approximately two million small farmers homes (around 10 million people) without access to public service of electric power distribution, which represented 80% of the population without access to artificial light. That is, the Brazilian rural areas, which could bring great opportunities to the development of the country, still lacked from one basic product, the electric power.

Also, it was verified that the unassisted families were mainly located in the regions of lower Human Development Rate (IDH), and that about 90% of them would earn income below to three minimum wages monthly salary. These were unmistakable data from the association between the access to electric power and economic and social development.

"Light for All" then started to integrate the strategy of the Federal Government to fight poverty and hunger. One of the main goals of the Program was to turn electricity in a vector of economic and social development of the assisted communities, encouraging integration of social programs from the government to make possible the access to healthcare, education, water supply, and sanitation. In addition to comfort and income generation, the electric power means, to those benefited from it, the recovery of citizenship.

The Ministry of Mines and Energy is in charge of the Light for All Program's coordination and Eletrobras is responsible for its execution. Partnerships with state governments, concessionaries and rural electrification cooperatives all over the country were established in order to put the program into operation.

The Ministry of Mines and Energy has established simple and objective rules, which were made public through the Manual for the Program's Implementation, to guarantee the program's transparency.

Differently from previous electrification initiatives, which demanded the beneficiary to afford for part of the expenses (making harder for the families to have access to electric power), the Federal Government, in the Light for All Program, decided to make the electric installation free, including electric meters. The beneficiaries would have to pay only for what they used, like every other Brazilian.

The community of Nazaré, located in the city of Novo Santo Antônio, in the state of Piauí, was one of the first places to be assisted by the Program. This community was not chosen by chance. The city, at the time, presented one of the lowest rates on access to electricity in the country: only 8% of the rural homes were connected to the electric power network. The community could not move towards modernity and the lack of electricity would contribute for this reality, as it was not possible to use machines in the crops or to install modern equipment in the local school.

Electric power changed everything. The flour house was remodeled, it received new equipment and the processing of cassava is no longer manual. Thus, the production became more profitable. Moreover, the leftovers started to be used in the preparation of food destined to small goat and pig flocks. This well-succeeded initiative took electric power, quality of life, and income generation for 30 families.

The Municipal School Tiradentes offers courses in the morning and in the afternoon and assures education for the children that live in Nazaré and around the regions of Baixa do Verde and Padre Chapada. At night, the unit receives teenagers and adults enrolled in the program "Education of Teenagers and Adults (EJA)". During the reading of this report, other communities will be presented that, like Nazaré, have left isolation and stagnation and today celebrate the economic development.





SOURCES OF RESOURCES AND ANTICIPATION OF SERVICES

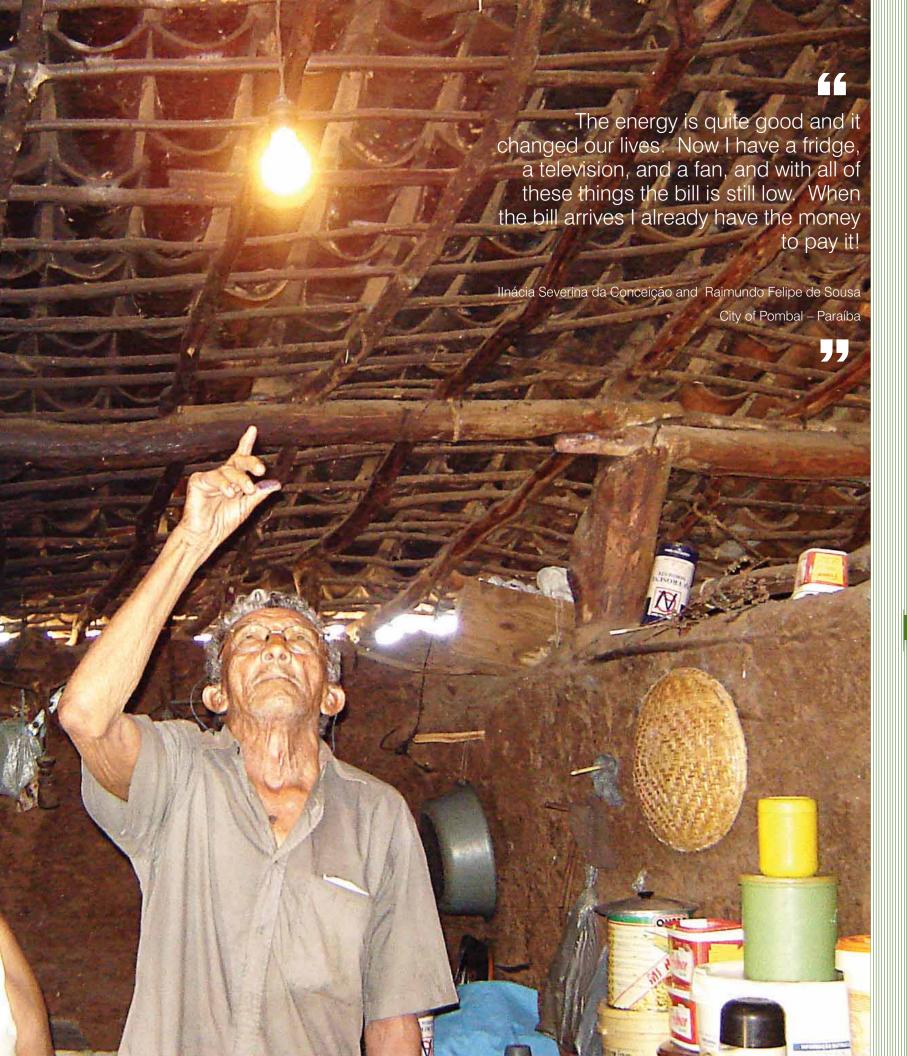
The Program is currently calculated in R\$ 20 billion, of which R\$ 14.3 billion are resources from the federal government. The remaining is from state governments and concessionaires and cooperatives of electrification. The federal resources come from energy funds – Energetic Development Account (CDE) and the Reversion Global Reserve (RGR).

Thanks to the subsidized resources and to financings with interest rates quite below the market, provided by "Light for All", the federal government will anticipate the standardization of electric power in the country. According to Aneel (National Agency of Electric Energy), Resolution 223, April 29th 2003, the electric energy concessionaires would have until December 2015 to provide electricity to homes with no access to this public service.

The Program "Light for All" was established by Decree 4.873, November 11th 2003 and extended by Decree 6.442, April 25th 2008. Although it is a government action, the Program elapses from State action directed towards the standardization of public service of electric energy in the country, according to Law 10.438, April 26th 2002, modified by Law 10.762, November 11th 2003, and by Law 10.848, March 25th 2004.

It is important to mention the Aneel Resolution 175, May 28th 2005, and its review, through Normative Resolution 365, published in May 28th 2009, which establishes the goals of standardization for each electric energy concessionaire and rural electrification cooperative, in addition of the Adhesion Protocol and the Commitment Term, which are the instruments that define the basic conditions for the implementation of the Program in each State.







"

Before the electric power I used to produce 3 to 4 kg of cheese, as I did not have any equipment to store it. Now, with electric power in my house, I could produce up to 60 kg by week, and my dream is to create my own factory, legally registered, to have more equipment, to sell at supermarkets, and to hire more people.

Claudia Penteado Itamarati Senttlement, City of Ponta Porã – Mato Grosso do Sul





The estimate is that the works of "Light for All" have generated about 300 thousand new indirect and direct jobs.

JOB AND INCOME

To the assisted communities, light now represents more comfort, better quality of life and new possibilities to generate income.

It was the case of Eleandro Emídio Brasil, which got his first job in 2006, in a pole factory in the state of Acre. His family, which also used to "live in the dark", was assisted by the Program. "To have energy at home was an old dream of ours: now, in addition to light, I got a job and I can help my family", said Eleandro, emotionally affected.

BEATO SALU LOST HIS BEARD

The small farmer Pedro Castilho (54) was very excited when he got the news that the Program "Light for All" would arrive at the city of Capixaba's rural surroundings, state of Acre. He was certain that he and his peers would be soon contemplated; Pedro decided to make a trick and bet with his friends that the energy was going to arrive soon. The friends, tired of the old promise that was going on for at least 30 years, doubted one more time and accepted the bet as they were sure that the community leader was only bluffing. However, this time Pedro was sure he had a invincible jack in this sleeve, and he did not save the chips. For the surprise of all, he increased the offer and bet his own beard, that is, he would let it grow until his expectations would be answered. According to Júlio Cesar, "the luck was on".



Pedro Castilho

Capixaba

Pedro won the bet, and Ms. Eliete won a television and a refrigerator





At the beginning it was hard. The beard was very inconvenient. My friends would always tease me about it

PEDRO CASTILHO



"It was hard in the beginning. The beard would bother me a lot", remembers Pedro. "The friends would always tease him, asking for the bet", says Eliete Castilho, wife of the producer. But Pedro's conviction was unshakeable. Even with the jokes and nicknames such as "old man from the river" and "Saint Salu", soap opera characters with long beard, he did not give up and kept his face untouchable for more two years, after all he needed to honor his word. When he could not take it anymore, the game turned around and the producer realized that luck was coming. The energy company started to implement the poles. Pedro Castilho could show all that his triumph – an ace of spades – was invincible. The electric power finally arrived at his community taking 'light for all'. At the inauguration ceremony, the proud Pedro Castilho finally shaved the beard in front of the whole community.

The change brought by "Light for All" was immediately felt at Pedro's house. With the energy he could buy a television and a fridge, relieving the hard work of his wife. From then on, she did not have to salt the meat anymore or leave it at the grease to preserve it. The family could eat more fruits and vegetables, once it would not go bad anymore. Eliete also started helping with the income: the hand sewing machine, which produced 10 pieces of clothing per day was exchanged for an electric one, making the production to jump to 40 pieces a day, improving the life of her kids and five grandchildren that live at the Castilho's home. Energy has also allowed the exchange of





the diesel engine for the electric one, making easier to crush the corn, which helps in his small raising of pigs and chicken.

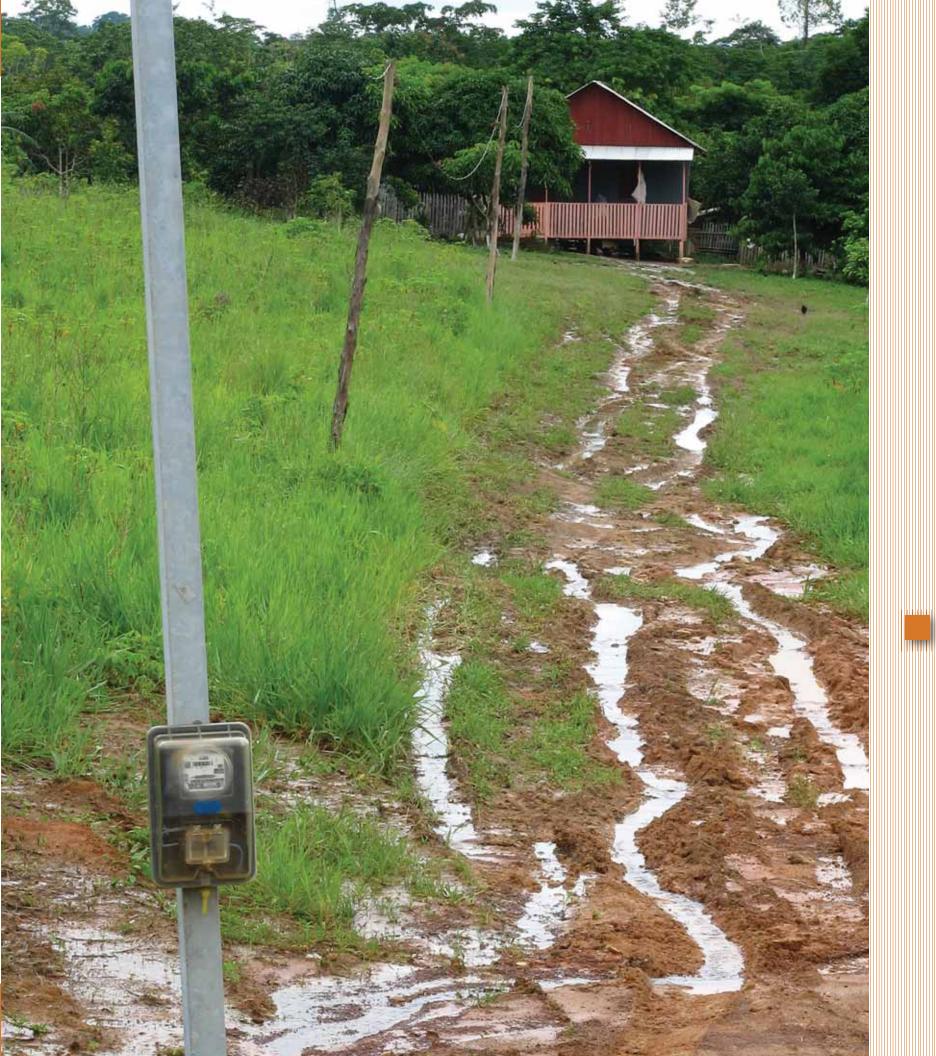
Two years later after the arrival of "Light for All", the improvement continued to agitate the Castilho's home, with the improvement of work and income, they are building an area and a kitchen in masonry. The old wire fence was also replaced by an electric one as it is cheaper and safer. "Even using fewer wires, it works better as the animals get afraid of the shock" said Pedro Castilho, smiling. The next step, according to Eliete is to buy an equipped tractor, through the Pronaf Program¹.

Together with the Castilho's, more than 260 families of rural producers from the small Settlement of Alcobrás were benefited with the arrival of energy. They also bet in projects to improve production and income. As soon energy arrived, a group of nine families founded the Nova Vida Association. The entity set up a small farm with capacity for 2 thousand animals. Today the production by family makes, by the end of the month, about R\$ 600,00 each one. The ration is also guaranteed by the small factory built by the associates, which also bought an industrial freezer to store the frozen poultry.

"With these machines, we could improve the productivity and now we got a good price for our product", explains the associate Alberto Vieira dos Santos. "We have always had the will power to work, we just needed the energy", concluded. With a lot of work and effort the small community of Alcobrás is changing the destiny of about one thousand residents, using the energy as a propelling coil for development.

¹National Program to Strength Family Farming





HOPE HAS WON OVER SADNESS IN THE BACKCOUNTRY

The Program Light for All made a revolution on the habits of the Brazilian semi-arid region. Before there was sadness and desolation, now there is hope, which was taken by the electric power waves. The news is everywhere. In the backcountry of Pernambuco, the joy of the Indians from Pipipam tribe is such that they do not get tired to dance the tore (religious dance) to thank for the arrival of energy at their tribe. In the tribe Travessão do Ouro – city of Floresta (PE), -, 150 homes were connected to the network, for the joy of all. The energy is changing the life of the population. This is what is happening at the house of Mrs. Carolina da Silva Neto (60). When she saw the lights on at her house, she ran to the store to purchase a refrigerator and a

liquefier and, with the help of both, she started to produce sweets from umbu fruit to sell in the city. "Now I pay the energy bill with the money I make from selling the umbu fruit popsicle, and I still get some money left", she says, excited. The producer José Evanildo da Silva (31) is also excited with the arrival of energy at his small store. "I have already doubled profits after I started selling cold soda and meat", he says. "I am very excited with the perspectives", says Evanildo. "We used to ask our guides to give us light and we have been answered. Now we rejoice with them for one more victory", celebrates the chieftain Valdemir Amaro Lisboa (39), together with all Pipipan Indians.

The joy is also present at Caritá Settlement, northwest of Bahia state, composed by 100 families, approximately 500 people. There, women have taken the initiative to apply the power of energy to increase handcrafts production. The business women association of the Settlement produces from hammocks to hats, from table sets to purses, in the hand thread. "The pieces finishing, which before were made in told pedal sewing machines, now are made in electrical ones.

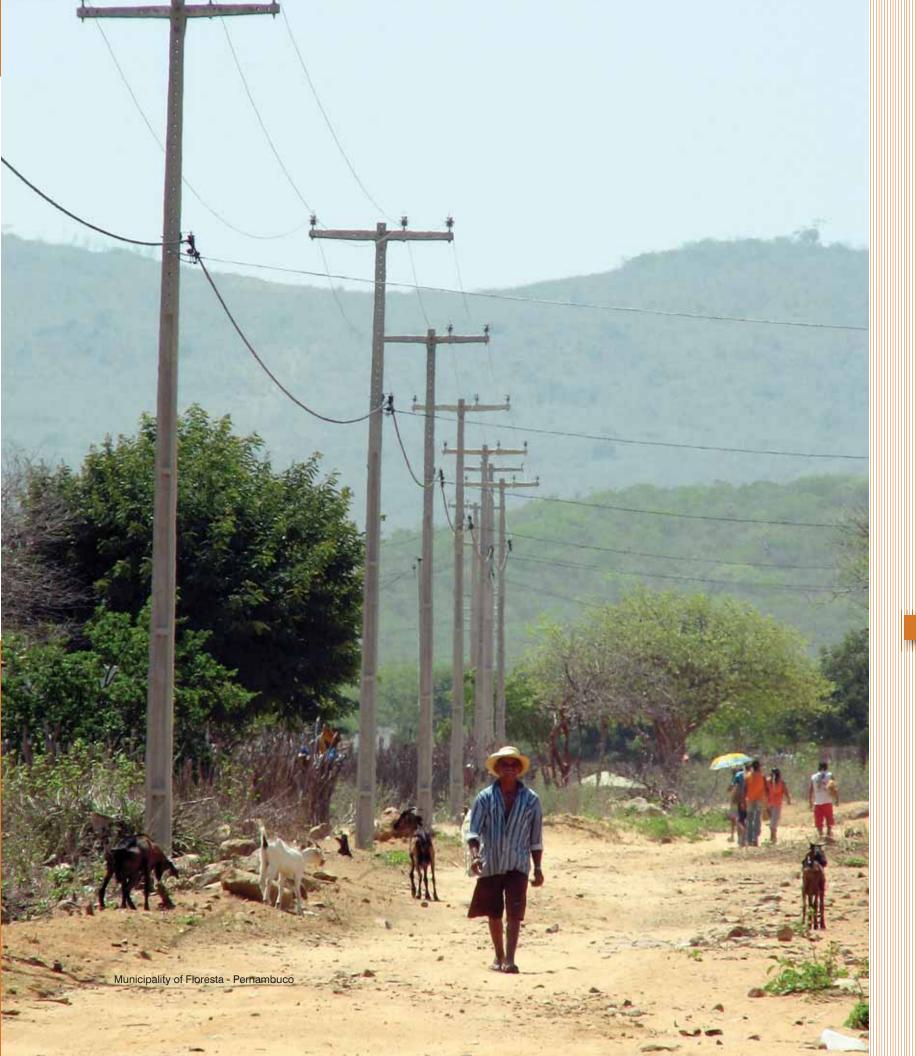
It looks like I am kidding, but it has significantly improved our work", stated Marivania Reis de Sousa Conceição, president of the association. "With the production increasing, we are already accepting orders and selling the products in handcraft fairs around the region" added Genivalda Zélia dos Santos, one of the seamstresses.

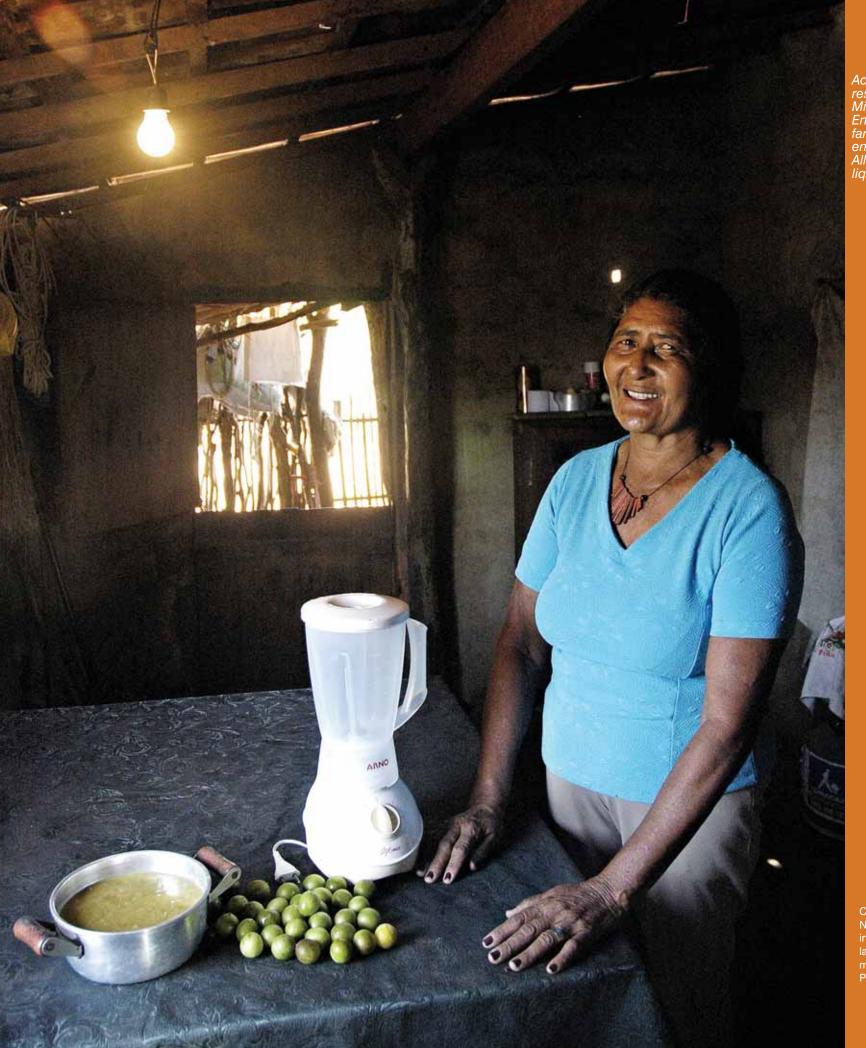
Floresta

Jeremoabo BAHIA

Communities in the northeast backcountry celebrate the arrival of electric power







According to a research made by the Ministry of Mines and Energy, 39% of the families that received energy from "Light for All" have purchased a liquefier.

Carolina Silva Neto, Pipipam indigenous land, Floresta municipality Pernambuco



Lace makers of Caritá proudly show their works that blend the thread tradition to the modernity of electric sewing machines.

The joy at the association is contagious, Terezinha Maria de Jesus da Silva says that she lived in a shed by the road for three years, waiting for the Settlement release, and today she has been living in a brick house for seven years. "That was a hard life", she adds with a loud laugh. "We didn't have anything, even dreaming was a hard task, today we are quite fancy, as we are exporting, with the support of Paulo Afonso diocese and from the nuns of Cícerto Dantas parish, our products to Italy", she happily reports. All this joy has a purpose, before the individual income was of R\$ 80,00 and now it went to R\$ 250,00. In 2008 the gross income of the association was of R\$ 45 thousand, and for 2009 the estimate is to reach R\$ 60 thousand, an increase of 35% in revenue.

Cassava producers from the settlement also want to take a ride on development, and they are already with a project of a communitarian flour house and a honey house, which should increase the community income. Through the processing, they will be able to replace the low cost of the cassava kilo by the promising flour kilo, multiplying the profits of the business. "The equipment in the honey house will allow us to work with the honeycombs from the beehives that we are cultivating in a much easier way", Célia Souza dos Santos concluded. More than happiness, Caritá community has gained confidence to face the hard life conditions found in the backcountry, she knows that she can now count on energy to light up the future.









OPERATIONAL MANUAL

The Operational Manual of Program "Light for All" defines the operational structure, goals, establishes technical and financial procedures and criteria, priorities, and its functioning.

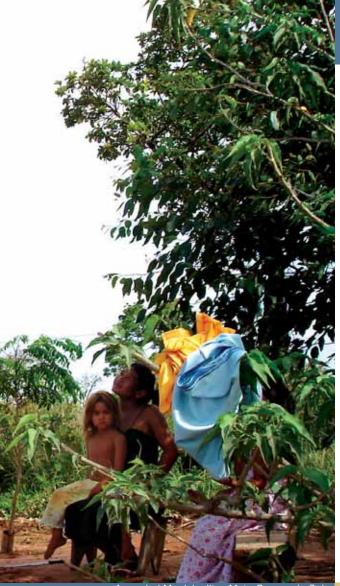
It also establishes the creation of a Management Committee in each State, which is a participative forum; it is responsible to determine the priority of services provided and to follow up the implementation of the Program.

Each Committee is composed by nine representatives, being one from the Ministry of Mines and Energy, the coordinator, one from the state government, one from the state regulation agency, one from concessionaires of electric energy, one from the city halls, and one from the cooperatives



How does the Program work

Low income families are priority of the Program



Amambai Municipality - Mato Grosso do Sul

of rural electrification (if applicable). The remaining representatives are chosen amongst the organized entities of the civil society, such as Incra (National Settlementand Land Reform Institute), Embrapa (Brazilian Agriculture Research Corporation), Ibama (Brazilian Institute of Environment and Natural Resources), among others, by the Committee coordinator, and by the State Government representative.

The members of the Committee attend meetings periodically to discuss the course of the Program in the State, existing difficulties, general questions raised by any of the members, and approval of new projects.

The team that works in the Committee coordination visits the communities, informing them on how to participate in the Program and how to make rational and safe use of electric power. It also does follow ups and organizes the inaugurations of the projects. The coordination strives to search, still, support from other entities to promote actions of integrated rural development, which makes possible the productive use of the electric energy.



Maria do Rosário Rodrigues Souza showing her first energy bill. "Now it is easy to obtain credit. Now I have proof of residence".

City of Minas Nova Minas Gerais



COORDINATION AND OPERATIONS

In addition of being nationally coordinated by the Ministry of Mines and Energy and operated by Eletrobrás, "Light for All" counts on the regional coordination of companies controlled by Eletrobrás: Chesf, Eletronorte, Eletrosul, and Furnas. Each one of these companies has a coordinator responsible for the actions of the Program, corresponding to his geoeletric region; they are also responsible to organize the Management Committee coordinators teams of each State and to supply logistic support for the good performance of its activities.



Cotriguaçu Municipality - Mato Grosso

THE ROLE OF ELETROBRÁS

Centrais Elétricas Brasileiras S.A. - Eletrobrás, is responsible for the technical and financial analysis of projects from "Light for All", presented by concessionaires of electric energy and cooperatives of rural electrification. It sends to the Ministry of Mines and Energy the analysis of the project and releases, after signature of the contract, the financial resources for the projects.

The company is also responsible to inspect the works performed and ensure the proper use of financial resources.

GEOLETRIC REGIONS

- Chesf Alagoas, Bahia, Ceará, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe.
- Eletronorte Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Maranhão, Tocantins and Mato Grosso.
- Eletrosul Paraná, Santa Catarina, Rio Grande do Sul and Mato Grosso do Sul.
- Furnas Espírito Santo, Rio de Janeiro, São Paulo, Minas Gerais and Goiás.



PROJECT EXECUTION

The performing agents are the electric power concessionaires and the cooperatives of rural electrification that carry out the services provided by "Light for All". So far, 60 concessionaires and 33 cooperatives throughout the Brazilian States provided services by the Program.

The electric power companies perform the survey about the demand of rural electrification in the region where they act and elaborate the services program, which is sent to Eletrobrás for budgetary and technical analysis. After its approval, the contract between the performing agent and Eletrobrás is signed out, to start up the project.

It is up to the performing agents to be accountable for the projects of electrification, engineering, installation of construction signs, to get environment licenses and authorizations and for indemnity resulted from the passage of the electric network through private owned areas.

ENROLLMENT

The inhabitants of rural regions with no electric power at home should look for the office or for the representative of the electric power company located in their city and then they should request the electric power installation through an enrollment process. The priority of the services is defined by the management committee and the schedule, by the executor agent.

Florestan Fernandes Settlement, Canindé do São Francisco municipality - Sergipe

PARTICIPATION

To provide services to 15 million people, there are plans of investments of approximately R\$ 20 billion, of which R\$ 14,3 billion will be from the Federal Government. The remaining financial resources, about 28%, will come from state governments and from executor agents.

The participation of each one was defined by a Term of Commitment signed together with the federal government, state government and performing agents, with the intervention of the National Agency of Electric Energy - Aneel and Eletrobrás.

In regions where the supply of electric power has been practically standardized and, thus, the investment would be of small sum, it was granted, to the concessionaires, a lower percentage of resources at unrecoverable fund, to minimize possible tax impacts. In São Paulo, for example, the subsidized values were of only 20%, once 10% to federal government and 10% to the state government, 65% financing by federal government and 15% of counterpart from the performing agents.

In the states of Amazonas, Acre, and Roraima, states that tax impacts would be quite high, considering that the investment to be made would have a high cost in relation to the concessionaries market, the unrecoverable funds were of 80% by federal government share and of 19% by state governments, and 10% by the concessionaires, as counterpart.

PRIORITIES

"Light for All" strives to first assist:

- Cities which Rates on Electric Power services provided to homes are below than 85%, calculation based on Census 2000;
- · Cities with Human Development Rate lower than the state average;
- · Communities affected by electric power plants dams or by works of the electric network;
- Projects that focus on the communitarian productive use of electric power and that provide for the integrated local development;
- Public schools, health clinics and community wells of water supply;
- · Rural Settlements;
- Projects for the communitarian development of family farming or of handcraft activities of family base;
- · Rural electrification projects on hold by lack of resources, which assist communities and rural villages;
- Population in the surroundings of Nature Preservation Units and Citizenship Territories;
- Population in areas on specific use of especial communities, such as minorities, communities remaining from Quilombos, Indian communities, extractives communities, etc.

FROM A FISHERMEN VILLAGE TO A TOURIST CENTER

To have a light bulb on at home was nothing more than a dream for the fishermen community of Algodoal Island, northeast of the state of Pará. After all, to cross the poles and power cables through kilometers of mangrove or even over the Atlantic Ocean was an insuperable challenge, even for the most experienced of the engineers. However, what was only a dream became reality: the arrival of the Program "Light for All", from the federal government, starts to revolutionize the way of life of the local community, transforming the fishermen village into a tourist complex potential.

The electric network brought by the Program replaced the power generator that used to take energy to some houses of the island, for few hours a day. With the permanent network, the inhabitants were able to buy electric devices, such as refrigerators

and water pumps. One of those who took advantage of this change was the retiree Wilson Teixeira da Fonseca (62). Born in the island and fisherman since he was a child, he uses energy to give more comfort to his family and also to increase income. "I have already sold my boat and I have retired. Life in the sea is very hard. Now I want to take advantage from what energy has to offer me", he explains. With the new refrigerator inside of the house, Wilson offers refreshments, beers, and soft drinks to the guests of his bed and breakfast. "I built four bedrooms here in my house, just for tourists. Also, I have already bought the bricks to build three more", he says, showing a lot of enthusiasm to face the new profession as a businessman.

"If it wasn't for the energy from Light for All, you would not find me here anymore. I would have already closed my bed and breakfast. After all, it is impossible to have things working by diesel!" Said the carioca retired professor from Paraná's Federal University José dos Santos Oliveira (65), which took advantage from the arrival of energy to increase and improve the quality of the bedrooms in his property. He met the Algodoal Island many years ago, still as a tourist, but he liked the exuberant nature of the region in such a way that he has been living in the island for eight years and decided to enjoy his retirement there as a businessman. Oliveira remembers how difficult was in the beginning, when, to put the main equipment to work in the bed and breakfast, all energy consumed would come from the generator. "Before, the

Algodoal and loarapé-Miri

PARÁ

Electric power has consolidated education and healthcare infrastructure and has expanded tourism





José dos Santos Oliveira and the improvements made in his bed and breakfast, thanks to the arrival of electric power



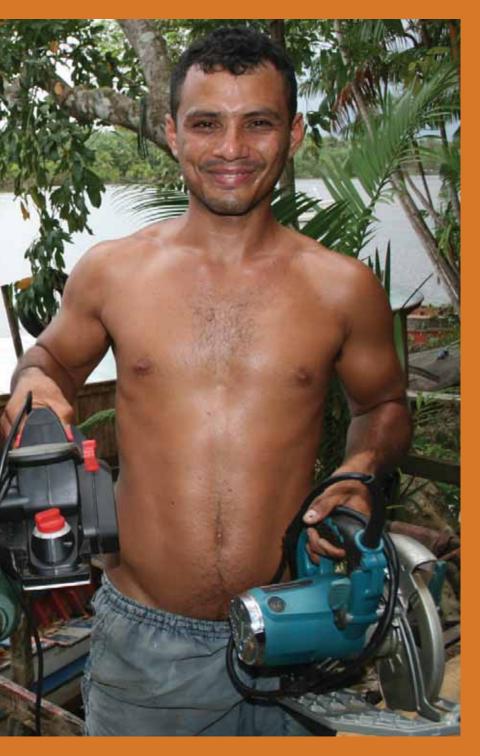
In the nurse Maria José Martins D'Ávila's opinion, the clinic shail run much better now it has electric power the whole day

most sophisticated of my rooms would only have a fan and I had to buy a lot of ice to not lose food", he remembers. The electric power allowed me to install air conditioned, a television, and fridge in almost all bedrooms. "The energy arrived on December 31st 2004 and I was in despair because both generators had burnt out that day, and the guests couldn't take a shower. They were going to spend New Year's in the dark. When the technicians arrived at my door and turned the lights on, I cried hugging my wife. It was New Year's gift", he stated.

Energy did not only create a hotel infrastructure in the island. Essential services, such as healthcare and education, had significantly advanced with the arrival of the electric network. Along with the improvements, there was big change in the medical clinic. The energy brought new equipment, such as the malaria lab, which shortened the waiting time for many exams. "Before, the malaria results had to travel by boat and it would take some days to arrive. Today we have the results in a few hours", states the nurse Maria José Martins D´Ávila. According to her, the clinic operates much better with a refrigerator and air-conditioned, and it is able to offer vaccines and snakebite serum for the population, which was impossible earlier. "Before, when somebody was bit by a snake, and this is very common around here, they would have to be taken to the cities of Marapanim or Castanhal, which is 1 hour and a half from here, not mentioning an additional 50 minutes to cross the river", the nurse stated. "I am very happy I can properly perform my profession", she added. In addition of usual services, with the arrival of the electric power, the clinic also offers a dentist once a week.



IGARAPÉ-MIRI
HANDCRAFT A BOAT, NOW, BELONGS TO THE PAST



placed in houses made by a hand drill. The woods were cut by hand saw. The shaver determined the curves and the finishing was hard in the come and go of the file. After all these efforts, the boat was ready, depending on the size, in approximately 3 to 4 months. Today, this has changed.

The old tools are no longer used, placed at the corner of the shop. The celebrities now are the two drillers, saw, shaver and the file machine, all operated by electricity. The work is delivered in two months, maybe less. "It became a lot easier to work and now the money comes sooner", says the old builder. "For example, before it would take me one hour to place the screws in the boat. Today, it takes only 15 minutes and the best is that I do not feel any pain in my arm. This quite an advantage, isn't it?" asked Mr. Cláudio, with a great smile in his face.

The electric power arrived at his home on June 16th 2008, and they were so excited that he wrote the date in the wall behind a picture in the living room, so he would not forget it. "I am very happy with the gift from Light for All, since it arrived I have had better work conditions, my family is having a better life, and the energy bill does not scare me, I have been close to the energy meter and I know which equipment spend more energy. These ones I just use in the proper time and the other things at home we only turn on when we need. The house looks pretty lighted up at night. These program has fallen from the sky", concluded the builder.

The naval worker Cláudio Maciel Bastos (63) is also quite content. He was born and raised in margins of the River Igarapé-Miri and learned to build and fix boats with his father and today he teaches what he has learned to his son. In a place where most of the roads are in the water, having a good boat makes a difference.

Cláudio says that a lot has change from his father to his son's generation. One of them was the electric power. Before, every work used to be by hand. The screws were





NEW YEAR WITH COLD DRINKS

The New Year's of 2006 started a new age in the life of the small rural producer Militão Januário da Silva. He lives in the small community of Almécegas – 130 km west from the capital of Ceará state, Militão decided to spend New Year's with something new in his house: a cold drink served to his family and friends. This was only possible thanks to a brand new fridge he had just bought and that arrived one day earlier to New Year's Eve. Militão could not hold his joy, but he had to wait 24 hours before connecting the fridge to the power outlet, according to the salesman. "I connected it at 7 pm of the 31st day of the year", told the producer, with a big smile. "When the clock stroke midnight I opened the fridge to get a drink and it was already cold", he said surprised.

Almécegas CEARÁ

The community has left darkness. Education, business, and tourism have improved the quality of life





Militão Januário and Elizabete Nunes de Oliveira

Like Militão, every community should have reasons to celebrate the arrival of "Light for All" in December 2006. Almécegas is located in a coast belt that blends paradisiacal beaches with sweet water lagoons, and those born there, mostly small producers, are using energy to increase their income. This is the case of Francisco dos Santos Barbosa, which at the time, was celebrating five years of his little shed that sells cold drinks by a sweet water lagoon placed 500 m from the beach. Although the privileged location, Francisco faced several difficulties before electric power. "I used to spend about R\$ 110 per month only with ice. Now that I have the freezer I could reduce the price of the beer from R\$ 3,00 to R\$ 2,50, and I have already started to sell fish and shrimp to tourists", says the business owner, excited with the perspectives. "Oh, and my clients today eat the shrimp and fish listening to music, in the CD player that I also bought!"

João de Deus da Silva (37), business owner, also plans a better future. He owns a small hut that, before "Light for All", he fight to keep it running, selling only non perishable products. As soon as electric power arrived at his home he bought a freezer and he already sells chicken, milk, water, and cold beer. "Life is much better today! I will pray a lot to live many years and quite enjoy this energy with my family", he jokes.





The classrooms now have fans that send the heat away.

The "electric news" was not only good to the businesses. The children from the community also liked the energy at the school. "It is a blessing", says the teacher Raulindo Ramos Menezes. "The community thought that energy would never arrive here", he reveals. Through the connections provided by "Light for All", the classrooms already have fans and the children can have cold drinks or water to alleviate the strong heat in the region. The energy from the power network will help to improve the operation of the computer lab in the school, as before the electric power arrival, the computers worked by batteries fed by a solar plate that allowed the operation for only an hour. "And to work again, it had to be off for half an hour to not overcharge the system", says the teacher.

The electric power network has already changed, for the better, the quiet life in the paradise of Almécegas.

GOODBYE TO HILDBIRTHS MADE UNDER OIL LAMPS

A new chant is echoing in the northeast backcountry. It was brought in, not by the voice of the performer, but by the waves from the radio connected to the electric power. Like spring rains, which fill up the caatinga² vegetation with green and the country heart with hope, electric power arrives lighting up the dreams of the Brazilian cabloco³.

Josefa da Silva is used to help women to give birth to thousand of babies that come to this world; she is the midwife of Serra da Guia quilombola community – located in the city of

Poço Redondo, State of Sergipe, she is glad she can perform her profession with the help of electric power, which is lighting up the healthcare clinics after the arrival of the Program "Light for All". "My eyes were tired of having to work under oil lamps", says Mrs. Zefa. For 51 years she has been responsible for the birth of thousand of children in her region. She has always believed in the power of education to change the lives of "her children" that came to the world through her hands and she is thrilled with the lights on at the school, which is already working in two shifts, lighting up the plays and study of the children. Antônio José da Silva (65) felt the same joy as everything quite changed at his house. "The children improved their grades after they started to study under the new light", says Antônio, father of 8 children and grandfather of 7 grandchildren. The bills at home also went down after the arrival of energy. "The amount I would spend with gas for one month, now I spend for three months of energy", he gladly reports.

Poço Redondo and Canindé do São Francisco SERGIPE

Progress arrives to settlements and quilombolas¹ communities in the Northeast.

¹A Quilombola is a resident of a Quilombo in Brazil. They are the descendents of slaves that escaped from slave plantations that existed in Brazil until abolition in 1888.

²Northeast region of Brazil covered with stunted trees and spiky scrubs.

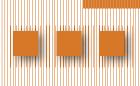
³A caboclo is a person of mixed Brazilian Indian and white people ancestry.



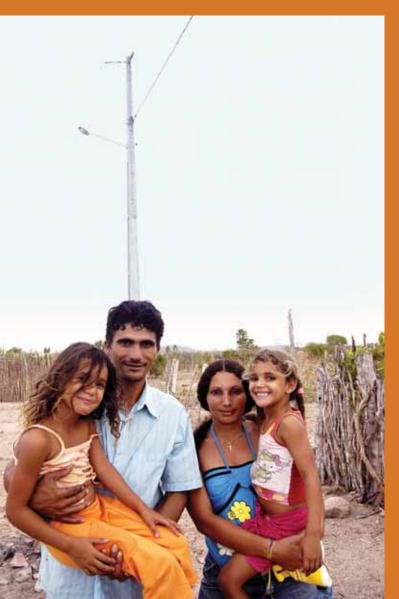


According to a research from the Ministry of Mines and Energy, 73.3% of the families assisted by "Light for All" bought a fridge.

Joy is all over the faces of many rural workers in the backcountry. In the settlement Comunidade de Resistência Florestan Fernandes – city of Canindé do São Francisco, state of Sergipe, 31 families received water and electric power network in their properties, after eight years fighting for it. "It is good to know that I will be able to watch the news when I get home; it is very important to be informed about everything", tells the rural producer Maria Edna dos Santos. Together with her son, Luciano Melo, she uses her free hours for entertainment with family and neighbors. "The house now gets full of children and relatives. On Sunday everybody gets together to watch a soccer match", affirms Luciano. The rural producer, Maria Auxiliadora Barbosa Silva (60), has plenty of reasons to irradiate happiness. With the implementation of energy in her property, in 2006, she got a lot of (electric) gifts at Christmas from her nine sons and daughters that live in São Paulo. Maria Auxiliadora celebrated the first New Year's Eve with energy at home, together with many relatives that visited her for the first time in many years. "It is a blessing having light at home. Now I can host my sons and grandsons, who had to leave here because I did not have conditions to support them", she reports. The happiness is such at her house that she decided to return the blessings received adopting a child, Ivanildo Barbosa Sobrinho, today he is two years old. "We must know how to return back to life what it has given us as gifts", she comments emotionally affected. "This is going to be the first child of mine that grows up with the lights on at home", she remembers.

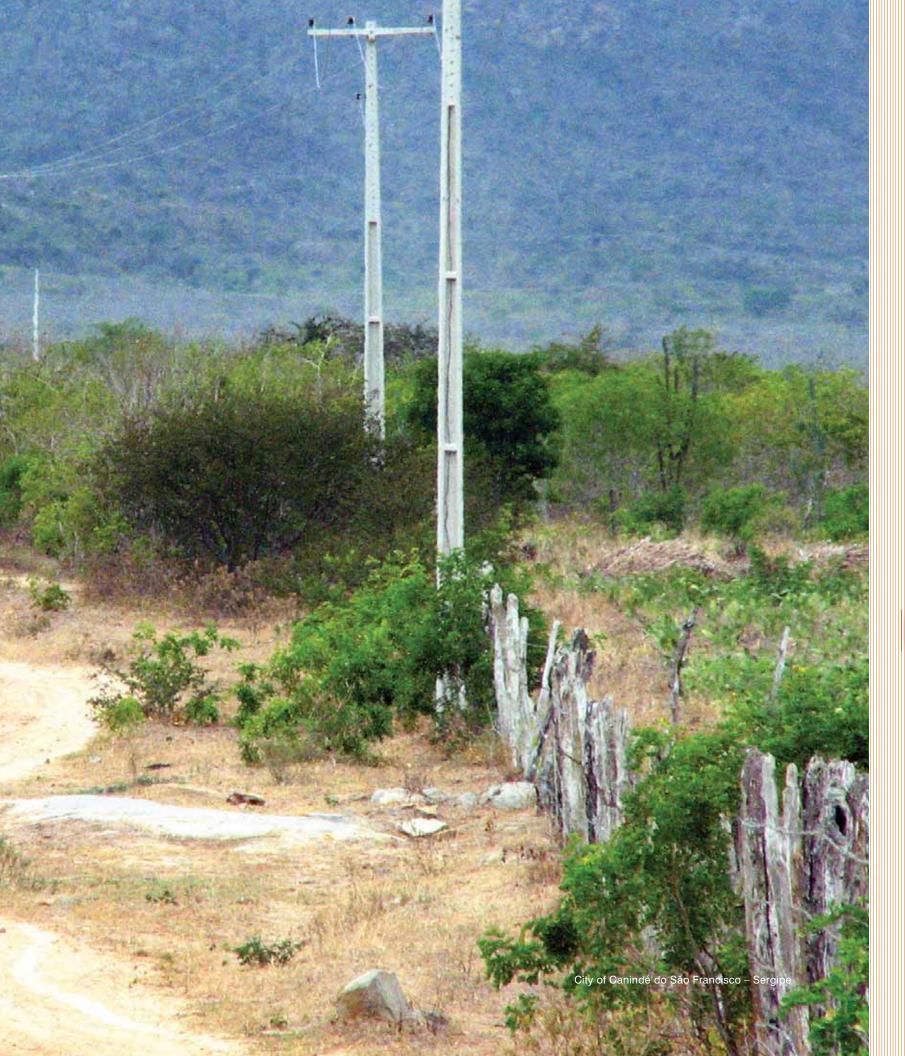


Little by little things are changing in the Brazilian backcountry. The old habits are staying behind, opening space for new projects. The kerosene lamp, often mentioned in folkloric songs, is becoming outdated. "People have awakened with the new light, and they are hungry for other news", tells Geoldino de Lima (32), community leader of Florestan Fernandes settlement. With the help of energy boosting up the work of the caboclo, the face of our dear backcountry will light up.



Geoldino de Lima and family





PARTERSHIPS FOR DEVELOPMENT IN THE COUNTRY

he goal of this Government, through "Light for All", was not only to provide electric energy to rural homes. The intention was to provide sustainable local development along with the light.

The Ministry of Mines and Energy, thus, gave structure to the Plan of Integrated Actions of the Program "Light for All" to boost up the electric energy use, to provide means and resources to accomplish productive projects in some communities assisted by the Program.

This Plan strives, through pilot projects, to advise the assisted families to use electric power in rural areas in a productive way, using the talents of the communities. Thus, job opportunities can be created to increase family income and improve quality of life in the country.

The conception of the Integrated Actions is based in the articulation of public policies, and of governmental programs, through the construction of institutional partnerships, establishing a direct relation with actions to encourage and support local development.

Among the partners of the Ministry of Mines and Energy, in the action integration process, there are the Ministries of Healthcare, Land Development, Social Development and Hunger Combat, NGO's (non governmental organizations), city halls, and international organizations committed the progress of nations, such as the United Nation Program for the Development (PNUD), Interamerican Institute of Cooperation for Agriculture (IICA), United States Agency for the International Development (USAID), in addition of institutions such as Interamerican Bank for the Development (BID).

Actions Integration

Light for All relates to ministries, state governments, city halls, NGO's, and international organisations to search conditions towards productive actions



Training for the beneficiaries of the Production Community Center of Vegetal Oil – extraction of castor oil – City of Simonésia – Minas Gerais

To accomplish the actions proposed by the Action Plan, some communities assisted by "Light for All" qualified for the implementation of Production Community Centers (CCP) are selected and it is considered:

- involvement of partnerships in the federal, state, and municipals scopes
- mobilization of leaderships in the assisted communities
- diagnostic of potentials, in a participative way, and of economic feasibility
- planning of implementation stages of the projects
- commitment from each partnership with the implementation stages of the projects
- qualification of users and partnerships to the efficient, productive, and safe use of electric power.
- monitoring and evaluation of results

The implementation of pilot projects made possible, to the technical team, the application of techniques and guidelines announced by the Plan of Integrated Actions, through validation of process and creation of conditions to reproduce these experiences in other communities, adjusting them to the reality and to the local conditions.





The sisters Júlia Oliveira (60) and Gloria Macena de Oliveira (80), residents of Bom Jesus do Araguaia, state of Mato Grosso, said that being able to see at night to walk around the rooms of the simple house is already an improvement. Júlia said that at night, she can sew and also read the bible and the recipes books of medicine plants that she has. For Ms. Glória, the light took away her fear of the dark. "Now, clear as it is, I get up all the time, I just turn on the light and that's it!. Now, with the arrival of the light, they intend to build a masonry house"... this is great, nothing but happiness", stated Ms. Júlia.

STRATEGIES AND GUIDELINES

The Integrated Actions process follows a set of guidelines that indicate the accomplishment and formation of partnerships, which are:

- to strength social networks
- to qualify the ones involved
- to encourage the productive use of electric power
- To manage in an efficient way the projects of integrated actions and implementation of Production Community Centers – CCP's.

MULTIUSE OF ELECTRIC POWER

In some communities, the Program develops projects, in partnerships, to offer conditions to the sustainable development, along with job and income generation from the productive use of electric power.

Several times, the beneficiary, individually or in association with neighbors, starts to use electric power to improve the productive processes and to lighten up hard tasks, such as:

- · electric water pumps in the wells
- irrigation
- forage machine and crushers to produce ration to animals
- · power engines, replacing the ones by diesel
- · refrigerators of milk, meat or fish
- greenhouses
- flower houses
- fruits processing

Thanks to this equipment, which creates new work routines, the small producers significantly improve their quality of life. The rural work is relieved and the production increases. Thus, in many cases, they can go beyond the subsistence agriculture with the sales of the production excess. The results are promising: creation of job positions, increase of family income and, consequently, incentive to the social economic development of the rural environment. Small sales, mini markets, bars, and bazaars start to appear to answer the needs of people in the surroundings, avoiding, thus, their relocation to greater commercial centers.



Greenhouse in the city of Bujari - Acre

COMMUNITY PRODUCTION

In several communities assisted by "Light for All", it was possible to implement a Production Community Center – CCP, which is a unity composed by machines and equipment for processing, storage, and conservation of farm products, employing proper technologies and using electric power in a safe and efficiency way.

The goal is the rural electrification to result, through the implementation of CCPs, in an increase of farming production and to also provide the growth of electric power, income, and social inclusion of the population.



Training in the cashew culture, city of Cerro Corá - Rio Grande do Norte.

SÃO FRANCISCO SETTLEMENT, CITY OF CERO CORÁ — RIO GRANDE DO NORTE

An example of a well succeeded partnership is the implementation of a Production Community Center – CCP in São Francisco Settlement, in the city of Cerro Corá, state of Rio Grande do Norte, assisting 150 people, of 30 families that live in semi-arid climate in the north of this state.

The little push that the community needed came from the partnerships established by the Ministry of Mines and Energy, through the Program "Light for All", with the United States Agency for the International Development (USAID), the Ministry of Land Development, the National Institute of Settlement and Land Reform (INCRA), the Center of Rural Studies and Development, the Agriculture Secretariat of the State of Rio Grande do Norte (Cosern), and the Companhia Hidroeletrica do São Francisco (Chesf), which acquired the equipment necessary to the implementation of a cashew nut toaster, as well as the boxes to raise honey bees, machines to process and centrifuge the honey, and also to provide training for the producers in both activities.

The creation of CCP came to answer an old dream of the community, which already cultivated the cashew for nuts extraction and these were sold in natura to buyers around the region, for an insignificant price. Along with the new equipment, some farmers start then to sell the processed product, wrapped with the seal of the Settlement, adding more value to the product and following, through this strategic procedure, the new sanitary and commercial requirements to value the product by informing its origin.

To intercalate the cashew nuts production, mainly at off seasons, the farmers from São Francisco Settlement are developing the exploration of beekeeping, as an additional income activity, once the flower pollination of the cashew tree made by the bees increases the productivity of the culture. According to Jeovane Damata, who lives in the Settlement, the activities with the bees give him encouragement. He already has 25 beehives that produce about 260 kg of honey per month, sold at an average of R\$ 10,00 (ten reais) per kilo. "The productivity is good because now we have equipment to handle the honey, by electric power, such as the spin dryer that retrieves the honey from the honeycombs. Before, this activity was made by hand and it was quite hard", he stated.

The quality of life of the population in the city quite improved,



The honey goes from the beehives straight to the Production Community Centre to assure more income to the beekeepers.

98% of the residents in the country has already been assisted with electricity and this is reflecting in the local economy. The stores are selling to the farmers everything that works by electric power, electric and electronic equipment.

Moreover, new perspectives of qualification in activities in rural areas have arose to the residents of the Settlement, which now look for specialized training to orient them to manage the business activities of the community. One of their goals is to use the central office of the Settlement, the house of the former farm owner, as a training center to qualify the employees and for meetings.

According to the current president of the Association, José Roberto da Silva, the project is already in progress next to the Ministry of Land Development. "We are quite hopeful in this undertaking, the place is beautiful, with a view to the hills of São João, Serrinha, and Santana and there is no place like this in Cerro Corá. When the project starts to operate, it will generate more job and income to the young ones in our community ", he stated.

In the Settlement, a digital inclusion unit was also implemented, composed by seven computers and access to the internet through satellite, antenna signal GESAC – Electronic Government – Service to Assist the Citizen – which was possible through the partnership with the Ministry of Communication. The group is also composed of partners such as Eletronorte – donated computers - , Nead (Center of Land Studies and Rural Development, Ministry of Land Development), which qualified young ones, through Cefet (Federal Center of Tecnological Education of the state of Rio Grande do Norte) and the City Hall, which granted space in the former school of the community, which, in return, provided labor to reorganize and provide maintenance to the place.



Tank for expansion and storage of milk - city of Carvalhópolis - Minas Gerais



Factory of banana processing - City of Paraty - Rio de Janeiro

EXAMPLES OF CCP 'S

The South and Southeast regions of Brazil are receiving attention for the quantity of CCP's projects already concluded or in process. The actions of several institutions increases and diversifies the potential of CCP's activities.

For example, a simple initiative, such as the acquisition of a milk cooling tank, allows the milk producer to store and extend the life of the product, and also to sell the excess.

In the case of coffee processing, the regions assisted started to participate in all production stages, once that before they would only plant the grain.

Several other activities are possible, such as:

- · grain processing;
- extraction of oil from the castor plant;
- irrigation of communitarian vegetable gardens;
- installation of cattle and swine slaughterhouses;
- production of cassava and sugar cane byproducts.
- · manufacturing of clothing and disposable diapers;
- manufacturing of cement products (blocks and flanges);
- industry of dairy, milk sweets, and fruits;
- bee honey processing;
- tomato processing;
- · production of food conservation;
- · community woodshop;
- · Gems cutting lab.

MICRO-DISTILLERY BRINGS AUTONOMY FOR SMALL PRODUCERS IN THE STATE OF RIO GRANDE DO SUL

Farming producers in the city of Betânia, a small rural community in the state of Rio Grande do Sul, realized that the vocation of their region to explore sugar cane could be more profitable. It was in this moment, with the support from Creral – Regional Cooperative of Rural Electrification of Alto Uruguai-, which decided to invest in a quite successful initiative: the implementation of an alcohol micro-distillery.



Helton Perondi and alcohol micro-distillery - City of Sananduva - Rio Grande do Sul

This important step was only possible through the Program "Light for all", which transformed the community of Sananduva, city located northeast in the state of Rio Grande do Sul.

According to the project coordinator, Edilson Guzzo, the families that cultivate sugar can also believed in the initiative and granted land for the construction of a shed. The project was feasible with resources from Creral. "The equipment came from "Light for All", brought by Eletrosul. Today, our micro-distillery produces ethanol that fuels vehicles used to the transportation of everything that is produced in the crops of Betânia. Thus, we could reduce the cost of the local production and increase profits" – he stated.

The success of the undertaking served as an incentive so the small farmers could follow to the next stage: implementation of an agro-industry in the same piece of land, to produce conserves, juices, brown sugar and shimia, a sweet of German origin that are quite consumed throughout the state. "The shed is almost ready. After that, we will start to purchase the equipment and train people who will work in the agro-industry. The producers of Betânia will make a large step towards autonomy and valuation of the products cultivated in their properties", said Guzzo.



ENERGY IMPROVES LIFE CONDITIONS IN THE COUNTRY

A community with no electric power does not only need the benefits from economic development, such as income and job. The Program "Light for All" has also been working in social areas, such as education, healthcare, and citizenship. All of this and also wellbeing and leisure, expressed in refrigerators to store food, fans to cool off the heat, electric shower to warm water in the winter or the television to entertain and to get informed.

The schools multiplied and started to work better with the benefits from electric energy, so they can offer classes at night, mainly for adults. New didactic procedures could be employed to motivate the classes, thanks to the acquisition of electronic equipment, such as televisions, DVDs, overhead projectors, and computers.

The Public School Ivanilde Braga Brandão is an example of this new reality. It is located in the city of Rio Preto da Eva, state of Amapá, the school works in partnership with the state government to also answer high school level. According to its principal, Luciana Serrão Fernandes, it used to be a small school with two classrooms. When electric power arrived, it was possible to expand to nine classrooms in two blocks, which receives 530 students, and the city hall is already with a project to build four more classrooms, a library, teachers lounge, and a computer lab. The results are already emerging, last year three students were approved to attend the Federal Agro-technical School, while in the school of the city, just one student was approved. "Light for All was paramount to this accomplishment, without energy this would not be possible", stated the school principal.

The health of the population has also received its development share. The activities in the local healthcare clinics used to be limited, with no electricity, and did not have, for example, means to store medication, that need cold storage to prevent deterioration

In the Island of Algodoal, state of Pará, the snakebite serum stored in the refrigerator is keeping people from traveling to the cities of Marapanim or Castanhal in case of snake bites, these cities are one hour and a half of distance from the island, without mentioning crossing the river, which takes more 50 minutes.

The communities learned to use electric power also to leisure. Cultural events, parties and fairs now are more frequent, meaning integration among the neighbor



Santa Maria Rural School - City of Cananéia - São Paulo

communities. It is also important to mention the religious activities in the rural areas. Several places started to have churches and spaces for night cults.

The Program also promotes citizenship in the countryside. A simple thing, such as to have an official address, represents, for the residents, the right to have an address to receive at home energy bills or to have store credit to purchase household items for their homes.

All these benefits move towards a greater purpose: to keep people in the countryside. The evasion of juvenile labor has fallen down significantly after the arrival of light. Moreover, the new life perspectives have encouraged the return, to rural areas, of families who had left their lands to search for others opportunities in the big cities.





ELECTRIC INCLUSION GARANTEES DIGITAL INCLUSION

The communities from North to South of Brazil have a big smile on their faces. In addition of receiving electric power at their homes, they are already getting at school the computers from the digital inclusion project, associated to the Program "Light for All". The computers are brand new and the printers are being donated by the federal companies Eletronorte, Eletrosul, Furnas, and Chesf that, through their areas of social inclusion, are contributing for the integration of quilombolas communities, Indian villages, and settlements to the digital world.

According to Isaias Sanches Martins, Indian of the ethnic group Guarani Kaiowá and teacher of the school Mbo´eroy Tupã´l Arandu Reñoi, Campestre village, located at the Indian Land Marangatu, city of Antônio João, state of Mato Grosso do Sul, the

community is very happy to receive the digital inclusion project, an integrated action from Eletrosul part of the Program "Light for All". It is not only a new and innovating thing for the Indian world, but also one more education tool, helping to give a notion on technology. The affirmation is supported by the teacher Léia Aquino Pedro that, with a wide smile, tells how excited the children in the village received the "new little toys". In addition of games, the new electronic little Indians are learning to type school papers and texts. Also, they play in groups, like all children and, among laughs, talk all the time in the Guaraní language.

The residents of the quilombo community Fazenda Picinguaba, located in the municipality of Ubatuba, state of São Paulo, also celebrated the arrival of the digital era. To leave the dark

Antônio João MATO GROSSO DO SUL

Ubatuba SÃO PAULO

Approximation of the world by the internet Way





Joy among the Guarani children, with the arrival of digital age in the school and in the village.

meant a lot more that a bulb lighted on inside the house. They realized how energy brought them closer, through the Internet road, to the world outside the quilombo.

The computer lab, implemented by "Light for All" together with Furnas Digital project, is equipped with 10 computers, Linux OS, connected to the internet by the Gesac antenna – Electronic Government Service to Assist the Citizen – a partnership with the Ministry of Communication; a printer; and people from the community qualified to the maintenance and management of the computer lab. According to the community leader Laura de Jesus Braga (51), the digital inclusion union represents hope of better days for the 35 families in the old quilombo, which are now able to develop activities never imagined before without the electric power, for example, to send an email, to make a school research, not having to go to the closest city. "Not long ago we did not have energy. Now we are even included in the digital era", said Laura.



"IT GIVES MOUTHWATERING"

Pacova, in the Tupi-Guarani language, means banana. However, for the rural producers of Barra Grande neighborhood, in Paraty, state of Rio de Janeiro, the term also means prosperity, social inclusion, and culture.

Everything started when the Union of Banana Producers of Barra Grande, Incra (National Institute of Settlement and Agrarian Reform), and the Program "Light for All", through partnership with Eletronuclear, announced a project that would bring work and income for the community. The proposal was to train local producers interested to produce banana natural sweets, without addition of sugar.

The support of "Light for All", since the beginning, invested in the project. It guaranteed the necessary resources to finance the trip of a group of producers to the city of Registro, São Paulo State, to visit a local industry and get acquainted with the production and processing of the fruit.

Paraty

RIO DE JANEIRO

Banana sweets factory promotes economic development and social inclusion



With the necessary knowledge, they created their own structure in an existing shed in the community, where they installed a boiler and all proper equipment to produce the sweets. The equipment was donated by Eletronuclear.

To support the project, the Cooperative of Rural Workers of Paraty was created, another initiative very important for the success of the project. Its office receives today producers from several parts of the city, who take the banana already harvested to become sweets. According to president of the entity, José Ignácio da Silva, the project assures self sustainability to the factory and, what is best, keep the young ones working in their properties and actively participating of the production. "The Pacova project brought pride to the rural producer, which is not ashamed anymore to work in the country, he affirmed.

In the office of the cooperative there still space for development of other activities, such as the Program of Rural Library "Arca das Letras", of the Ministry of Agrarian Development (MDA), and handcraft classes for the community. The idea

is to make of Pacova Project a center of culture and self sustainable center. For the secretary of the cooperative, Elaine Magali Alves, the project is already working. To confirm this, according to her, the invitation that the producers received to participate, in 2008, of the National Fair on Family Farming and Agrarian Reform, promoted by MDA and that counted on the presence of representatives of Mercosul countries. "We took our banana sweets and the handcraft from Paraty – everything was sold. It was wonderful to be a part of the group that represented Brazil", she related.

The enthusiasm is such among the cooperative members that the project is being expanded with the construction of other shed, where the Trading Center of Local Rural Products and Handcraft will work. "Since the banana producer is no longer in the hands of the middleman, with the factory, we want the other producers of Paraty to have a place to sell their products. The creation of the center will have this purpose" – explained the president of the cooperative.



THE TURN OF QUILOMBOLAS, INDIANS AND SETTLEMENTS

The Federal Government gives priority to the needs of social minorities. To properly reach the goal of Light for All, it was necessary to establish a priority criteria. Amongst them, the communities that have always lived excluded from society, such as the quilombo families, the ones affected by power plant dams, extractivists, the Indian lands, and settlements residents.



Special assistance

Comunities that were excluded from public resources are now priority

QUILOMBOLA COMMUNITIES

These communities do not belong only to the past slavery history of Brazil. Today, there are 1,324 communities already recognized as quilombolas, throughout the country and with proper participation in our social structure. They constantly live in pursue of ownership of their lands, a right found the in Federal Constitution. The emerging of quilombolas communities has its grounds in the increasing organization of rural workers and in the rising of the black movement, as an ethnical identity inserted in the ownership of the land.

There are studies that show that quilombolas communities were composed in different ways, either by the escapes and thus, occupation of free and isolated lands, in the middle of nowhere, or by heritage, donations, land as payment of services provided to the state; by the people that stayed in the land that they lived and planted inside great properties, and even by the purchase of lands, during the enslaver system, after abolition.

To ensure the economic development of the quilombolas, the Federal Government is taking the light for them. To prioritize projects and identification of demand, the involvement of the Special Department of Policies to Promote Racial Equality – Seppir was paramount. Up to May 2009, more than 91 thousand residents from quilombolas communities received electric power through Light for All.

The assistance given to Kalunga quilombola community, in the city of Cavalcante, state of Goiás, was the pioneer work of Light for All. In the first inauguration of electrification works, March 12th 2004, the place had 42 power connections and, now, there are a total of 402 homes assisted.

^(*) Information found at Fundação Cultural Palmares, Ministry of Culture, in Jan 7, 2009.





Itamantatiua Quilombola, city of Alcântara -Maranhão



Kalunga Quilombola, city of Cavalcante - Goiás

The Kalunga try to keep the African tradition through cultural events and marriage among them. They live from family farming, planting corn, beans, and rice, fishing in the Paranã River, and from the small cattle flock. Although they live healthfully, they are constantly concerned about losing their lands to great farmers and landgrabbers. They also look for ways to increase family income, selling some handcraft and farming products at small markets around the region. The arrival of electric energy increases this perspective.

The program is also in the city of Alcântara, state of Maranhão, which concentrates the largest quilombola area in Brazil. Up to May 2009, 1,075 quilombola homes already had electric power.

In those communities, electric power is already deeply changing the daily lives of the residents. Once they were used to be abandoned, the quilombo families were surprised of how fast the electric power arrived at their homes. Many did not believe they would see a light bulb on in their own homes.

The program Light for All, in the city of Alcântara, has been encouraging the city hall to reform the schools and healthcare clinics, as well as to install public lighting in the assisted sites.





SETTLEMENTS

The implementation of rural settlements usually diversifies cultures and the productive processes in the cities they are located. Also, it promotes the growth of local economy, through the commercialization of production in markets or with the organization of settlements residents in cooperatives. However, this development may be limited if there is no electric power support.

Due the great potential of rural settlements, the program "Light for All" established that this share of the population must have priority assistance, to assure the growth of agricultural productions, along with greater usage of machines and a large commercialization of the products. In addition, other programs from the Federal Government that gives incentive to the rural environment (very common in settlements), such as the National Program to Strength Family Farming (Pronaf), require the properties to have electric power so they can receive the resources.

The Light for All Program delivered electric power, until May 2009, to around 917 thousand rural workers, among them residents of the Itamaraty Settlement, located in the city of Ponta Porã, southwestern of Mato Grosso do Sul state – in the old farm of soy beans ex - King Olacyr de Moraes. There, from the arrival of electricity, the farmers are working with a variety of products such as beans, corn, rice, milk, beef, both to support their own family and for sale, and some producers are innovating with other cultures.

Exelentistino si presidente huiz Inscio de Silves

Em primeiro Lucar quero parabenizar o si peta vibini

conquistada, e também quero lhe acradecer pelo

privilecio de me de esta novidade de emplantar

a energia eletrica nas aldeias. Espera que esta

Bilhete cheaur em suas mesos, e uma memeira.

Bilhete cheaur em suas mesos, e uma memeira.

Bilhata de poder le demonstrar a rinha felicidade

da poder coular sempre com a sua ajuda e teu

barinho para pessoas menos favorecidos, perinci
palmente para-xos indicenas.

Unionia flamos da Silva

Letter written by Antonio Ramos da Silva, Kadiweu ethnic group – Mato Grosso do Sul

INDIANS

The Brazilian Indian population receives special attention from Light for All. Brazil shelters, today, 225 Indian societies of several villages, and 60% of this population is concentrated in the Amazon Region. The total is of 656 Indian properties, speaking 180 native language and dialects, at villages that keep different ways of contact with the white man. One of the challenges of Light for All is to assist these communities in such a way to not interfere in their culture, tradition and way of living and thinking.

Up to May 2009, approximately 92 thousand Indians were already benefited from Light for All actions. To assist this community, the program main partnership is with Funai – Indian National Foundation, agency of the Ministry of Justice, responsible for Indian matters. The institution follows up the activities of the program in several stages, such as: request



Poultry became a income source at the villages of Terrena, city of Dois Irmãos do Buriti - state of Mato Grosso do Sul.

of electric power by the community, access to the reserves, articulation of their grounds in the states, and orientation on the rational, safe, and productive use of energy. The Indian leaderships, associations, teachers, healthcare agents, and the community itself are prepared to receive energy, under the condition to pay for its consumption.

The income sources of Brazilian Indians are quite variable, depending on the culture of each ethnic group, quantity and quality of the land they own. The Indian sustainability base is still the subsistence agriculture, extractivism, fishing and hunting in the most isolated reserves, handcraft and the occupation of public positions



Travessão de Ouro Village - city of Floresta - Pernambuco

– for example, Indian teachers and healthcare agents. The arrival of energy resulted in the development of some implementation projects or improvement of productive activities existing in the villages, with income generation, providing better quality of life for the population. In the state of Mato Grosso do Sul, the Terena Indians, from six villages in the city of Dois Irmãos do Buriti, are using electric power to raise cut poultry, in the traditional manner. A similar initiative is also happening in the city of Aracruz, state of Espírito Santo, the Indians of Pau Brasil village, from the ethnic groups Tupiniquim and Guarani, raise pigs and chicken, and also developed fishing practices. They produce, for their subsistence, corn and cassava, which started to be irrigated after the electric power arrival with proper machinery. "Before the deforestation, we could plan the planting time according to the moons, because we knew when it used to rain. Today we have to act as any small producer, that means, we have to use the irrigation system. The electric power in the whole village makes the job easier and we can assure the production of food to feed each Indian family", he explained.

The state that holds more Indian communities, assisted by Light for All, is Mato Grosso do Sul, where more than 31 thousand Indians received electric power in their homes. However, the largest assistance to only one Indian community up to this moment was in the state of Rio Grande do Sul, Terra Indígena Guarita, in the city of Tenente Portela. There, more than a thousand homes received electric power, benefiting more than five thousand Indians from Kaingang and Guarani ethnic groups.







Child quilombola of the Curuçá community - city of Alcântara - Maranhão

HIGH END TECHNOLOGY AND SOCIAL DEVELOPMENT

During the beginning of the Alcântara settlement, northeast of the State of Maranhão, the region had the closest harbor from Europe, so the city became the housing of the state aristocracy. Today, four centuries later, the region is famous for the Rockets Launching Center, high end technology capable to send satellites to the space. Close to all this modernity, in the region that shelters the largest quilombola¹ area in Brazil, the descendants of slaves that fought for freedom continued fighting against the obsolete, living as in he Middle Ages, in full XIX century. They were in need of many things, such as electric power at home, unsatisfactory schools, and healthcare clinics with no resources.

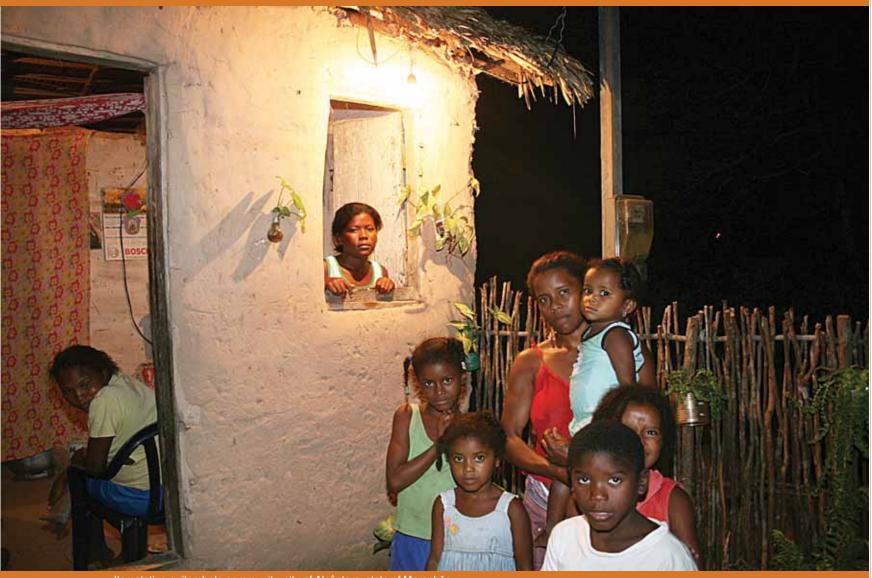
¹A Quilombola is a resident of a Quilombo in Brazil. They are the descendents of slaves that escaped from slave plantations that existed in Brazil until abolition in 1888.

Alcântara

MARANHÃO



Program reduces disparities and technology contrasts



Itamatatiua quilombola community, city of Alcântara, state of Maranhão

Now, with the arrival of electric power from the Program "Light for All", the descendants of slaves can enjoy from the comfort that technology from century XXI has to offer. In Curuçá community, it is already possible to see the fruits from energy. "For us, the improvement started with the road. Before, there was only a trail, but with the poles set up, the road appeared. Today it is easier to walk to the city and come back home", said José de Ribamar Pinheiro. To his friend Faustino Pereira Rodrigues, it was good for the school, which was before made by taipa (lath and plaster wall) and today the city hall has built one by masonry. "It was much better for our children", said. "And it is going to get better!", completed the teacher Leide Daiana. For her, it will be possible now to start teaching adults to write and read. "Now, with energy, it will be possible to teach lessons at night. It will be soon!", she stated.

For the small business owner Antonio Pedro Coelho, inhabitant of the quilombola community Arenhengaua, the electric light brought him a dream of a business full of news. Before, he could only sell cakes and cookies, today he shows off a banner offering meat, sausages, poultry, and liver. Not mentioning the soft drinks, ice cream, and cold beer. "Now I can say that I have a business! With energy everything became easier!", he stated.



The school used to be of taipa (lath-and-plaster wall), but the arrival of energy has improved it. Now it is made of masonry with much more comfort to the children.

The Itamatatiua community also felt the joy of electricity. It was not created by runaway slaves, but by descendants of a couple of slaves donated to the image of Saint Tereza dÁvila in a farm that belonged to the Carmelitas nuns order, and that after the place was abandoned, they started to occupy it. There, all residents have "Jesus" as their last name, a heritage from the Saint, a tradition that has crossed the century since the quilombo was created.



"The candeia (oil lamp) has more than a century and a half of existence and it was used by the ancestors to light up the night". Maria de Lourdes de Jesus. "We have kept it to show our children and grandchildren how the ancestors used the light". Domingas de Jesus e Jesus.

Itamatatiua was one of the first quilombos in the region to have electric power, even before "Light for All". At the time, only the houses in the center of the community received energy. With the arrival of the Program, everybody started to have the benefit. According to Maria de Lourdes de Jesus, one of the people that, not long ago, was still using the oil lamp to break in the night, it was quite sad to look to houses that had light and feel yourself dark. "I did not have money even to buy the cables, I just kept wishing and in my dreams I would ask the good Lord if I still would have that light some day. Today my house already has it, and when there is a power shortage, I get scared even to go to the backyard!, she said. At the house of Heloísa Inês de Jesus, the feature is the TV and the fridge. "Now I can watch the news and see what dad Lula is doing", she jokes with the new nickname of the president. "Oh, and drinking a very cold drink!", she concluded with a smile. Even the little Anderson de Jesus, nine years old, said that energy was a good thing, according to him, school was bad because there was no fan and it was quite hot in the classroom. "It was awful to study, now it is good!"

The business owners of Alcântara are really enjoying the moment. After energy was set up in the quilombos, the sales of televisions, fridges, liquefiers, and fans have increased a lot. According to Valter Carlos Pinheiro, manager of a famous store in the Northeast, the sales are being made mostly in the quilombos areas, more than in the cities themselves. "Before they would only buy furniture and today they buy household appliances. Some houses do not have room for a TV, but they find some!", stated the manager.



Redentora and Tenente Portela

RIO GRANDE DO SUL

Electric network arrives to indian communities, taking health and education for hundreds of families

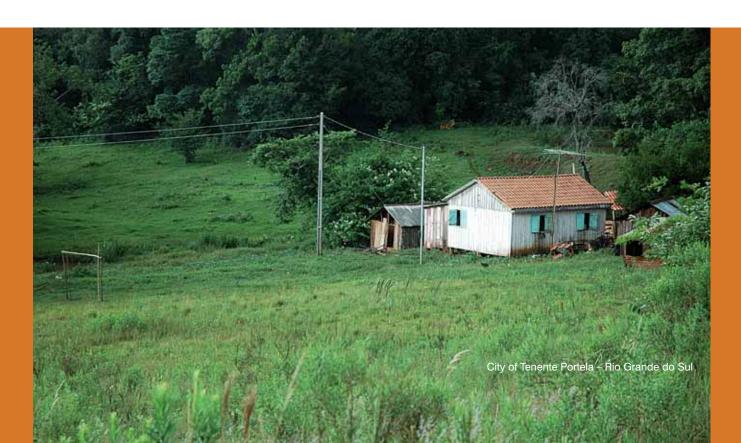
ELECTRIC POWER CHANGES NOMADE HABITS

When they saw the Program "Light for All" connecting their villages to the electric power network, the Indians from Kaingang and Guarani ethnic groups, located, respectively, in the cities northwest of the state of Rio Grande do Sul, Redentora and Tenente Portela, realized that they did not have to leave their homes anymore searching for better life conditions. That moment meant the arrival of services that would guarantee more comfort to the families.

The energy has also arrived to the healthcare clinic at Bananeira village, in Redentora, bringing an important and waited improvement to the clinic services. In addition of cold and safe storage of vaccines and medicines necessary for the maintenance of the active principles, the clinic received an sterilizer. Thus, several procedures are now offered to the community, from preventive exams and removal of surgery stitches to the nebulization in children and seniors.

"Before the Program installed the electric power in the clinic, we needed to use lamps to perform the preventive exams. Now we use the proper and safer equipment and, thanks to the sterilizer, we started to make 80% of the clinic procedures right here. Our patients do not need to be taken to other units anymore to receive proper assistance", evaluated Cristina Raisa, head nurse of the unity.

Like the clinic, the local school was also benefited from the electrification. The energy used before was produced by solar plates and, due to its low storage capacity, in rainy days, the energy was minimum, practically





"

The vaccines and the medicine from the clinic are now safely stored

Viviane Ribeiro, nurse assistant



none. Now classes can be given at regular hours, assuring, thus, more quality in the education of the children in the village.

The nomad culture remains among the Indians, but in a different way than the one from their ancestors. If before they would abandon their homes, now they remain in the village and exchange homes among themselves. To the kainang Indian Brasília Ribeiro de Freitas, 60 years old, accept light at home meant more than comfort: there was a change on how to face technology. For her, the result from "Light for All" was like a gift given by God through men's hands. "In the beginning I did not want the light. I thought that the sunlight was meant to light the day and the moonlight to light the night. I did not think it was important to have other type of light. Today I am convinced and I helped to persuade the others that also did not want to. I am very happy as today I warm my baby chicks in the winter, I made a bathroom with electric shower and I have a freezer to store food. God has given men wisdom to provide us a better life with electric power", she concluded.

The life of Guaranis from Tenente Portela also has changed. The partnership made between the Ministry of Cities and the Health National Foundation (Funasa) built masonry houses to replace the traditional wood ones. In addition of the light, all new homes have bathrooms, which will change hygiene habits and reduce risk exposure in the community. In the village, the electricity allowed, still, the improvement in the service of the local healthcare clinic.

For the chieftain Virgilio Benites, light was only the first step towards a better future for the Guarani Indians. The next goal is to return to the project to build a new space for the local school and, later, to implement a teleconference room. "Since we arrived here, everything we have has been gotten with much work. The Program "Light for All" was different. It came, put light in our houses and brought good things to us", he affirmed.



With power equipment, the clinic can offer proper assistance.



ELECTRIC LIGHT SPEEDS UP AGRARIAN REFORM

At the Itamarati Farm - located northwest of Mato Grosso do Sul state - the union of the Program "Light for All" with the "Agrarian Reform" is causing a revolution never seen before. The 50 thousand hectares farm, which before was dedicated to the soy monoculture, became one of the most well succeeded democratic programs on the access to the land, assisting 2,845 families of small rural producers without land. The soy empire, which was owned by one person only, became the home for thousand of people that carried, in their lives, the mark of exclusion and abandonment. People such as the small producer Ildo Teixeira da Silva (39), who spent his whole life working in the land of others and never had a single opportunity. A mix of Brazilian with Paraguayan, which is how they call the Brazilians that work in the lands of the neighbor country, Ildo decided to leave behind a life of suffering and exploitation and, after spending 18 months camped by the road, in front of the farm, he got his piece of land, where he lives with his wife Maria Madalena.



The diversification of cultures at Itamarati already includes the culture of silkworm

After the ownership of the land, there is the light! The poles from "Light for All", that conduce the power cables, took the residents of Itamarati Settlement to another level: the one of sustainable production! Ildo was used to deal with cattle and remembers the difficulties without energy: "Before, we had to milk the cow every day and stop house by house to sell it before it would go bad". The harsh and long work was relieved with the arrival of energy, which made possible to install several collective milk coolers in the settlement. One of the coolers, with capacity of 2 thousand liters, is placed at Ildo's property, which stores the production of all neighbors, assuring the quality and allowing the

Ponta Porã

MATO GROSSO DO SUL







44

The milk is now a good business. I cannot complain

Ildo Teixeira da Silva

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sale of the product for the dairy industry. According to Ildo, the producers spend about R\$ 0,01 per liter of stored milk including the energy bill, resulting in an average revenue of R\$ 1,000 per family. "It is a good deal. We can't complain", he says. The business is so good that the farm already reached 35 thousand liters of milk produced per day, and with the perspective to increase production. "Thus, we have more electric water pumps pulling water for the cattle, we have crushers to produce ration, we also have producers that are already using a mechanic milker; also, my house increased from 40 to 120 square meters. It is the progress that arrived here for once!" he concluded.

The farming production is also prominent at Itamarati. The energy from the Program also made possible to irrigate the land. The farm, divided in individual and collective properties, increases its diversification little by little.





Now, it starts to innovate with the silk production, which is added to the culture of soy, beans, corn, rice, and wheat. Nilson Francisco Scolate is one of the four producers at Itamarati that decided to try the new activity. He implemented two boxes of 30 square meters to raise the silkworm. With the arrival of energy from "Light for All", he installed light spots in the shed, making easier the night handling and improving the final quality of the product. According to him, already in the first year of production, he could extract from the 100 thousand silkworms of his production, 201 kg of first quality pod, which were all sold to the state of São Paulo, profits of about R\$ 1 thousand per month.

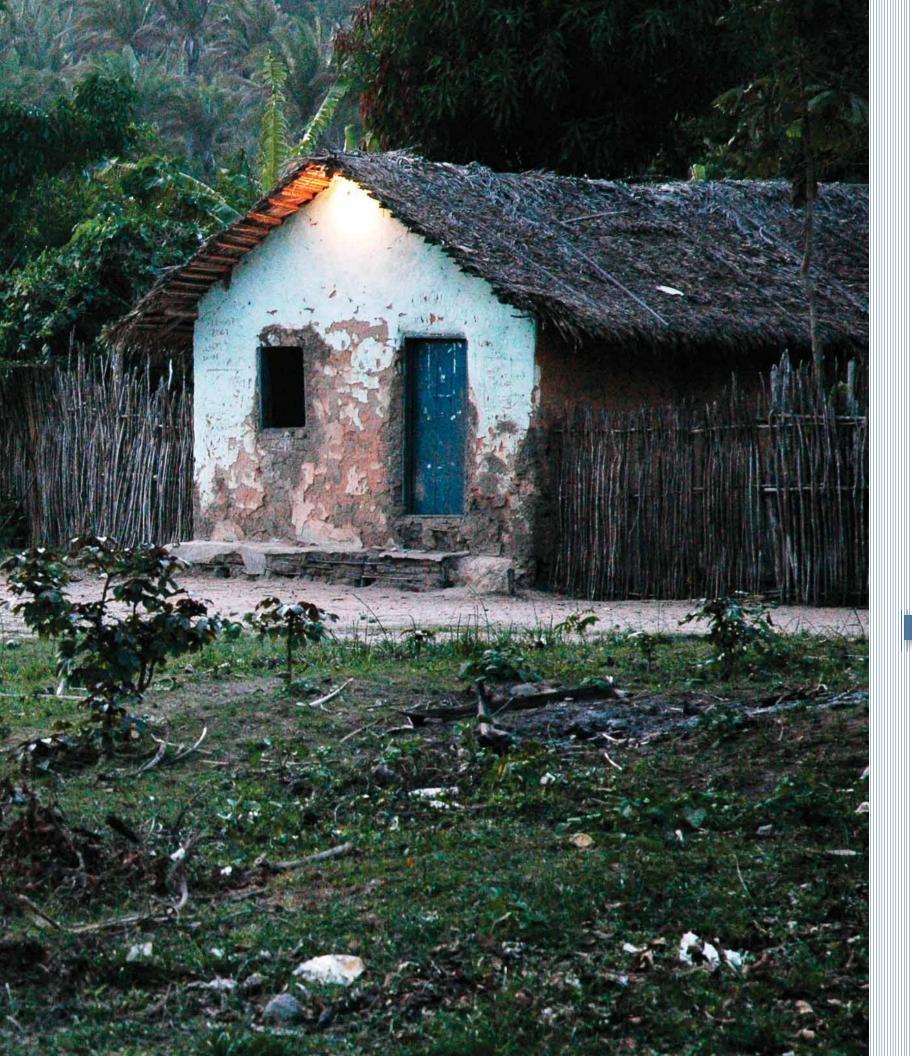
With an eye over the promising market, Nilson studies to add more boxes. "Now I can invest. Without energy I could not work properly as the pod is cleaned in a electric device, before the cleaning was by hand, which was a lot of work and little production", he stated. Besides, with electric power he can work at night – the silk production demands a strict care 24 hours a day, also, it needs to be protected from attacks, mainly from ants and bats.

In his property, Nilson plants 2 hectares of mulberry trees to feed the silkworms and what is left from the mulberry leaf, after the worms eat, is used as fertilizer to plant sesame, another income source to the family. According to Lucília Nunes, Nilson's wife, the energy also helped a lot, once without it, there is no way she could help her husband in the production of silkworm as she would not have the time as she would have to wash her clothes by hand. Today the washing machine does everything", she said.

The business owners of the neighbor cities are also betting on these success histories as they see higher profits in the sales of household appliances. "Our sales increased around 13% since the arrival of the Program, says João César dos Santos, manager of a network of local stores. "We also have innovated the way we work. Now we send the salespeople to the settlements instead of wait for them at the store", he says.

With the democratization of the land use, the culture diversification, the increase of circulation of products in the field and in the cities, "Light for all" proves that it is worth to bet in the rural electrification as the propelling coil of the development of the country.





BENEFITS GO BEYOND ENERGY

he implementation of Program "Light for All" around the country is bringing in benefits that go beyond electric power resources. The same service allows inhabitants in rural areas to get informed about national and international facts through a TV device; they no longer need to salt food as they can now store it in refrigerators, or even take a simple warm shower in the cold days in the south of Brazil. It is also warming up the economy of Brazilian communities and states assisted by the Program, and, consequently, boosting up the national economy.

The increasing requests, resulted from the Program, promoted the reactivation of several pole factories and also created employment, for example, contractors hired to build the electric network searched to hire local workers. Moreover, the arrival of electricity to rural communities favors the increase of farming productivity and of labor.

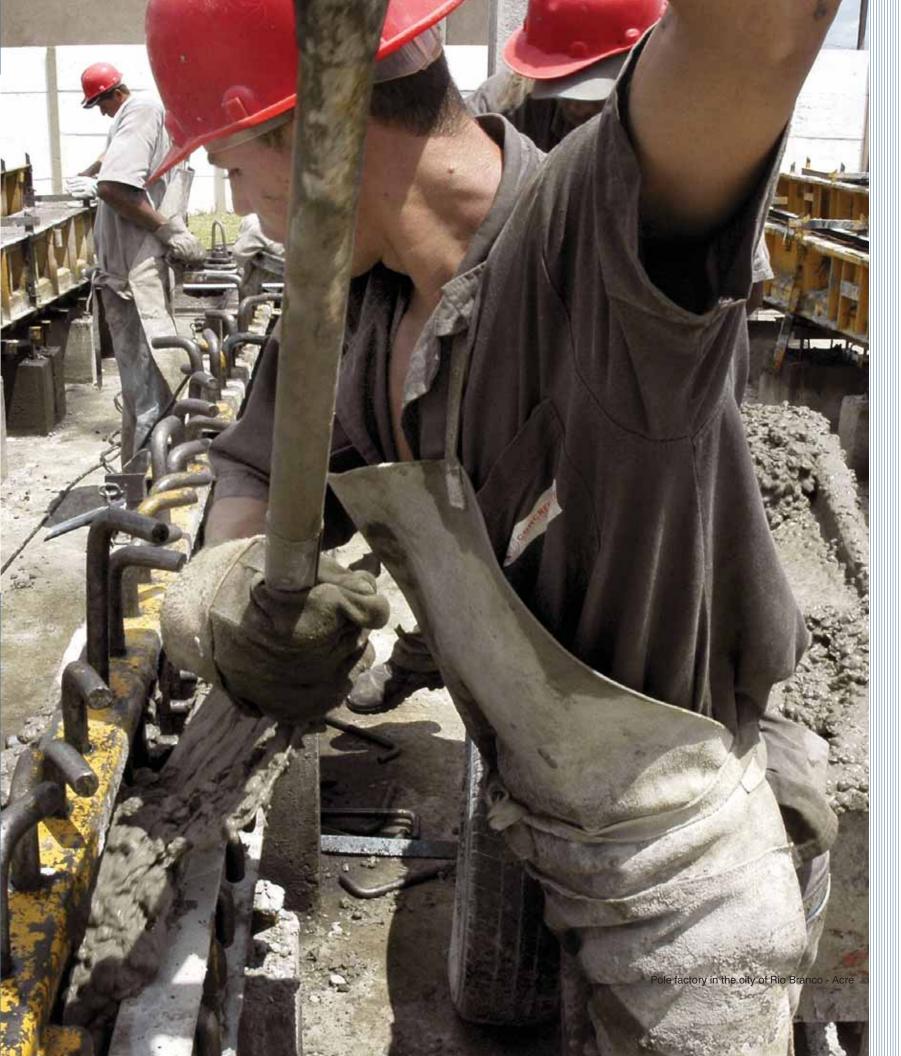
The estimate is that "Light for All" has created 300 thousand new job positions, direct and indirect ones, in Brazil. Also, it has used so far about 4.6 million poles, a number higher to the one installed in several Brazilian capitals, 710 thousand power transformers and 890 thousand kilometers of cabling, the equivalent to 22 laps around the earth.

The standardization program of the access to electric power has also encouraged the industries that provide materials to the electric power distribution sector. Producers of poles, cables, and energy meters had an increase in their production.

According to the coordination of the Brazilian Association of Electrical and Electronics Industry (Abinee), the heating sector is noticeable, in the last four years, mainly by companies that produce electrical materials used in network expansion to deliver the electric power to the localities.

Stirring up the economy

The program has already created 300 thousand new direct and indirect job positions



The president of Abinee, Humberto Barbato, says: "in addition of the important social consequences on education, healthcare, quality of life of people and even digital inclusion, the Program "Light for All", renamed by Abinee as "Dignity for All", has been of great value for the electro-electronic sector as it generates a considerable volume of orders to the segment that produces equipment to the distribution of electric energy, which, before the program, was facing difficulties with production bellow its capacity. "Light for All" is, doubtless, the concrete proof that government programs can work, if well planned, organized, and with established and accomplished goals".

The Program "Light for All" has also been encouraging other sectors in the economy such as the sale of household appliances. Stores around the country are increasing sales. According to Odeomar Melo, manager of a household appliances store in the city of Ponta Porã, state of Mato Grosso do Sul, his team is turning around the sales process. Instead of waiting for customers at the store, they are visiting the communities assisted by the Program to register the clients and to offer their products. "We sell a lot of TVs, liquefiers, and fridges to the families that received the light. The program is definitely helping us to accomplish our sales goals.

In the city of Coqueiral, state of Minas Gerais, the electrification of the district Frei Eustáquio favored the creation of a cooperative of seamstresses women that are working in faction regimen (the factory sends the pieces of clothing cuts so they sew them up in a final piece), this resulted in a small commerce to support not only those part of the cooperative but also the remaining population. Now, the place counts on two supermarkets, a snack bar, a pizza place, and a clothing store. Moreover, those supported by the Program are building new homes, warming up the construction material segment in the city.

In Angra dos Reis, more precisely in Ilha Caieiras, which received electric power through a submarine cable, the arrival of energy made possible to families to purchase household appliances. All homes have now televisions, CD players, washing machines, and the refrigerator by gas was replaced by an electric power one. Some residents completely changed their furniture.

Another sector improved was of car bodies and related accessories. In 2006, the newspaper "Diário do Comércio", Minas Gerais State, disclosed that the company Baresi Implementos Rodoviários, after strong profit loss in 2005, had closed the year with an increase of about 20% in sales and in gross income. According to its owner, Marcelo Soares, the Program "Light for All" created a demand for services providers to work in the projects, to equip their vehicles, the company then made profits at that time selling accessories for load trucks. Now, in addition of sales, it profits from the maintenance of these trucks. "We had an increase of 45% in the corrective maintenance of parts for load trucks, acquired to answer the needs of "Light for All". We are now conquering new customers and we keep having good results through the maintenance services provided", explained.





LIGHTING UP THE BLACKBOARD OF SANTA MARIA DO BAIXO SCHOOL

In the interior of the natural riches of Atlantic Forest, 200 km from the capital of São Paulo state, a sound echoes through the forest. It is not a sound from some rare specie, newly discovery by biologists, but the sound of laughter from dozens of children playing in the patio of the school electrified by "Light for All".

The public school Fazenda Santa Maria do Baixo belongs to the city of Cananéia – southeast end of the state, almost border with Paraná state. It is literally located in the end of the world, a trail surrounded by exuberant nature, and that, according to the myth, was opened by the Guarani Indians much before any explorer had stepped on Brazilian lands. Isolated from the rest of the world and forgotten by the government, the inhabitants of this rural area considered the arrival of energy the best news since Dom Pedro II¹ installed the telegraphic network there.

Before the place was illuminated by electric power, the students were excused earlier from the classes, as they could not see what was written in the blackboard. Today, in addition of teaching at regular hours,



Children from the state school of Santa Maria de Baixo farm

the teacher Ana Cristina de Lima already can use the TV and the DVD to show movies and cartoons to her students. "Many on them can watch movies only here in the school as they do not have this type of device at home. To be in school is a great joy for them, many of them even arrive earlier", she stated.

The natural beauty of Cananéia attracts many people that practices adventure sports. One of the activities is the trail on four wheels, where the racers use jeeps to run the road that leads to the small village of producers. The friendly population enchanted the travelers and encouraged them to help out in the creation of a new space in the school.

"Our village is the last construction before the border with Paraná state. Once, they needed to stay here, as it was raining a lot, and we sheltered them. In exchange, they helped us to build a toy library and

¹Second and last Emperor of Brazil, died in 1891

Cananéia

SÃO PAULO

Isolated community rejoices with the arrival of electric power





44

I want to become a teacher to teach children and adults in my community.

Lidiane Ribeiro Goncalves, 12 years old

95

donated toys, books, and videos to the school", remembers Gilbert Jose Melcher, principal of Cubatão public school, unit that the small rural school is tied to.

For the little one Juliana Alves Pedro (9), to go to school it is a great joy: "Do you know why I like to come here? It is because I like to study, to read, and to see the videos. When I grow up, I really want to become a teacher and to lecture".

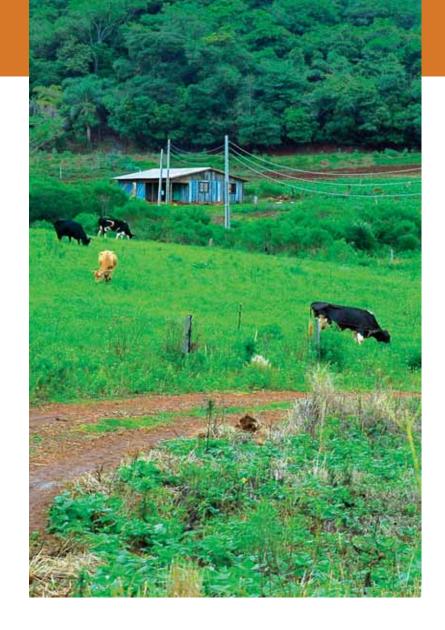
The energy also assured the quality of the meals given to the children. The volunteer Levi Pereira da Cunha explains that his wife is a teacher and both of them are responsible for the preparation of the meals: "Everything is easier now, as we can keep in the fridge food that, before, had to be eaten fast so they would not go bad, such as milk and juice". Thus, in addition of fighting waste, electric power gives assurance of more meals at school.

RATION FOR THE CATTLE, WITH GUARANTEED QUALITY

Small producers in the city of Ribeirão Claro, state of Paraná, received a new impulse in their activity with the implementation of the Production Community Center (CCP) – Ration Factory Vida Nova, an initiative directed to assure food for beef and milk cattle in the region.

The electricity that arrived with the Program "Light for All" in the region made possible the implementation of the factory, and meant a great change in the life of small producers in the small city in the state of Paraná.

The associated, Dorival Lopes de Moura, said the initiative brought new hope to the population and to the local cattle raisers. "Light is everything. Before the Program brought light for us everything was much harder. Now we have a lighted up home, more comfort, and condition to produce ration for the cattle we raise", he stated in a satisfying way.



Ribeirão Claro

PARANÁ

The desire to produce and the well succeded partnerships assure a better life to small producers



The entire ration is produced in the factory

Inaugurated in September 2008 in the community of Três Corações, the factory counted on, since the beginning, with the support of the City Hall (that built the shed), Eletrosul (responsible for the donation of the equipment, for the integrated actions of "Light for All"), Emater (Agency of Technical Assistance and Rural Extension) and of local producers, and one of them even donated the land to implement the factory.

All ration necessary to support the local cattle and the ones from the communities of Abreu and São Sebastião is produced now at the CCP. And what is even better: they can control the origin and quality of the food given to the cattle. "If we'd buy the ration at stores, we would spend at least 40% more than we spend today producing our own. Also, before, we would take the corn to be crushed in another city, 100 km far away from here. Now, we are responsible for the whole process and we are sure that our cattle are healthy" – explained the president of the Rural Association of the Residents of Três Corações, Acir Carriel.

To have the right to receive food for the cattle, the producers know that is important to actively participate in the process of transformation of the goods in ration. This work is made by the supervision of Adré Carriel, who helps his father Acir with the work and also is a volunteer to the maintenance of the machine and of the shed itself. "We all bring the corn, the mix, and other products to produce the ration. We pay only for the spent energy and for the maintenance of the shed and machines. This brings more profits when we negotiate the meat and the milk, and the quality in the production of cheese and other food we consume at home", concluded, happily, André.

Deval and his cabbage crop, which is today all irrigated. "This is only possible because energy from "Light for All" has arrived here!"

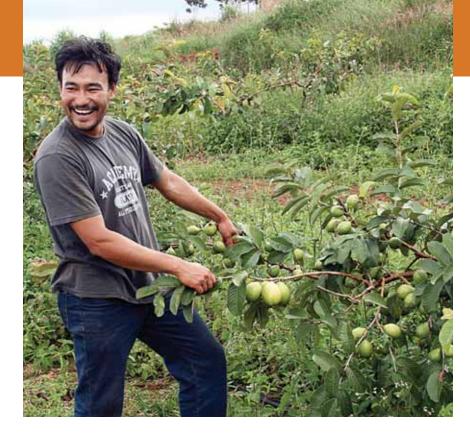
ENERGY TOOK THE CITY TO THE COUNTRYSIDE

"Before, living in rural areas was to live far, far away. Today, with electric power, we live in the countryside, but inside the city!" It was with this last sentence that José Deval da Silva, resident of the Settlement Colônia 2, in the city of Padre Bernardo – State of Goiás, defined how the Program "Light for All" has contributed to improve quality of life in rural areas. According to him, without electricity, it was hard to talk about comfort. "We did not have anything at home because the appliances, which could even work with diesel, would compete with the crops and, as it was very expensive, work would prevail, which was how the family survived", he emotionally got off his chest. "What about taking a cold shower at night, in the winter? It hurt", added Bunkichi Kimura Neto, fruit producer, which is today building a bigger house, of masonry, and with a big hydro massage bathtub "presidential suite", as he defines himself, laughing loudly.

Padre Bernardo GOIÁS

The electric power is giving strength to the agriculture







Today I plant other things, but my project is to work only with guava and avocado, all year irrigation.

Bunkichi



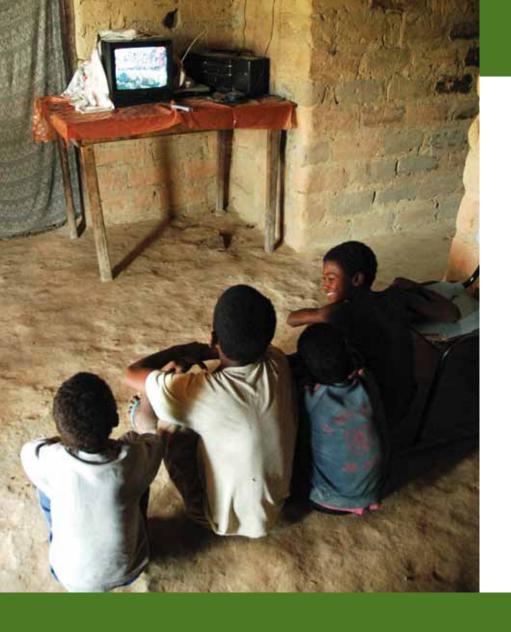
The residents of the Settlement, after the electric power, point it out as the main joy factor, the independency that they have now to produce in their own properties. According to Odair Pedro Rodrigues, resident of the B3 block, before, he and his peer Deval would produce very little in their land as irrigation was quite pricy and their production would all go to pay the diesel and the maintenance of the machine. "It was impossible to have profits on the crops", he says. Also, to ensure to have his family living, they had to work as employees in other properties. He would only work in their crops when there was some time left. "That is why many people left. We had the land but we could not produce, this was very sad", he stated. "By the end of the month, instead of having money in our pockets, we would have debts. It was so discouraging!", added his peer. "I once spent R\$ 5 thousand per month, only for diesel. Today, irrigating all the crops, the highest energy bill was of R\$ 1.5 thousand, and it included costs of household appliances and the light of my house", added Bunkichi.

After the arrival of energy from "Light for All", life in the Settlement has changed completely. The production of vegetables and fruits, main activity of local producers, has significantly increased. To have an idea, only from 4 of the 23 blocks of the Settlement Colônia 2, there is an output, weekly, of 1,400 boxes of 20 kg of products, and the work already employs about 20 people.

The planted area has increased and the costs of diesel... have fallen down. "Today we only use diesel to operate the machines and the truck", said Deval. Vegetables such as carrots, sweet potatoes, beets, chuchu, pumpkin, and cabbage, and fruits such as avocado, guava, tangerine, and strawberry go directly to the shelves of the producer market in Ceilânida, satellite city of Brasília, and to CEASA (supply center) of the federal capital. According to Vicente Cardoso, resident for more than 13 years, it is even hard to imagine how it used to be before, with the oil lamp. "We would only plant to eat and sell a little bit of it. To produce for good is only possible with electric power, as we can, through it, send water to everywhere. Before there was nothing around here, now, there is crop everywhere!" he concluded.

The residents of the Settlement Colônia 2 do not stop dreaming, the goal now is to acquire a new machine, more modern, through the Neiborhood Association of Residents of the region, to wash and select the carrots they are growing, in order to add more value to their product. The selection will avoid the loss that still occurs today with those that do not meet the market required standard." With the new equipment, carrots, large or too small, or even those broken during handling, can be exploited in an industrial kitchen, which we also want to deploy." This action will generate job to the women of our community. All of this is possible now because energy from "Light for All" has arrived here!" Deval concluded.





"LIGHT FOR ALL" HAS ALREADY RESULTED IN IMPORTANT CHANGES IN THE RURAL AREAS

The arrival of light is changing, positively, the life of those that live in rural areas. This is the conclusion of the research ordered by the Ministry of Mines and Energy, which interviewed 3,892 families throughout the country that received electric power in their houses during the period from 2004 until the end of 2008.

The goal of the research was to evaluate in which levels the arrival of electric energy resulted in the improvement of quality of life, on leisure and comfort; in the local economy, with the acquisition of household appliances; if family income has increased from the productive use of electricity; and, mainly, to keep these families in the rural areas.

Results of the Program

Research evaluates the satisfaction and impact of the arrival of electric power in the communities





A blessing of God in the lives of many workers like me. With energy everything improves. Now the electric pump supplies water to the tank, we don't need buckets anymore nor to go to the stream, the water is already inside the house. Also, now I have TV and radio, all electrically powered.

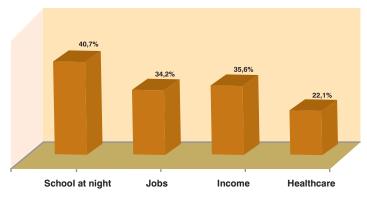
Oséas Galvão da Cruz, 71 years old, from Francisco Galvão Settlement - city of Palmas - Tocantins



MORE STUDIES, MORE JOBS, MORE INCOME AND MORE HEALTH

Some of the relevant data raised by the research are on the improvement of conditions and opportunities to study, work, income, and healthcare in the rural areas, after the arrival of electric power. Below, the improvement rates attributed to "Light for All" provided by the ones interviewed.

Effects of "Light for All" on the opportunities of work, study, health and income



To attend a school in rural areas has also become easier after the arrival of electric power. School activities at night have improved for 40.7% of interviewed.

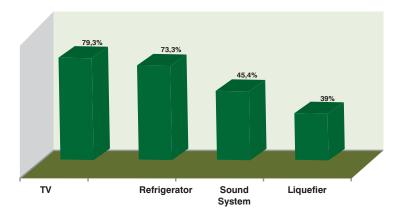
The research still pointed out that job opportunities have increased for 34.2% of this population. Healthcare services availability have increased for 22.1% of those interviewed and family income has increased for 35.6%, showing that electric power is stimulating the economic and social development of the communities.





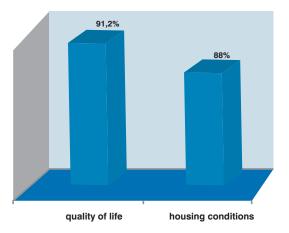
STIRRING UP THE ECONOMY

The Program "Light for All", according to the research, encouraged business activities in rural communities, generating more income, jobs, and regional development. After the Program, there was a considerable increase in sales of devices, such as TV's, refrigerators, fans, CD players, freezers, and liquefiers. The number of purchased TV's, for example, jumped to 79.3% and refrigerators, 73.3%, corresponding, respectively, to the sales of 1,586,000 and 1,466,000 units.

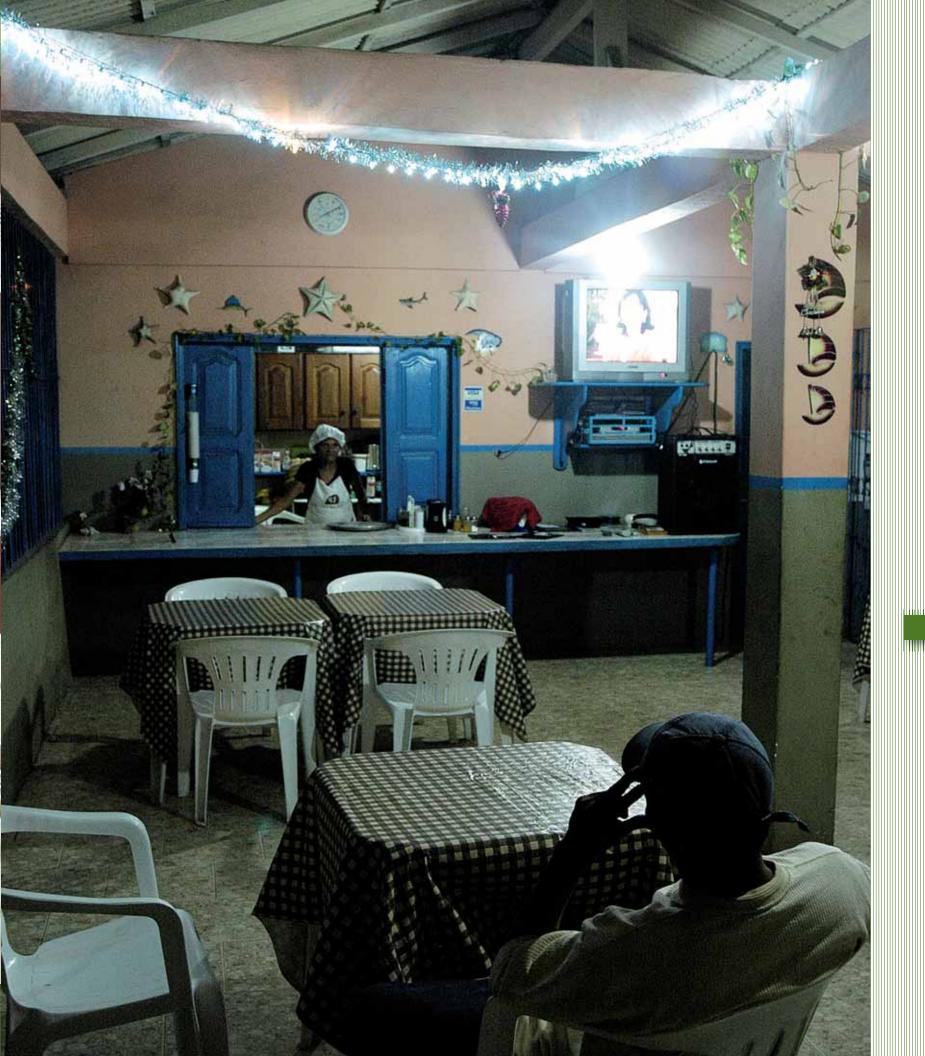


QUALITY OF LIFE

The research has proved that "Light for All" is, in fact, resulting in deep changes in the countryside. The quality of life and living conditions have improved for 89.3%, and 86% for the ones interviewed after the electric power.







10 million Brazilians out of the darkness A HISTORIC LANDWARK

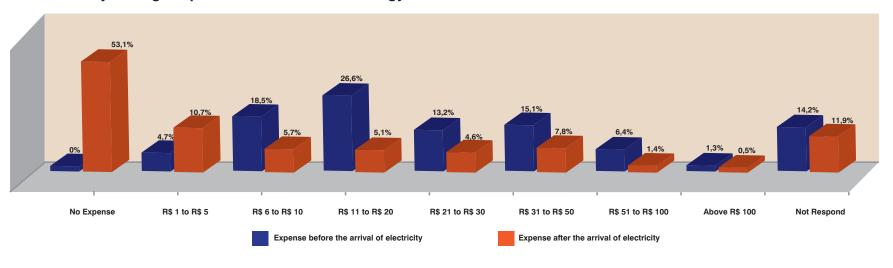


With the arrival of Light for All's electric power everything is better. Besides allowing us to have a refrigerator, it solved the water problem. It was a difficult time when we had to fetch water from the well using the bucket. With the electric power we have the electric water pump. Just need to turn it on whenever it is necessary. The Light for All is marvelous."

Luiza Conceição de Souza from the Nova Amazônia Settlement – city of Boa Vista – state of Roraima

Moreover, the use of electric power has replaced costs with other types of energy generation that, before, would weight in the pocket of the families. 53.1% no longer have any of these old costs.

Monthly average expanses with renewable energy in Brazilian reais





STAYING IN THE COUNTRY

According to the research, 96,000 families started to live in rural areas after the arrival of electric power, which means that a population of 480,000 people left bloating the cities.

This is unmistakable data that "Light for All" is encouraging people to stay in the countryside, once it creates conditions to the ones living in the rural areas to have a more deserving life.





Agroinautas ASC de frutas ASC Mais de 500 Familias beneficiadas Capacidade de produção: 10 toneladas por dia Capacidade de armazenamento: 100 tonelada Produtos processados: codesa

LIGHT FOR THE WHOLE DAY AND LIGHT EVERY DAY

For the population that lives by the Amazonas River, the access to electricity means the assurance of income and development for thousand of families. Surrounded by the largest sweet water basin in the world, and isolated, paradoxically, from the transmission lines of the Brazilian hydroelectric plants, this population spent years submerged in the raw material that generates 85% of the electric energy in the country. However, they were not able to enjoy it. They used to live, most of times, using oil lamp or with energy from two to maximum six hours using a diesel generator. This restriction meant a limitation to them, who could not count on comfort in their homes or the necessary capacity to generate income. The population of Vila do Engenho, city of Itacoatiara, established partnerships to use this so dreamt energy to generate businesses.

Itacoatiara



Profits from the sale of cupuaçu, pineapple, graviola, and umbu fruits increased 100% with energy and motivation

About 250 km from the capital of the state, Manaus, 500 families in the region that were assisted by "Light for All" were able to unite work to electric power, in a clear demonstration that, when well articulated, the production initiatives can completely change their lives. The rural producers, organized as a category for 22 years, when they used to sell everything, from organic poultry to cupuaçu flour to pineapple, were know as "Producers in Action", mater cell of the future and dreamt cooperative and later the pulp facture. At the time they used to unite the production of everybody in the community and would sell in a single place, to have strength. And they had it.

The creation of Ascope – Cooperative of Rural Producers of the Community Sagrado Coração de Jesus do Paraná da Eva came naturally. However, as they did not have energy, they could only dream with the factory. "We even researched the cost of an electric network, but we gave up as it was very expensive", said Edsomar Mendonça, factory manager. It was the end of a dream... end? No, the start of the story because the Program "Light for All" came to everybody changing the life of the residents of the community.

With the energy from "Light for All", an agreement with the State Government and part of resources from the cooperative itself made the construction of the factory possible and the pulp production, which before was made by knife and reached a maximum of 40 kg a day, per family, now has capacity to process 10 tons of fruit per day, and to store up to 100 tons. The possibility to sell fruits already processed completely changed the expectation of income in the community.

"Now we have a greater purchase power and price definition on the pulp value", he says. "Moreover, we ended up the exploitation of the middleman. Today we are united and the fruit producers sell to the association at a fair price. There are jobs for everybody and this improves our community and our city", said Edsomar. The cooperative is so focused in the growth of its business that it is already looking to the future, selecting 20 teenagers to study in the Federal Agro technical School, in Manaus, to become a rural technician. "Thanks to the energy from "Light for All", Vila do Engenho has developed itself, if we still had the generator, the progress would not have arrived. When the light arrived there were families that lived at Igarapé do Engenho and brought their whole house in a ferryboat, through the river" tells Nazira da Silva de Mendonça.

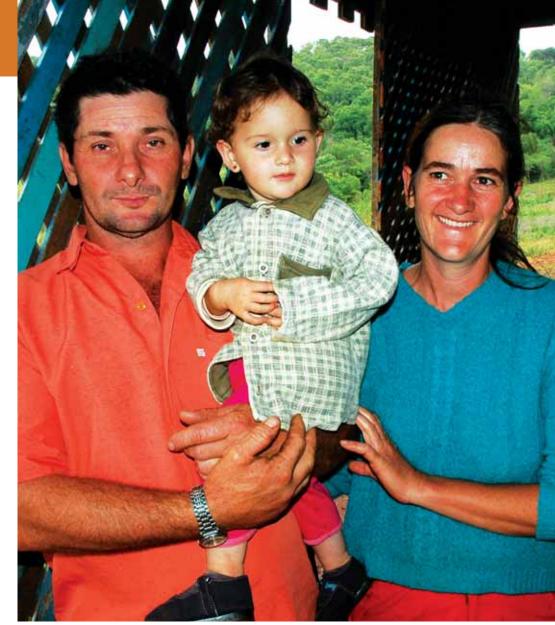
The pineapple crop is all around and the fruit becomes pulp at the Vila do Engenho factory



ENERGY UNITES AND KEEPS THE FAMILIY IN THE COUNTRY

The daily lives of those in the settlement of Madre Cristina community were radically changed with the arrival of "Light for All". In addition to the comfort provided by the energy and illumination, the families became even more united and even the common tasks became pleasant activities.

Located in the city of Passos Maia, in the state of Santa Catarina, this new reality favors people such as the Capelleti family. Before the arrival of energy, the family often had to be apart from each other as it was difficult to be at home in the colder days. Without light, the cold water showers made Meire and her daughters, Cristiane and Amanda, to live with relatives, while the father, Adelson, would stay by himself, taking care of the crops.



The Capelleti Family remains united since the light has come

Passos Maia and Aberlardo Luz

SANTA CATARINA

Program increases the quality of life level and reduces the rural exodus



The energy allowed me to move to the place that now I call home

Meire Capelleti

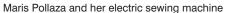


With the electrification, the first step taken by the Capeletti was to buy an electric shower. Later on they got a refrigerator and a machine to wash the clothes. Thus, the necessary structure was guaranteed to bring the family together at once, which now, Meire proudly calls it of "my house". Excited, Adelson built new rooms, bought more household appliances and purchased a tractor for the work in the farm and a milker device.

Cristiane, the couple's older daughter, tells that the household appliances made the house tasks so much easier that now they have more time to perform other activities an for leisure. "After the light arrived, it has been easier to study, to entertain, and even to listen to the radio, which is what I like to do".

To the housekeeper Maris Polazza de Souza, the energy at home helps to complement the family income as a seamstress. "I work in the city and for a year I saved money to buy an electric sewing machine. I always have orders from the neighbors, thus, I can help with the expenses of the house and pay school for my older daughter".

The initiative of Maris confirms how much "Light for All" has been contributing for the improvement of quality of life of men in the country. The people feel valued and now they glimpse other ways to use electric power to boost up the economy of their communities, integrating at once to the society and to the modern productive activities.









THE AGROINDUSTRY OF HOPE

The dream of the residents of Abelardo Luz came true after the Program "Light for All" placed the energy poles in this city in the state of Santa Catarina. A group composed by 11 rural producers from four settlements got together in the beginning of 2008 about a proposal that would change their lives, capable to generate more profits than what was gotten before with the production and sale of their harvests: the creation of an agroindustry of conserves.

With support of agriculture technicians, they began a study on seeds germination, to improve the quality of food cultivated in the settlements. The result of this planning did not take longer to appear. The cucumbers and onions that sprouted from the ground were healthful and succulent, ideal for the processing in brine.

The necessary resources to create the agro industry were gotten from the Cooperative of Production and Trade Edson Adão Lins (Coopeal), INCRA (National Institute of Settlement and Agrarian Reform) and Eletrosul, which donated new machines to the entrepreneurs. Moreover, the initiative counted on the adhesion of forty families of the settlement, in the production of raw material. "Light for All" installed a new three-phase electric network for the building, making possible the connection of all equipment involved in the production.

The partnership worked: the production of conserves currently employs six people from the community and it is totally adjusted to the sanitary norms from the Ministry of Health, factor that guarantees to its products a greater acceptance in the market. Completing one year of creation in the the month of March, it has already gotten important results, as the participation of 82 families in the production of cucumber, onion, and pickles conserves, in addition of the acquisition of an onion peeler. Everything produced is bought by restaurants and establishments in the region. "The next step is to offer a greater variety of products in conserve, such as peppers, carrot, and green beans. For this, the agroindustry will have the support of a biochemist, who will choose the proper conserve for each vegetable", explained the project coordinator, Salair José Andreatta.

The rural producers from the settlements Santa Rosa 1, Santa Rosa 2, Quiguai, Capão Grande, and Indianópolis know that what is most important is the perspective of a better future. "The agroindustry is our hope. This year we could make some money, only that, more than money, I see this initiative as the possibility to guarantee our survival from here on" -, concluded the producer José Pereira de Lime, or Chieftain, nickname given by the settlement.

ENERGY HAS ARRIVED AT ARARA VILLAGE

"We thought that it was one more lie from the white man. We had already heard promises and the energy would never arrive. Today it is different, all our houses have electric power and we are quite happy", defines Firmino Arara, chieftain of Iterap Indian village, composed by 45 families, located 70 km from the city of Ji-Paraná, state of Rondônia. Father of eight children, the chieftain is proud of his new freezer, of the TV he already has at home, and mainly of the flour electric toaster that they now have in the village.

The network set up was an older request from the Indians who now can relieve the hostile conditions of life inside the forest and they can still reinforce the safety of the place. "Life is good. Light has brought comfort to our houses and

improvements to the health clinic. Today we have a fridge to store our vaccines, an equipment sterilizer, and a walk-talk to help in the most complicated cases", explains Noep Arara, healthcare agent and head of the village clinic.

The Arara raise cattle for their consumption, plant cassava, potato, corn, rice, and beans, and sell, mainly, the flour cassava in the markets of Ji-Paraná. However, the community is most proud of the school that works at day to the children and at night to teach adults to write and read. "All of our children are in school and we already have 20 adults also. The school received computers and fans. We are very happy with everything brought by energy", stated Sebastião Arara, the village teacher.

Ji-Paraná RONDÔNIA

Tradition and innovation together to bring Rondônia Indigenous inhabitants better life quality

44

We thought that it was one more lie from the white man

Chieftain Firmino Arara

"

Maria Luiza Arara liked the most the arrival of the washing machine. According to her, before everything was washed in the river and it was a lot of work, now the machine is the one who works, she said smiling. She also said that one day, when it was raining a lot, a power cable broke out and interrupted the energy in the village, "then we saw how we used to live. We got crazy, without energy the washing machine could not work, the drinking water was warm and nobody wants to drink warm water again, we only want the cold one!, she says laughing loudly.

Indigenous chief Arara and his family



A REFERENCE TO THE WORLD

he disclosure of the initiatives made by the Program "Light for All", to change the life of the communities in the Brazilian rural environment so they can access electricity, has already crossed borders. Authorities and technicians from countries such as Bolivia, Colombia, Kenya, and China, for example, came to Brazil to participate in meetings with the Program national coordination, to get acquainted with it and, mainly, to learn how "Light for All" encouraged the economic growth of the communities that started to use electric power as a development vector.

In 2005, the Program was the theme of a conference on electric power held in Paris, France. One of the hostess of the meeting, the French non-governmental organization - Association for the Rights to Energy SOS-Future, considered the Program as a reference to the world, a well succeed experience to standardize the access to energy.

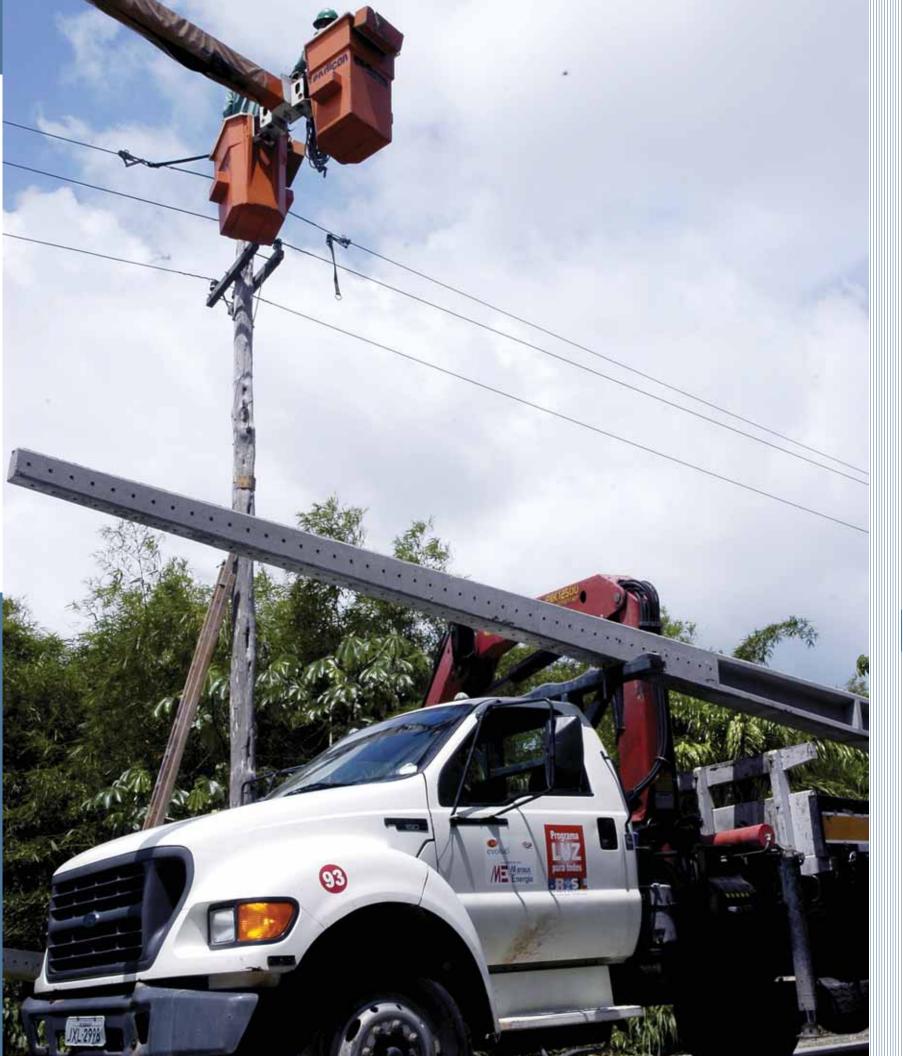
During the international meeting, held in 2006 in Brasília, by the Global Alliance for Energy Standardization (GVEP), the participants' attention was vividly lured by the recognition, made by that organization, on the enormous range reached and success of the Program "Light for All" implementation.

At the time, the national coordinator of the Rural Electrification Plan of Camarões, Justin Tsama, said that the Program was "inspiring" for their country. At the end of the event, Brazil and Camarões signed an agreement memorandum to exchange experiences in the sector. The intention of Camarões is, mainly, to learn how to take cheap energy for poor isolated communities.

The Program "Light for All" was also highly praised in the lately editions of the World Social Forum and it was presented in countries such as India, South Africa, Venezuela, Guatemala and Costa Rica.

Example for other countries

Representatives from other countries already came after details on the operation of the Program



A HISTORIC LANDIVIARK 10 million Brazilians out of the darkness

COFFEE THAT TASTES PROSPERITY

The community of Urtiga, in the city of Ilicínea, south of Minas Gerais state, has many reasons to celebrate. Everything has improved after its small farmers could buy machines and build a shed to process their coffee crops. However, all of this was only possible after the Program "Light for All" took electric power for the inhabitants of the community, taking, together, hope of more promising days.

Today, approximately 20 local families are able to sell processed coffee for toasting companies in the state. The construction and acquisition of the equipment were made by the

Association of Small Farming Producers of Urtiga, which received resources from parliamentary amendment and bank rural financing.

With the support of the Program, a Production Communitarian Center (CCP) was implemented and equipped with a grain drier, two hoppers (one for drying and another for cooling after drying) and a bolter for grain peeling. Thus, the producers saved money and had their products more valued in the market. If the coffee arrives wet at the CCP, the whole process takes five days. If it arrives dried, it immediately goes through processing, and it can be taken to be sold in the same day.

According to the president of the association, Edson da Silva, the advantage comes with the cost reduction and valuation of the product at the moment of its sale. "Our producers used to process the coffee in the neighbor's house. They did not pay only to use the machine, a considerable value was still charged on them. Today, they pay only to the use the machines, which are theirs. Also, the money from the processing liquidates the debt of the loan made in the bank", he explained.

Even paying, they are all satisfied. That is how Antonio Ferreira Faustino feels, producer and responsible for the maintenance of the CCP. He explains that, without the facilities and new machines, the local producers would have serious difficulties to process their coffee. The neighbor who used to have the private machines got rid of the equipment before the inauguration of the space. "The

IIICINE A
MINAS GERAIS



Electric Power generates jobs, income and increases revenue



CCP arrived in the right time, because the neighbor sold everything. If we were not prepared, we would have lost a lot of money to process the coffee before the sale", explained the producer.

The Association has already new plans, which will be put in action after the liquidation of the loan. The producers plan to build a yard and operate the coffee washer, equipment already acquired by the entity and that will make the harvest processing easier to the associates. "We want to make use of all necessary structure to the product processing. This space is the only thing missing so they can bring their harvest directly to here and leave with it ready to be sold to their customers", explained Edson.

POMERANIANS GREET WITH **LEEWEND LICHT!**

Leewend licht! That is how Pomeranians descendents celebrated the arrival of electric power in the city of Santa Maria de Jetibá, located in the west region of the state of Espírito Santo, an expression that, translated to English, means "Here's to light!"

Leewend licht! Leewend licht! The small producer Marcelo Zaager says it with a smile, full of joy as he was answered by the Program "Light for All". He, his wife Natalina and his son Marcos are Pomeranians descendents, historical region located in the north of Poland and German, south coast of Baltic Sea.

The family of fair skin and blue eyes does not deny their origin, and the son only speaks German. Like them, more than 90% of Santa Maria de Jetibá population is descendents of Pomeranians, composing a population, estimated in the state of Espírito Santo, of 120 thousand people, the largest concentration after Santa Catarina State. It is impossible to understand the foreign language, but, when talking about the importance of the electric power arrival, the sparkle in the eyes of Mrs. Natalina is enough to realize the great change that "Light for All" has brought to the life of her family.



Zaager Family's happiness

"After the light, we bought a television, freezer, and a fridge; the energy is wonderful", she reports as she is enchanted with the comfort and improvement of quality of life that they now have.

For the husband, Marcelo Zaager, the energy was paramount to his crop. Since the Program was concluded in the city, he could buy a water pump of great power to irrigate the soil, triplicating his production. "Before, we could not produce much because we could not moist the soil. Now it is different, everything we plant we harvest", celebrates Zaager, showing the vast production of vegetables.

Degredo and Santa Maria de Jetibá **ESPÍRITO SANTO**

Electric Power increases income, revenue, and fortifies family ties





Ms. Estefânia and her little radio that used to work by battery and today works by electric power

The production of Zaager family is to be envious for: everything is fresh, no pesticides. Marcelo proudly says how his work became profitable. With the sales of the vegetables he has bought a television and a freezer, and now he is already dreaming to buy other devices. "I paid everything with vegetables! I made a deal with the owners of the household appliances store in Guarapari, and every month I would take an amount of products from my property to them." He concluded smiling.

In the community of Degredo, north of Espírito Santo state, lives Mrs. Estefania Maria da Conceição, 103 years of a hard working life. For her, light means, literally, music to the ears. She was the first person to receive electric power at home in Degredo. "Electric power is very good, I spend the whole day listening to music, the radio is my company", she says with enthusiasm, reminding that, in addition of the company, electric power has also saved her some money. In the past, every month, the oldest resident of Degredo would spend about R\$ 9,00 only with batteries, but, for the same value, she now payd the energy bill. "Life here has improved a lot and with music it gets even better", she stated with a wide smile.

SEARCHING FOR ALTERNATIVES

he rural electrification program of the federal government, "Light for All", has reached its initial goal to take electric power to 10 million Brazilians and today, its great challenge is to make this benefit reach the most isolated communities in the country, mainly the ones throughout the Amazon Region.

The difficult access to certain places, which many times makes it impossible to take poles and power transformers, makes the Program search for alternative sources of energy to set them up. Most of times, the length of the rivers, the forest or mangrove areas, or even the fluvial or sea Islands, make it hard to set up the conventional electric network, due to environment and economic issues.

Searching for solutions to energy to all inhabitants of rural areas, the Ministry of Mines and Energy – MME, through the Program "Light for All", searched for partnerships with institutions such as public universities and centers for scientific studies, to implement pilot-projects. In this exchange of

experiences, "Light for All" has already identified projects with the use of clean energy, which are environmentally responsible and less expensive.

Moreover, with the goal to speed up the implementation of projects that answer the needs of remote communities, the Ministry of Mines and Energy published, in February 2009, the Manual of Special Projects of the Program "Light for All", which establishes the technical and financial criteria to the services that use the generation of energy from renewable sources.

The idea is to develop specific projects, to build large scale sites, however, monitored, making possible to the companies to develop this new ways of services, to get experience with new technologies and generate enough data and information to provide an environment of discussions and evaluations, next to the regulation agency, on quality indicators and maintenance and operation costs.

Among the technical options, it will be considered: the systems of decentralized generation from the mini and micro power plants; hydrokinetic systems, thermal power plants operated by biofuel or natural gas, photovoltaic solar plant, airgenerators, and hybrids systems.

This type of support complements the conventional one, made by the extension of networks, so the goal of the government can be accomplished: to take electric power to all inhabitants in the rural areas throughout Brazil.

Isolated communities

"Light for All" finds, in parterships with institutions, examples of projects to take eletric power to remote locations



WHAT HAS BEEN DONE

• MICRO HYDROELECTRIC PLANT AT CACHOEIRA DE ARUÃ – STATE OF PARÁ (PICTURE)

Coordination: University of Itajubá, in partnership with Winrock and Project "Saúde e Alegria".

This project is meant to assist the residential, productive, and collective consumption of Cachoeira de Aruã community, located in the city of Santarém – state of Pará. The system is composed by a micro power plant of 50 kW and by a distribution mini network of approximately 2 km, which supports 50 homes.

• BURNING OF BIOMASS AT ILHA DE MARAJÓ – STATE OF PARÁ

Coordination: Federal University of Pará (UFPA)

This project of an energy generation system is composed by a steam engine boiler, which uses biomass residues to direct burn, by a plant of extraction of oil from species from the forest and by a ice factory. The operation and maintenance of all system (unites of generation and transformation) are being accomplished by the community cooperative. The ice produced sold at the place itself to the fishermen in the region, and the oil negotiated directly with buyers from São Paulo.

• HYBRID SYSTEM AT ILHA DE LENÇÓIS – STATE OF MARANHÃO

Coordination: Federal University of Maranhão (UFMA)

In the community of Ilha de Lençóis, city of Cururupu – state of Maranhão, the team from the Alternative Energy Nucleus – NEA, Federal University of Maranhão, decided to use a hybrid system with three different sources of energy: solar, with 162 photovoltaic modules; wind, with tree air generators; diesel motor generator and 120 batteries that store energy for an average period of 10h without local and wind generation. The power installed in the system is of 40 kW taking care of all 89 houses of the community presenting a consumption today of 9 kW, spent by houses and public illumination.

• HYBRID SYSTEM AT ILHA DE TAMARUTEUA

Coordination: Federal University of Pará (UFPA/GEDAE)

In the community of Ilha de Tamaruteua in Pará state, the technicians from the UFPA decided to use a hybrid system with three different sources of energy (diesel, wind, and solar), composed by a diesel generator of 40 kVa, a photovoltaic system of 3.8 kWp power, two wind engines of 7.5 kW each one and a battery bank. The system total power is of 51 kW which has the advantage to save diesel when the renewable sources, as wind and sun, are available. The project also proposed a feature: it created a energy sale system through a card with a chip (like a cell phone chip) for the pre-payment. This card, sold at R\$ 15,00, gives the right to consume 30 kWh.

Wind energy tower at Ilha de Lençóis, city of Curupuru, Maranhão





São Francisco do Aiucá Community, city of Uarini, state of Amazonas, flood period of Aiucá channel

PHOTOVOLTAIC SYSTEM AT SÃO FRANCISCO DE AIUCÁ - STATE OF AMAZONAS

Coordination: Electro-technical and Energy Institute of São Paulo University (IEE - USP)

This project uses the solar technology, with individual photovoltaic systems, for the generation of energy at São Francisco de Aiucá community, in the city of Uarini, Amazonas state. The monthly availability of the systems is of 13 kWh. The cost with this type of energy is relatively low, about R\$ 15,00 per month, by individual system (maintenance and battery change), more an adhesion of R\$ 150,00 per home. The administration is made by the residents' association. In their original proposal, 19 homes would be contemplated with electric energy, but 23 homes were assisted in the total.

In addition of taking electric energy to the houses, the project replaced the fuels, eliminating the burnt residuals, before used for illumination.

REVITALIZATION AND POTENCIALIZATION OF MICRO POWER PLANT IN THE BORDERLINE - STATE OF AMAZONAS

Coordination: Military Command of Amazônia

The project consists in the revitalization and re-powering of micro power plants that assist Indian communities and isolated communities located around the Special Squad of Amazonas Borderline, and in the construction of new power plants. For example, the micro power plant Paricachoeira, installed in the state of Amazonas, which will be expanded with a new power, using 2 generating units of 92.78 kW each, replacing the old ones of 34 and 95 kW.

SHINING HEAVEN

Life has quite improved at Ilha de Lençóis, a paradise in the sea of Maranhão state, part of the city of Curupuru. Before the arrival of the Program "Light for All", the island residents would live in the dark, without any type of comfort, except for an oil lamp to break in the darkness. The perishable food had to be salted and leftovers would either go to the garbage or to the animals.

Some residents, the ones that live closer to the community school, used a power generator installed by the city hall, to have night classes from 6 to 10 pm. However, basically, the light would come from candles and oil lamps. Those were hard times!

When the team from the Federal University of Maranhão arrived to install the hybrid system of electric power generation, developed by them and financed by the Ministry of Mines and Energy, financial resources from the Program "Light for All", it was the sign that new times would arrive at Lençóis Island.

The amount of solar energy panels (162), the batteries (120), and the three towers from the wind system got the attention of the population of the island. The work to transport this equipment was worth it when everything was lighted up, and the light from the bulbs shined inside the homes, a new world had opened for all the 89 families in the island.

"Everything has changed a lot around here", said Evanildes Silva Araújo, born in the island, as he had to buy ice in Apicum-Açu before fishing in the high seas. He had to do this; otherwise he would lose the fishes. Now, he buys ice in the island, he already has a television, CD player, and the next step is to purchase a fridge for the "boss" (wife). Erinaldo de Jesus Silva is also in love with the island as he has been living there for 15 years. He came to visit his mother one day and he has never left. "I used to live by the school and had four hours of energy at home. If before, which was hard, it was already beautiful, imagine now that energy works 24 hours a day. And when I come from the sea, late at night, I see from far away the lights shining from the wind engines and from the houses. Today, they show us the way!" Says Erinaldo.

People are now using the energy to make some extra money. Mário Oliveira dos Santos is the owner of one of the small business in the Island. He, before, had a generator to keep the ice he would sell to the fishermen, he would spend about R\$ 150,00 per month only with diesel, not mentioning the costs for maintenance of the equipment. Today, the cold beer in the freezers and the TV turned

IIha de Lengóis MARANHÃO

Light from the wind engines and from houses work as Guides for those who come from the sea





Wind energy towers (in the back) and the solar panels, installed at the flagstone in the operation center, they assure energy to 89 houses of the island for 24 hours

on at night always bring in some residents for a night talk, and his expenses with the energy bill do not go over R\$ 68,00, he informed.

However, the testimony of Marluce Azevedo Oliveira, which rents rooms for tourists in the island, was really impressive. According to her, the expenses with candles were of R\$ 8,00 per day, that is, R\$ 240 per month, only with candles. Now she can offer a much better service to her guests, she is now buying fruits, cold soft drinks and she is thinking about improve the bed and breakfast, today she pays R\$ 28,00 per month to have energy at home for the whole time. For Cristiane Silva, the neighbor, "darkness was no good, it was very sad here and I used to be depressed. I wanted to leave and today I am happy, and I have a lot of appliances. I don't want to leave anymore! The residents of Guajarutinga Island, close by, keep staring the beauty of our lights and now they are moving over here. The arrival of energy was a gift from God!" She concluded.

GOAL OF THE PROGRAM

To bring free access for inhabitants of rural areas up to 2010.

Services Provided (up to May 2009): 2 million power connections, assisting 10 million people.

FORESEEN BUDGET

R\$ 20 billion, once R\$ 14 billion are resources from the Federal Government

Contracts signed by the Federal Government: R\$ 9.7 billion Released by the Federal Government: R\$ 6.9 billion

JOBS GENERATION

Estimate of 300 thousand new direct and indirect job posts.

*Reference: accumulated by May 2009

MATERIALS USED

- 883 thousand km of electric cable, equivalent to 22 laps around the earth
- 4.6 million poles
- 708 thousand power transformers

RESEARCH

Research ordered by the Ministry of Mines and Energy pointed out that the Program Light for All:

- Improved study opportunities to 40.7%, job opportunities to 34.2%, income to 35.6%, and healthcare to 22.1%, of assisted families.
- 1,586,000 families are able to watch TV in their homes and 1,466,000 families purchased a refrigerator.
- It has encouraged 480,000 people to return to life in rural areas.

"Light for All" in numbers

10 million brazilians have left darkness







NEW CHALLENGES

he joy, which infects all is great to look back and see that for the past five years, the Light for All program took more than 10 million people out of darkness, giving them more opportunities for development in the field. There is no denying that such a step was completed successfully.

The program was created with an estimated demand of 10 million people without electricity in rural areas of the country. Today, reaching the initial goal, it was found that in some states, there was an increase in the number of requests in relation to the initial estimate of the program. This is due to the fact that rural populations, with the arrival of electricity and what it represents, are choosing to stay on their land rather than migrate to the large cities. Is there still a return to the field, due to improvements in working conditions and income afforded by the arrival of energy.

The Light for All enters a new phase, and it certainly is the task more challenging and difficult program: in addition to maintaining the current pace of network connections, you must meet the families who live in isolated communities, especially those that are in the Amazon region, where it is not possible to carry electric power systems using the traditional transmission and distribution. Alternative solutions are being developed, with the use of decentralized generation, combined with local characteristics, respecting the environment and adding income.

Another task that the Light for All will, henceforth, will be to foster the sustainable development projects through the productive use of electricity. For with the energy, the possibilities for development and generation of employment and income will change the reality of families that have contributed to the greatness of this country.

Overcoming the initial goal is a source of pride! The effort of all involved in the program helped to improve the living conditions of more than 10 million Brazilians. It is based on those assurances, hard and encouragement that the fight will continue until it comes out of the darkness the last Brazilian.

Ministry of Mines and Energy

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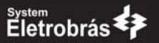
Program Light for All contacts





Electric Power Concessionaries and Rural Electrification Cooperatives Governments

State



Ministry of Mines and Energy