PHASE II

SAINABLE CAPITIES

AUBA SUSTENTAVE

SUSTAINABLE CARNAUBA: CONSERVATION, ENVIRONMENTAL EDUCATION AND SUSTAINABLE TECHNOLOGIES.



WHO EXECUTES THE PROJECT

















ROGUIMO - Rodolfo G. Moraes & Cia. Ltda. Carnaúba Wax





PRESENTATION

The Carnauba is known as the tree of life due to its environmental, economic and social importance. This palm tree, which is endemic to the Caatinga biome, is also present in the coat of arms of the states of Piauí, Ceará and Rio Grande do Norte. In Ceará, the carnauba wax represents one of the main export items, and rural communities find in the wax extraction the possibility of generating income during the second semester of the year, when the dry season begins and there is not enough water for farmers to focus just on the productivity of their crops.

The carnauba wax extraction is a traditional activity that still lacks improvements as for labor relations, carnauba crops management, technologies to increase productivity, and control of an exotic plant species that has affected the biodiversity of the Caatinga biome and attacked the carnauba trees. In this context, the Associação Caatinga, a civil society organization founded in 1998 with the purpose of protecting the carnauba and its habitat, carries out the Sustainable Carnauba project with sponsorship of the Union of Carnauba Wax Refining Industries of the State of Ceará (Sindcarnauba).

In the first phase of the project, the "Carnauba Dialogues" were held in various regions of the state to identify the bottlenecks in the production chain and to propose an action plan to overcome those challenges. The second phase of the project sought to give continuity to the good results, promoting through educational actions the modernization, formalization and professionalization related to the carnauba wax extraction, and improving the quality of life of the communities depending on this economic activity. All this, through the use of sustainable technologies to ease their coexistence with the semi-arid region, and aiming at the sustainability of the productive chain. These actions promote the sustainable development of rural communities, contribute to the protection of biodiversity, and help to improve the relationship between man and Caatinga.

We have reached the end of the second phase, feeling proud of our contribution to the improvement of the Carnauba production chain, and with the conviction that we still have a path to follow in order to make it increasingly sustainable. We invite you to check out the results of this process. Enjoy your reading!

Daniel Fernandes

General coordinator - Associação Caatinga



MONITORING REPORT

THE SUSTAINABLE CARNAUBA PROJECT WORKS ON TWO MAIN AREAS: EDUCATION AND SOCIAL TECHNOLOGIES.

The aim is to provide relevant information to the producer and the carnauba worker, and on the other hand, to assist the communities and families that are involved in this economic activity; improving their quality of life and reducing their social vulnerability, a crucial factor when it comes to create and offer better working conditions.

With regard to education, the Carnauba Dialogues meetings took place, an event with strategic workshops and relevant information to foster the carnauba production chain improvement. In terms of social technologies, 57 technologies were built and distributed to families directly related to the production chain.

LINES OF ACTION

EDUCATION

THREE 'CARNAUBA DIALOGUES' MEETINGS WERE HELD IN THIS EDITION.

The events objective was to bring together producers and workers and to share information about good practices and other important topics related to the production chain:

1-Job formalization;

2- Health and safety at work;

3- Rural retirement due to age and social security system special insurance regime.

The meetings took place in the municipalities of Sobral, Granja and Russas.

Three workshops were held in each of the meetings, followed by a space for considerations, questions, answers and suggestions. The partnership with the National Social Security Institute (INSS, as per its acronym in Portuguese), which was present in 2 of the 3 meetings, was very important as it helped to clarify important questions regarding rural retirement.

It is worth to note that the workshop on health and safety at work improved through the meetings, as the information and recommendations about PPE use were continuously compiled.



SUSTAINABLE DEVELOPMENT GOALS

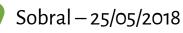
The Sustainable Carnauba project complies with the Sustainable Development Goals (SDG), a global agenda established by the United Nations to promote sustainable development globally.

SDGS COMPLIANCE



- **8.8** Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment;
- **12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature;
- **13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning;
- **15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species;
- **17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.







28 registered participants

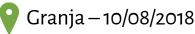
🕎 19 organizations

Workshops:

- Health and safety at work;
- · Solar dryer and productivity;
- \cdot Formalization of labor relations.









n 86 registered participants

More than 28 organizations

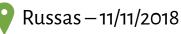
Workshops:

- · Rural retirement and special insurance regime;
- · Health and safety at work;
- · Formalization of labor relations.











💼 44 registered participants

26 organizations

Workshops:

- Health and safety at work;
- · Solar dryer and productivity;
- · Formalization of labor relations.





RESEARCH

THE PROJECT CONTRIBUTED TO THE DISSEMINATION OF KNOWLEDGE ABOUT CRYPTOSTEGIA MADAGASCARIENSIS

An invasive plant species has infested the carnauba crops in Ceará. This vine suffocates the palm trees and causes their death. Moreover, it competes with native species for hydric resources (it consumes a lot of water), doesn't allow other plants to get sunlight, and as a consequence, it prevents their growth.



PLANT NATIVE TO THE ISLAND OF MADAGASCAR, AFRICA

PROBABLY BROUGHT TO BRAZIL AS ORNAMENTAL PLANT

OCCUPIES SPACES AGGRESSIVELY

FAST-GROWING VINE, IT CAN REACH A HEIGHT OF UP TO 15 M.



LINE OF ACTION

SOCIAL TECHNOLOGIES

THE TECHNOLOGIES OFFERED WERE PLATE TANKS, BIO-WATER SYSTEMS AND ECO-EF CIENT STOVES.

The implementation of social technologies aimed at improving the quality of life of the carnauba working communities and reducing social vulnerability. The technical team met with the target communities (Espinho dos Lopes, Salgado e Junco Manso in Morrinhos, and Volta dos Almeidas in Granja), presented the project, confirmed their interest in participating, and identified the families to be benefited with the technologies and the project. To choose the families, we took into account information about their household, prioritizing families with school-age children and the elderly, as well as family income, access to water, use of firewood, relation with agriculture; but the main criterion was the participation a family member in the carnauba production chain. The families who identified themselves with the profile were later visited by the Associação Caatinga team.

After choosing the participating families, the social technologies construction began. The project's goal is the distribution of:

- · 20 plate tanks;
- 2 bio-water systems;
- \cdot 35 eco-efficient stoves.

TRAIN AND EQUIP 20 FAMILIES WITH PLATE TANKS







SDGS COMPLIANCE



- 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters;
- 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality;
- **3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination;
- 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life;
- **6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all;
- 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally;

- **6.b** Support and strengthen the participation of local communities in improving water and sanitation management;
- 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status;
- **12.2** By 2030, achieve the sustainable management and efficient use of natural resources;
- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries;
- **15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular

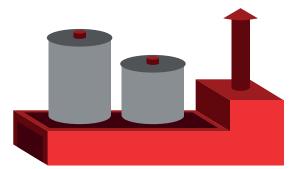


forests, wetlands, mountains and drylands, in line with obligations under international agreements;

• **17.16** Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.



TRAIN AND EQUIP 35 FAMILIES WITH ECO-EFFICIENT STOVES





SDGS COMPLIANCE



- **1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters;
- **3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination;
- **5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life;
- **12.2** By 2030, achieve the sustainable management and efficient use of natural resources;
- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries;
- **15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements;
- **17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

TRAIN AND EQUIP 2 FAMILIES WITH BIO-WATER SYSTEMS









SDGS COMPLIANCE



- **1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters;
- 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality;
- **3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination;
- 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life;
- 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally;
- 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity;

- **6.b** Support and strengthen the participation of local communities in improving water and sanitation management;
- **8.4** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status;
- 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status;
- 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning;
- **12.2** By 2030, achieve the sustainable management and efficient use of natural resources;
- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries;
- **15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements;
- 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries



PERSPECTIVES

A WORKING GROUP HAS BEEN SET UP INVOLVING INSTITUTIONS OF THE CARNAUBA SECTORAL CHAMBER AND OTHER SPECIALIZED ORGANIZATION ...) THAT TOGETHER ARE DEBATING AND ORGANIZING A NEW PROJECT.

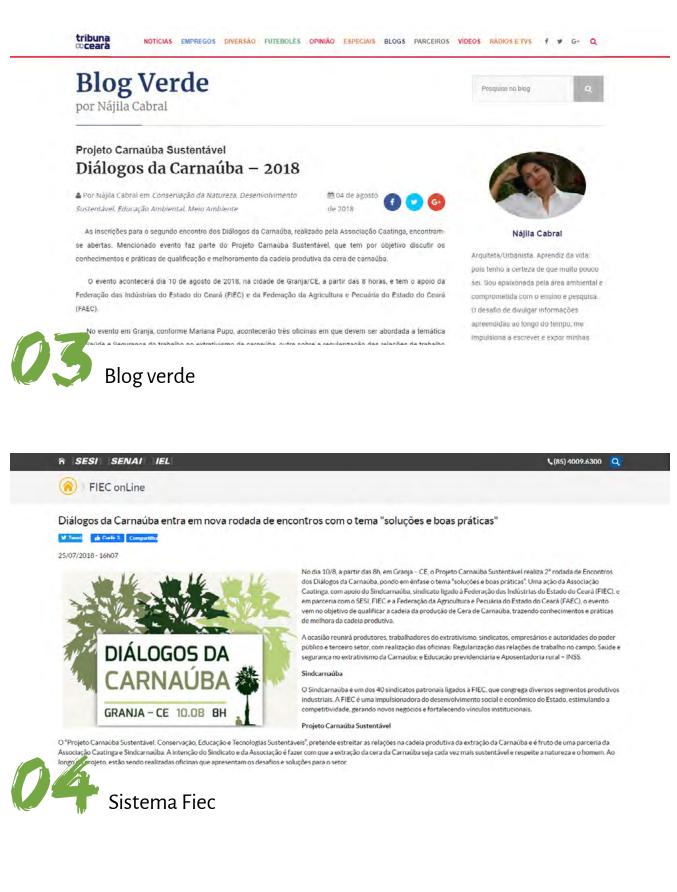
The field visits, the contact with the carnauba producers, and the Carnauba Dialogues educational meetings, allow us to perceive that producers still need to have access to more information regarding important topics such as entrepreneurial organization, productivity, and financial management. With a low level of organization and modest profits, many of the small producers feel distant from achieving the standards of professionalization, organization and safety that are required by inspection bodies, the processing industry and consumers.

In this sense, a working group was constituted involving institutions of the Carnauba Sector Chamber and other specialized organizations such as SEBRAE, CENTEC, IBAMA, SENAR and the Associação Caatinga. Together, they are debating and organizing a new project, with contributions from all organizations to foster the improvement of the production chain. The institutions already had meetings with producers from Marco and will soon meet with producers from Morrinhos in order to organize groups to receive consultancy from SEBRAE about management and productivity. The other organizations will help with the plans and actions needed in terms of labor formalization, devil's claw biological control, social security education, funding, among others.





COMMUNICATION







HOME METRO POLÍTICA VERSO REGIÃO SEGURANÇA JOGADA NEGÓCIOS BLOGS ÚLTIMAS 🔍

Satélite: diálogos da Carnaúba

SATÉLITE

Por Redação, 00:00 / 26 de Julho de 2018





O projeto Diálogos da Carnaúba estará em Granja, no dia 10 de agosto. Realizado pela Associação Caatinga e patrocinado pelo Sindcarnaúba por meio do Projeto Carnaúba Sustentável, com apoio da Federação das Indústrias do Estado do Ceará (Fiec) e da Federação da Agricultura e Pecuária do Estado do Ceará (Faec), ele destaca conhecimentos e práticas de qualificação e melhoramento da cadeia produtiva da cera de carnaúba.



vc repórter Flagrou algo? envie para nós (85) 98899-9597

 \bigcirc



Satélite





Ceará é notícia

HOME METRO POLÍTICA VERSO REGIÃO SEGURANCA JOGADA NEGÓCIOS BLOGS ÚLTIMAS

Carnaúba: de símbolo a expectativa

Por admin, anderson andrade@geq.com.br o de agosto de 2018 ATUALIZADO EN 2 DE AGOSTO DE 2018 ÀS 08:00:45

Hoje, na Coluna Comunicado:

= Diario

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A boa e velha carnaúba está na pauta das discussões da indústria cearense. O projeto Carnaúba Sustentável marcou para o município de Granja, a 300 quilômetros de Fortaleza, no norte do Estado, a segunda rodada da série "Encontros dos Diálogos da Carnaúba", enfatizando soluções e boas práticas para a exploração do produto. Será na próxima sexta feira. A articulação é do Sindcarnaúba e da Fiec. Produtores, empresários, trabalhadores do extrativismo e representantes de sindicatos, do poder público e do terceiro setor devem comparecer.

A carnaúba é a árvore-símbolo do Ceará. Em 2004, foi editado decreto com essa definição pelo então governador, Lúcio Alcántara. O Piauí também tem decreto que a considera assim, mas



desde 2017.

Comentários





NETWORK INVOLVEMENT

- \cdot Ashoka;
- Technical Chamber of Carnauba;
- · Caatinga Biosphere Reserve Committee;
- · Devil's Claw Biological Control Group;
- · Folha de São Paulo Social Entrepreneurs Network.

OUR NUMBERS

ADDING UP ALL THE ACTIONS OF THE PROJECT, WE REACHED THE FOLLOWING RESULTS:





292 THOUSAND LITERS OF WATER REUSED PER YEAR BY IMPLEMENTING 02 BIO-WATER SYSTEMS





320 HOUSAND LITERS OF WATER STORED PER YEAR WITH HELP OF 20 PLATE TANKS

DEFORESTATION REDUCTION AND HEALTH IMPROVEMENTS IN THE 35 FAMILIES THAT RECEIVED ECO-EFFICIENT STOVES.



