

ROUND 1 SOCIAL INNOVATION

A. Social business idea

A1: Social Mantra One-liner:

Making sustainable home products out of coconut fiber waste while generating jobs and reducing pollution.

A2: Contributions to UN goals:

Un goal 8: Decent work and economic growth.

We seek to generate full and decent jobs focused on women artisans who are dedicated to removing dry coconut fibers.

Un goal 9: Industry, innovation and infrastructure.

According to Abriga Nature, coconut fibers are suitable for commercialization in the construction of houses as thermal insulation in walls, ceilings or floors. Due to their fibrous and porous structure, fibers can reduce heat and sound transfer. That is why our long-term goal is to serve people living in marginalized or resource-poor areas.

In a study conducted by the National Council for the Evaluation of Social Development Policy (CONEVAL, 2023), it states that the five entities with the highest percentage of the population in extreme poverty in 2022 were Chiapas with 28.2%, Guerrero with 22.2%, Oaxaca with 20.2%, Veracruz with 13.1% and Puebla with 11.4%.

Un goal 12: Responsible consumption and production

We seek to improve the habit of consuming plastics, because it is one of the most polluting materials in the oceans. According to the National Commission of Protected Areas (2023), a little more than eight million tons of plastics go to the oceans a year, which is equivalent to the load of a garbage truck per minute. With the effect of the sun, plastic releases toxins into the water, affecting organisms that are at different levels of depth, including seabirds. Therefore, we aim to reduce the purchase of plastic pots and replace them with pots made of coconut fiber.

Un goal 13: Climate action.

Through surveys of local coconut sellers, we observe that the vast majority of coconut waste ends up in landfills and being burned. According to an article in Sustainable Architecture (2023), coconut shells take 10 years to decompose naturally and follow their life cycle. For this reason we decided to contribute to take advantage of coconut fiber by making pots and insulating fabric.

Mission

We're a business that collects discarded coconut shells to create two products for the home, creating a network of contribution to the environment and minimizing pollution.

Vision

In two years to be a company that minimizes the waste of coconut fiber, creating ecological products, giving it another use, generating jobs and helping marginalized areas with our products.

B. ESG preparedness

B1. Target issues

The source of Ecoco's social idea was born with a mixture of personal experiences and a systematic search, since it is oriented to the vision a member of the team casually visited a coconut stand located in Laguna Real subdivision, in the city of Veracruz to consume coconut water, however, in that stand there was a dump with more than 100 coconuts accumulated and piled up that lasted for more than 3 weeks, being evident the bad condition of coconut shells and even a bad smell.

The evidence of video and photos are available in the following link: <https://drive.google.com/drive/folders/1DKdS9aIQD2fzkFKnSqf9UKc7TVXz2R7x?usp=sharing>

According to the Secretary of Agriculture and Rural Development (2022) Mexico is a major coconut producer in the world, being the 7th coconut producer in the world. In terms of production, Mexico did 474, 139 tons in 2022 and exported 25,9 thousand tons in 2020. All over the world every year, 50 billion coconuts are produced, 85% of these shells are handled as waste and disposed of in landfills or dumps causing negative impacts on the environment. (Salazar, 2020)

We decided to do a search on what happens to the coconut shells once they're consumed. Most sources say that these were thrown away, burned and sometimes used as fertilizer. However, we realized that you can take advantage of coconut fiber and give it a new use. We looked for who else was affected by coconut waste, so we decided to investigate who sold coconut in the city of Veracruz, and that's how we found "El rey del coco" located in Calle J.B Lobos, David Alfaro Siqueiros Supermanzana y entre Las Bajadas, Emiliano Zapata, we agreed to a meeting and he told us that they throw the coconut shell in the garbage, however they must wait two days for the garbage truck to pass, so in the meantime, the shells generate mold and attract flies and bees due to the sweetness of the fruit.

B2. Root causes

We interviewed 5 coconut stalls in Veracruz, and all of them told us that they throw away the coconut shells, without giving it another use and even burning them.

The evidence of videos are available in the following link: <https://drive.google.com/drive/folders/1zr4Vi6JGIGS7wxvDgriKPT8J1yjVLMzv?usp=sharing>

A summary of what we obtained is presented below

Questions	How many coconut shells are thrown away in a day?	What do you do with coconut shells?	Do you know the fate of coconut shells?	Does anyone buy you coconut shells?	How often do you throw the shells?	What kind of coconut do you sell?
Lucia Carr. Veracruz - Medellín Dos Bocas, Veracruz.	100	Someone takes them and picks them up	No	-	daily	hybrid for almost 1 year
Laguna Real Carr. Veracruz - Xalapa Laguna Real, Veracruz.	200	They are thrown or given away	They throw it on a ground for filling	No	every 3 days	hybrid for more than 30 years
El Rey del Coco Calle J.B Lobos, David Alfaro Siqueiros Supermanzana	20-50	They throw them away	No	No, but sometimes people ask them for compost	every 2 days	Tabasqueño for more than 10 years
Esther Guerrero "Jugos Beto" Carr. Veracruz - Medellín	72	They burn the shells	-	No, they give them away for compost	daily	For 6 years
Emir Barrios Av. Medellín Dos Bocas, Veracruz	300	They throw them away	-	-	every 3 days	-
Street seller "Playa tortuga" Costa de oro, Veracruz, ver.	20	They throw them away	No	No	daily	hybrid

Our principal concern was that the owner of "Jugos Beto" (Esther Guerrero) who has been selling for 6 years, told us that she burns coconut shells. The incineration is one of the most contaminant coconuts shells' destination.

According to the 2018 Acapulco Sol article, residents of the Villa Rotaria community in the city of Guerrero, Mexico have to endure daily breathing smoke from a burning coconut shell. So the inhabitants near these spaces suffer from breathing all the smoke, which affects their airways in young and old adults, in addition, the burning of coconut shells releasing gases that contribute to pollution, as well as other greenhouse gasses and carbon emissions.

B3. Current solution landscape

The current solution offered by other organizations are presented below

- Pots

Other alternatives in coconut fiber pots are already available in Mexico. It is a fact that we are not creating a new solution, but Ecoco wants to join the companies that are already implementing this solution and be part of the change.

Establishment	Place	Online store
E-MA Orgánicos	México	https://www.e-maorganicos.com.mx/
The Home Depot	México	https://www.homedepot.com.mx/jardin/macetas/macetas-de-barro-arcilla/macetas-fibra-coco-12-pulgadas-dorado-aguasav-308404
SODIMAC	México	https://www.sodimac.com.mx/sodimac-mx/content/a1430001/Tiendas/
Siyapath Productions	Colombo, Sri Lanka	https://www.etsy.com/mx/shop/SiyapathProductions?ref=shop-header-name&listing_id=1046256912&from_page=listing

- Cloth coconut fiber

Outdoor coconut fiber cloth can be found in France in "La Scourtineria", however, they're only shipped to Europe. In amazon, it sells the coating in the form of roll with shipments to all the world and in "Grow depot" it sells coconut fiber in bags with shipments to the Mexican

republic. In Veracruz, there is no competition for outdoor coconut fiber cloth, so it will be a new product in the community.

Pros	Cons
We collect coconut shells that go to landfills to be burned.	It is an artisanal process, which requires time and dedication.
Due to the beneficial properties of coconut, our products are functional.	Isn't a new current solution in the whole country and world.
In the port of Veracruz there is no competition from flower pots.	

B4. Solution to implement

In order to create cloth for outdoors and pots we need four steps which are:

Step 1: Separate the coconut fiber.

Step 2: Put the fiber in a deep bowl.

Step 3: Prepare a mixture of water, flour and white vinegar, which will serve as glue.

Step 4: In a bowl stir the above mixture with coconut fiber, to shape the fabric and pots.

The evidence of videos are available in the following link: https://drive.google.com/drive/folders/1ny9m_821vWY8DBgrQoHhB9C6u5etY0BZ?usp=sharing

B5. Solution uniqueness

Even in Veracruz, coconut fiber is already sold, usually in bags or rolls, and they're used for other types of products. So the implementation of coconut fiber cloth and pots is an improvement in the existing solutions.

C. Stakeholder engagement

C1. Engagement strategy

As main stakeholders we made an agreement with "El Rey del Coco" which is a local seller with more than 10 years of experience selling coconut, its local is located on Calle J.B Lobos, David Alfaro Siqueiros Supermanzana and between Las Bajadas, Emiliano Zapata, 91777 Veracruz, Ver.

The main objective of this agreement is to collect the coconut fiber that is usually discarded daily without that fiber obtaining any other utility, ending up in landfills or being burned. In this way we can take advantage of fiber for the elaboration of pots and thermal fabric.

On the other hand, the director of the Municipal Institute of Women of Veracruz located in J. M. Palacios Sn, Pinos, 91870 Veracruz, Ver., which provides first-contact care to women victims of violence, spoke providing comprehensive and specialized attention with a gender perspective, as well as promoting the equal participation of women in the public and private spheres.

Therefore, the intention to create a workshop with the support of this institute is to help women who want to acquire a new skill so that they can generate income by creating coconut fiber pots. We are currently waiting for the Municipal Institute of Women of Veracruz to give us dates to teach the workshop of making pots of coconut fiber.

We also aim to have partners within two years who want to give us the financial support to remunerate women who help us in the production process of our products in terms of coconut fiber separation.

C2. Social support campaign performance



Thursday, April 9, 2024. We made an agreement with "The Coconut King" to be our main suppliers of coconut fiber.



On Thursday, May 9th, we spoke with the director of the Municipal Institute of Women of Veracruz, which gave us its support to consider opening the workshop of making pots of coconut fiber. We were waiting for the dates to be able to teach the workshop.

D. Learning curve

At the beginning, our products were kitchen utensils and lighters. At first our main material was the coconut shell but as we went ahead with the project we realized that it was not convenient to use it.

We used the dry coconut shell, which cost money, for the first prototype we bought 10 coconuts per 100 pesos, also in the process of breaking the coconut, the pulp and water were wasted also the process of sanding turned out to be more delayed and complex than we thought. Our second product was the lighters, although they're made of coconut fiber, their main function is to encourage fire, so we realized that it was contradictory due to the main problem we want to eliminate.

What did we improve? After testing, we learned that it was better to work with coconut fiber, since green coconut is mostly discarded so it has no cost, apart from the fact that the fruit is not wasted and is easier to work with.

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