



SAFE CARNAUBA MACHINES PROJECT

ABOUT THE PROJECT

Carnauba wax, a product used in food, cosmetics, pharmaceutical and polishing industries, is produced from a powder which is extracted from dry leaves of the Carnauba tree.

After cutting leaves from trees during the harvest season, a process which does not harm the trees, the leaves are dried and then 'beaten' to extract the fine powder that covers them.

The extraction of powder from the dry Carnauba leaves is done in the field using a beating machine. The machines extracting the Carnauba powder are built in local garages without attention to the safety guards required to protect workers from injuries, meaning that machines miss important safety features.

Beating machines have cutting and hot parts, and injuries are very common and often serious.

PROGRESS TO DATE

70 MACHINES WERE FIXED¹
NO MACHINES WERE ORIGINALLY COMPLIANT



REDUCING RISKS TO THE SAFETY OF AN ESTIMATED 400 WORKERS



REPRESENTING **20%** OF MACHINES IN USE IN THE SECTOR



100% OF THE 70 MACHINES NOW HAVE



PERIGO SUPERFÍCIE QUENTE NÃO TOQUE

SAFETY SIGNS, GUARDS ON DANGEROUS AREAS & EMERGENCY STOPS

A CERTIFICATE OF CONFORMITY WITH SAFETY REGULATIONS²



279 WORKERS HEALTH & SAFETY TRAINED

Project partners

This project was implemented by UEBT through the GIZ funded project 'Supporting biodiversity-based supply chains in Brazil'.

The project component on Carnauba is implemented in partnership with the Initiative for Responsible Carnauba (IRC) and processing companies who are UEBT members.



With the support of:



Safety measures taken

UEBT started the Safe Carnauba Machines project in the harvest season of 2022 in partnership with the IRC and supported by GIZ.

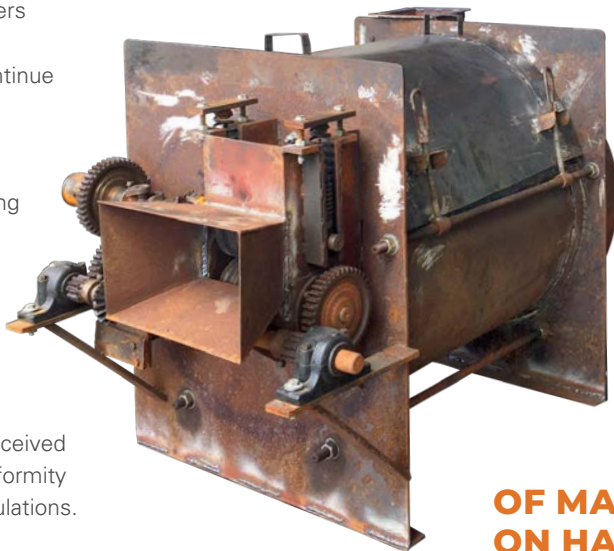
The project is implemented in collaboration with four Carnauba processing companies. It aims to reduce the risks of injuries of machine workers and tackle the lack of knowledge of machines owners and manufacturers on the legal safety requirements.

76 machines in 3 different states were inspected during the project. An engineer specialized in mechanics and health and safety carried out the inspections that revealed that the inspected machines needed several adjustments to improve safety for operators. The owners of the inspected machines received technical advice on all modifications needed to comply with safety regulations, and how to implement them.

Following modifications, the beating machines were reviewed a second time and, if all improvements were correctly implemented, were given a certificate of conformity with legal requirements.

While a few machine owners dropped out after the first inspection or could not continue due to harvest timelines, 70 machines were fixed with a wide range of improvements, representing an estimated 20% of the machines in the sector, significantly reducing safety risks for approximately 400 machine workers.

In addition, 279 workers received specialized training, in conformity with health and safety regulations.



WHAT'S NEXT

By 2025...

- Fix 100% of machines in use in the sector
- Seeking support from companies and other partners

Above: Example of a beating machine seen during the first inspection, before safety improvements were made.



100%

OF 70 MACHINES
NEEDED BASIC
SAFETY
ADJUSTMENTS³



88%

PEOPLE INTERVIEWED⁴
HAVE HAD AN INJURY
OR KNOW SOMEONE
INJURED OPERATING A MACHINE



73%

OF MACHINES DID NOT
HAVE AN EMERGENCY
STOP BUTTON



90%

OF MACHINES HAD
NO SAFETY SIGNS
ON OR NEAR THEM⁵

49%



OF MACHINES HAD NO COVERS
ON HAZARDOUS PARTS SUCH AS
HOT AND CUTTING ELEMENTS

REFERENCES

1 Improvements included installations of safety signs, emergency stops, radiator covers, exhaust silencers, motor belt covers, grinding equipment covers, drive shaft and gear covers, and straw load limiters; 2 Conformity with safety regulations of the Brazil Public Ministry of Labor; 3 On 76 machines inspected; 4 On 40 machine owners interviewed; 5 For example, "Hot surface – do not touch" or "Protective equipment must be worn".

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