Partnerships for Forests

How a French shoe company is protecting forests and improving livelihoods in the Brazilian Amazon: the case of Veja

Picture: Hick Duarte

Forest-grown commodity supply chains can deliver benefits for smallholders, consumer companies, and forests. This case study shares lessons on how Veja has strengthened the native rubber supply chain in Chico Mendes Extractivist Reserve (RECM) in Acre, Brazil. The company has created financial incentives for rubber tappers to protect forests and improve communities' understanding and application of best practice in rubber production and the role of women in the supply chain.

Veja has established a profitable and sustainable natural rubber value chain in Brazil that aims to protect forests in the long-term. To-date they have supported over 400 households to switch to native rubber production to receive price premiums that generate higher income than alternative, unsustainable livelihood activities. Additionally tappers receive a payment for ecosystem services on the condition they do not cut down trees on their property. This provides families with an incentive to protect standing forests and encourages them not to take up cattle ranching – an activity that traditionally sees forests lost to make way for pastureland.

Partnerships of Forests (P4F) supported Veja to develop partnerships with eight new cooperatives, setting up inclusive governance and deforestation monitoring systems for the Payment for Social and Environmental Services (PSES), providing rubber tapping training and kits to smallholders, improving women's participation in trainings, and cover gender topics as part of the trainings. This has resulted in improved stakeholder engagement - with 200 new families benefitting from Veja rubber and PSES payments, improved smallholder incomes, and generate a greater awareness within communities of the role that women play in the rubber value chain. This cases study shares key learnings from our engagement with Veja.


Picture: Project Archive

Reviving the natural rubber value chain to protect the Amazon

The rise and fall of Brazil's rubber industry

The Amazon is the only place in the world where rubber trees (Hevea brasiliensis) are endemic. Native Brazilian groups in the State of Acre have been involved in informal rubber production since at least the 1700s. Rising global demand for rubber led to the boom of the industry in the 1850s, and by 1912 Brazilian rubber production represented nearly 90% of the global market. This attracted tappers from across the North-eastern region of Brazil and other Amazonian states in the country. However, due to increased competition from rubber plantations in Southeast Asia, the industry faltered in the early 1920s. By 1921, Brazilian rubber only represented 8% of the global market (Resor, 1977). What was left of the rubber industry in Brazil was decimated in 1935 by an epidemic attack of pathogens.

To handle increased competition in the global rubber market and the seasonal characteristics of the product, rubber tappers in Brazil 'developed a diversified strategy for economic survival that mixed subsistence farming and sale of rubber and Brazil nuts' (Keck).

In the 1970s, the federal government established economic development policies for Acre state, which incentivised cattle ranching instead of rubber collection. As a result of poor pasture management and meager inputs, productivity and incomes were far lower than anticipated. After a few years, overuse of pastureland led to high levels of degradation, pushing ranchers to expand into forests.

Extractivist reserves helping to protect small-scale rubber production

Since the 1980s, the remaining native rubber tappers have fought to protect their access to forests within the Amazon. Chico Mendes was one of the key leaders in the political movement that sought to protect communities' forest access. He created the National Council of Rubber Tappers in 1985). This ultimately resulted in the creation of extractivist reserves (in Portuguese Reservas Extrativistas, RESEX) to protect forests and secure local access to forest resources. The RESEX model later became widely replicated, recognized by the International Union for the Conservation of Nature (IUCN) as a category of conservation.

Due to factors such as the lack of public policies for forest-friendly economic growth in Acre state, as well as challenges related to logistics, size and type of demand for forest products and the capacity of local organizations to perform business activities, the reserves initially struggled to operate.

In the late 1990s, a Sustainable Rubber Supply Chain Programme was launched that provided state subsidies to enhance rubber production. Since then the majority of native rubber tappers have come from communities living in extractive reserves (RESEX). These territories have land tenure systems that place limitations on land use activities. Communities can grow crops, raise cattle, and carry out extractive activities, but they cannot cut down forests beyond a pre-established limit (10% of the area, up to a limit of 30 hectares in the case of the RESEX Chico Mendes) or sell the land they occupy. For a few decades, this arrangement worked well for tappers and they were able to rely on rubber tapping as a main source of income.

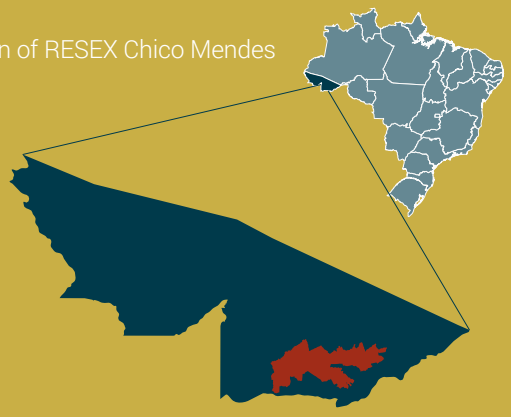
Picture: Project Archive

Reserva Extrativista Chico Mendes (RECM)

In Acre state, the Reserva Extrativista Chico Mendes (RECM) has been used as an example of "environmentalism of the poor" to counter claim that environmental degradation is correlated with high levels of poverty (Alier, 2007). Low-income communities that depend on the standing forest may be the most qualified and efficient environmental protectors (ibid).

RECM today occupies an area of approximately 970,000 hectares (ha), across a population of roughly 30,000 people. The most common economic activities are animal breeding (such as cattle, pork, and chicken), extractivism (nuts and rubber) and agriculture (yuka being the most significant)..

Location of RESEX Chico Mendes



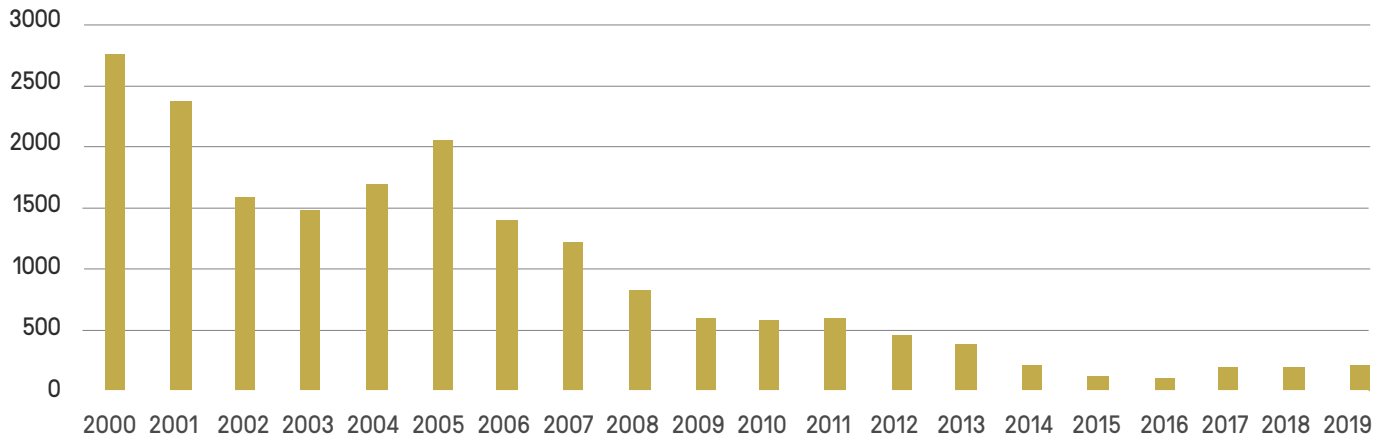
"Although linking environmental and social questions was not a new idea, the Chico Mendes case linked them (...) over what kind of development should take place (...). It evoked a conception of sustainable development that not only considered human needs but also championed the rights of specific populations to define their needs and formulate development alternatives." (Keck).

A new century:

Increased global demand for sustainable rubber as an opportunity to revive the sector and protect the forest

Since 2000, fluctuations in the price of rubber and increased competition from rubber plantations in Southeast Asia has further driven down rubber production across Acre (see graph below). Even with governmental subsidies and import tariffs, incomes do not meet households' demands. This has pushed tappers to resort to other economic activities, such as cattle ranching, which has had negative deforestation impacts.

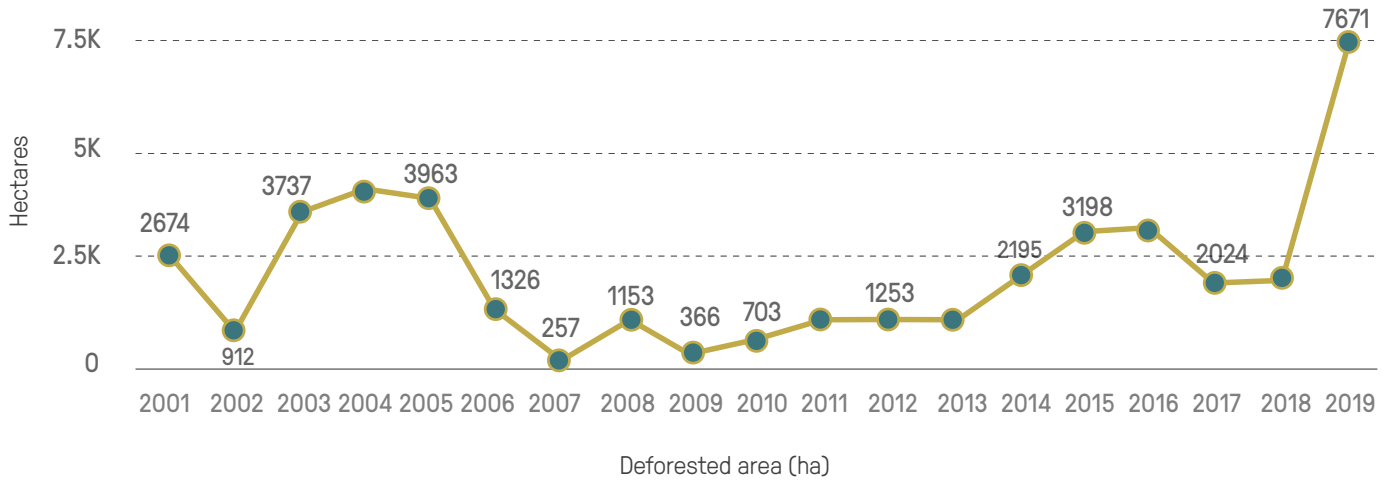
Figure 1. Rubber Production in Acre - Metric tons/year (2000 – 2019)



Source: IBGE - Vegetal Extraction and Forestry Production


Picture: Project Archive

Figure 2. Total deforested area per year in the Legal Amazon



Source: Instituto Nacional de Pesquisas Espaciais (INPE) ISA. Unidades de Conservação no Brasil: Reserva Extrativista Chico Mendes. https://uc.socioambiental.org/pt-br/arp/626 . Last access Aug 26 2021.

In recent years there has been a spike in global demand for sustainable rubber. Large supply chain actors are now willing to pay price premiums to rubber tappers committed to zero deforestation This has provided a unique opportunity to revive natural rubber production in Acre State, that is dependent on standing forests, and reverse the trend towards cattle ranching.

Veja: producing shoes using sustainable rubber

Veja is a French shoe company established in 2003 that sees sustainability and fair trade as core to its business model. Veja was created with the ambition to produce the most sustainable pair of trainers on the market. It is a certified B-Corp and fair-trade company. Today, Veja trainers can be purchased in more than 60 countries and the company has sold 3 million pairs of shoes. The firm buys native rubber from tappers in Acre that is used in the production of its soles.

As of 2021, one thousand tonnes of wild rubber has been purchased from 435 rubber tappers. The company has a well-established relationship with their producers through their long-standing operations and above-market rates. They also recently started a Payment for Social and Environmental Services (PSES), that will provide premium prices to rubber tappers that follow deforestation-free protocols.

Picture: Project Archive

How does the business model work

Collection

- In the forest, rubber is extracted from rubber trees.
- Each family-owned property has at least 2 rubber "paths" with an average of 100 trees each.

Cooperatives and associations

- 2-3 times per year, wild rubber is sent to small cooperatives and associations, mainly by boats and trucks, where it gets processed.

Industrialization

- Processed rubber is sent to Veja's manufacturing headquarters, I in the south of Brazil, to be processed for the sole of shoes.
- Shoes are then sent to distribution centers in France and the USA.

How P4F supported Veja

Veja Shoes requested P4F's support to increase rubber production in Acre and ensure sustainability within their rubber supply chain. P4F supported Veja Shoes with:

1. Scaling operations by signing partnership agreements with eight new cooperatives,, which include non-deforestation protocols. The new cooperatives represent 200 families (1,087 direct beneficiaries) which has nearly doubled the number of families benefitting from Veja Shoes There are now 435 households (2,365 beneficiaries) that provide rubber for Veja. As a result, Veja has been able to scale operations –from 69 tonnes in 2018 to 530 tonnes in 2021.

2. Setting-up inclusive governance systems through effective stakeholder engagement for PSES prices that provide a price premium for sustainable tapping methods. P4F supported the development of workshops with smallholders and cooperatives to create a sustainable production protocol under Veja's PSES and formalise the PSES guidelines. P4F also supported the development and implementation of a deforestation monitoring system that helps monitor PSES commitments signed by rubber tappers and cooperatives. It is now possible to analyse deforestation rates and include field diagnosis within the same platform.

3. 3) Providing large-scale training to communities to adopt best practices tapping methods. P4F's support improved the engagement between Veja and producers through the provision of rubber collection kits, technical assistance, and several training events where the team shared information on best practices for collection, storage, and transport of rubber. The purpose of the training was to help families unlock the additional PSES price premiums by following the new protocols to protect the remaining forest.

4. Increasing gender awareness on the relevance of women within the value chain, by involving them in sustainable production training and helping them understand the new PSES scheme so that they will be able to take a more active role in household decision-making and rubber production.

History of Payment for Social and Environmental Services (PSES)

Veja started to source rubber from Acre state in 2017 and established the initial PSES system the following year. They purchased native rubber from eight municipalities (Sena Madureira, Assis Brasil, Brasileia, Xapuri, Feijó, Tarauacá, Porto Walter, Rodrigues Alves) and as well as the RECM.

The PSES gives tappers a price premium compared to the average market price for rubber. In 2018, the price premium was 80% of the Brazilian rubber market price, meaning rubber tappers that signed up with PSES received 180% of the market rubber price. However, at that time, some of Veja's suppliers were not compliant with environmental laws and deforestation rates were high within the RECM. P4F's support helped improve monitoring and compliance with non-deforestation commitments.

Picture: Project Archive

Picture: Project Archive

Lessons from P4F's work with Veja

Lesson #1:

Payments for Social and Environment Services scheme work better when governance arrangements between off-takers, associations, cooperatives, and producers are clear and allow them to equally contribute to and agree on a sustainability protocol and monitoring system.

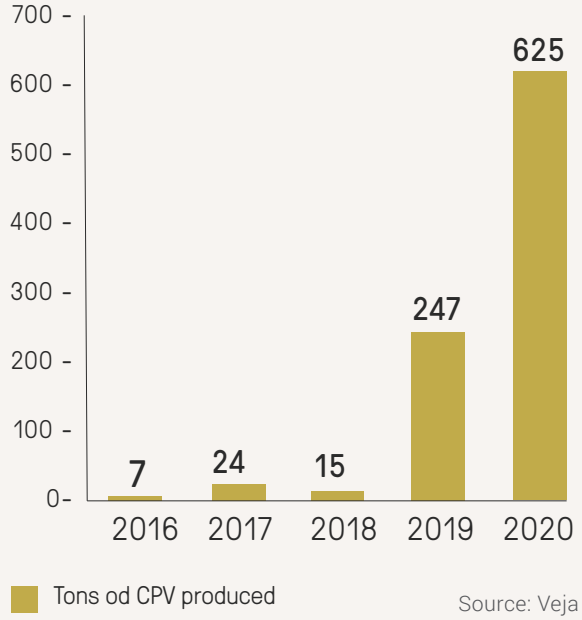
To create a sustainable sourcing framework and formalise non-deforestation guidelines for stakeholders involved in wild rubber production, Veja realised close engagement with producer families and cooperatives was important to ensure their buy-in. With P4F's support, Veja hired a specialised consultancy firm, Instituto de Desenvolvimento Social (IDS), to research and identify social justice and gender equality issues within rubber producing households and traditional communities in Brazil.

From June 2020 until July 2021, IDS worked with wild rubber producers' families, leaders of local associations, and Veja's management and operational teams to develop a protocol for sustainable production. Nearly 90 people participated in five workshops across three municipalities (Assis Brasil, Tarauacá, and Xapuri). The municipalities were selected based on the prominence of deforestation in the landscape and their contribution to Veja's rubber production. By the end, all stakeholders involved with wild rubber sourcing for Veja signed the jointly built sustainable production protocol. The protocol includes a set of socio-environmental criteria for the purchase of raw materials, an agreed governance structure, and monitoring and evaluation methods as explained in Box 4.

The protocol clearly specifies co-responsibility between families, cooperatives, associations, Cooperacre (the central cooperative that processes the raw material), and Veja to ensure the sustainable production criteria are achieved. As part of this, the protocol requires, all stakeholders come together once a year to discuss prices, quantity sold and the price premium (PSES), to avoid price fluctuations and reduce market uncertainty.

As the biggest cooperative in Acr, Cooperacre is responsible for receiving inputs from Veja and paying the tappers. They receive the raw material from local cooperatives and transform it into Granulado Escuro Brasileiro (GEB), in order to be transported to Rio Grande do Sul to be processed into rubber soles.

Figure 3. Increase in rubber supply, CVP type, purchased by Veja



Source: Veja

Picture: Project Archive

The four sustainable production protocol principles

The protocol is structured into four principles that were developed and agreed on by all stakeholders:

1. The recognition that the supply of sustainable rubber occurs through a network that involves families, cooperatives, associations, Cooperacre, and Veja to ensure sustainability targets are achieved;

2. A governance approach that encourages collaboration and discussions amongst stakeholders. This includes strengthening the autonomy of cooperatives to manage their production and decision-making processes;

3. An agreement that producer families, cooperatives and associations will keep their credentials as sustainable rubber producers, as long as they keep deforestation on their land within the agreed parameters;

4. The commercial relationship between Veja, Cooperacre, and their associates complies with ethical, social, and ecological principles for purchasing raw material, as expressed in Veja's Code of Conduct and FairTrade Certification. In doing so, all stakeholders will cooperate and participate in the decision-making process, abide to current land use, human rights, and sustainable development legislation in the Amazon.

The protocol states that for the PSES payment to be released, producers and cooperatives must meet the following sustainability criteria:

- Maintain good quality rubber;
- Stay updated on best practices in rubber collection;
- Comply with the governance arrangements established by the protocol, and;
- Follow land use activities compatible with the land use management plan, the Brazilian Forest Code, and RECM rules

To comply with these sustainability procedures, rubber tappers are trained to follow good management practices that provide advice on the length and depth of the cut, the number of cutting days, and road cleaning standards. This training supports tappers in complying to rubber quality requirements, such as moisture, weight, and identification standards. Rubber tappers must also fulfil commitments related to production and social organisation (including delivery schedules, documentation, and their participation in assemblies).

Additionally, the protocol defines a set of labour standards that all tappers need to be compliant with. This includes:

- No slave nor child labour, with the exception that any participation of children and adolescents who assist family production cannot entail dangerous activities and the workload cannot compromise their school attendance; and
- There is no discrimination against workers based on sex, race, sexual orientation, illness, disability, marital status, age, religion, political affiliation, caste, social origin, ethnic origin, nationality, or any other characteristics.

This has helped bring greater transparency in the supply chain and improved understanding of producers and cooperatives on the importance of best practice and labour standards.

Another key element of the PSES is its monitoring system. The system monitors deforestation rates of each tapper and tracks the premium prices that will be paid to each tapper by Veja as an incentive for ensuring forests remain intact. The system allows Veja to verify deforestation rates within the tapping areas and identify whether it meets the threshold defined in the non-deforestation protocol.

Overall, the monitoring system strengthened the PSES governance and feelings of co-responsibility between Veja, the cooperative and its members. Every six months, tappers and members of the cooperatives visit deforested areas within the rubber collection areas to identify the source of deforestation. As an incentive to respecting this protocol, they receive an additional payment made on an individual basis. As a result, everyone involved in the supply chain is incentivised to keep deforestation within the established limit.

Picture: Project Archive

Picture: Hick Duarte

Lesson #2:

Training and PSES premiums can enable communities to switch to rubber tapping and increase smallholders' income.

In 2019, when P4F started supporting Veja, the company planned to increase the number of tappers supplying Veja from Acre State, but first needed to overcome several challenges. First, they needed to change the mindset of rubber producers to move away from cattle ranching. As the previous section discussed, establishing a PSES system provided price premium for rubber tappers in exchange for zero deforestation commitments. With P4F's support in getting stakeholder buy-in for the sustainability protocol, an additional 200 smallholders were willing to supply Veja.

Yet, smallholders needed support to change their practices and switch to rubber tapping, as upfront investment costs and limited knowledge and skills for the new sustainable methods form key barriers.

To improve knowledge and skills, Veja delivered training on management and good practices in rubber tree cultivation. With P4F support, 200 tappers participated in training on every step of rubber collection, as explained in the figure below.

A step-by-step guidance to rubber tapping

1. Tree identification

Identify the most suitable trees.

2. Tree preparation and extraction

a

Tree scraping – prepare the tree for tapping by cutting away shrubs and debris.

b

Tree cutting – apply transversal cuts with a special knife to enable rubber extraction.

c

Rubber collection – using a cup, let the rubber collect for at least three hours.

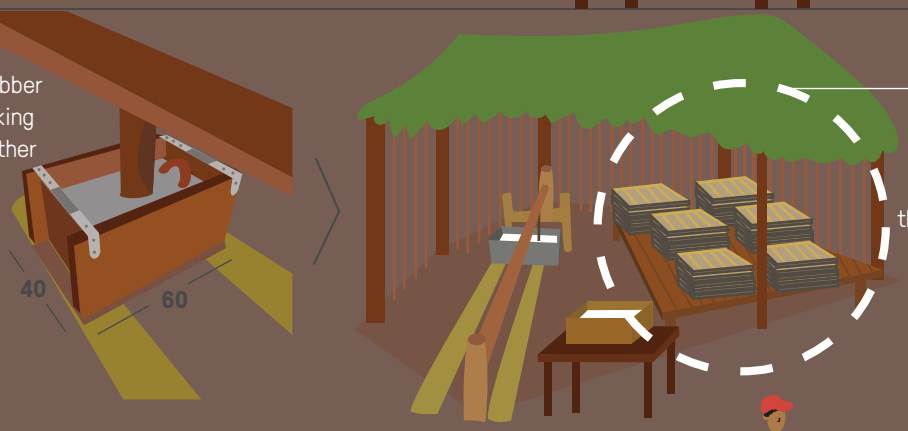
3. Processing

a

Straining the rubber - remove dirt, insects and other elements from the collected rubber.

b

Coagulation of rubber – place the clean rubber in a wooden box. Then add a coagulator substance, obtained from the rubber tree. Leave the rubber to coagulate for 24 hours.



c

Rubber press – Pressing the rubber takes over a day and needs checking every four hours to evaluate whether more pressure is needed.
The press is usually made with wood. As a result, pressed virgin cernambi (or 'Cernambi Virgem Prensado' in Portugese – CVP) is made.

d

CVP storage – wash, clean and store the CVP in a ventilated location, suspended from the ground to avoid contact with sun or humidity.

4. Logistics

Transporting - Tappers transport the CVP to the local cooperative and receive payments by volume. Transport modes often consist of small boats owned by tappers. The local cooperative receives, stores, and transports all CVP to Cooperacre to process it into Granulado Escuro Brasileiro (GEB), a type of processed rubber resulted from the CVP processing, which is then sent to Veja's factory in Rio Grande do Sul for processing into soles.

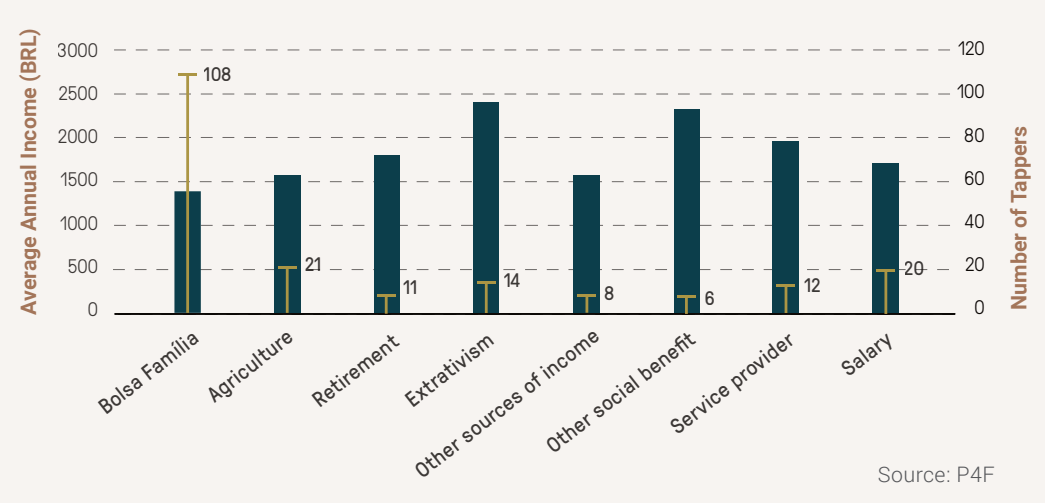
Between 2018 and 2021, rubber sales and PSES payments from Veja has increased smallholder income by 71% (on average).

This section presents a cross-sectional analysis of how Veja has supported livelihoods of rubber tapper communities. The analysis is based on two data sets. The first data set was collected by Veja in 2018 (prior to P4F's support), and contains income figures from 235 rubber producers in eight municipalities received from rubber and the market price per kg. The second data set was collected by SOS Amazônia, a local NGO in Brazil, between 2019-2020, and focused on 200 new rubber tappers based in Assis Brasil, Tarauaca, and Xapuri municipalities.

The socioeconomic background of Veja's tappers

Based on the data collected in 2019 by SOS Amazônia, each family produced an average amount of 320 kg of rubber per year. In most cases, rubber tappers were not exclusively reliant on rubber for their livelihoods but had multiple income streams, such as agriculture, regular employment, public retirement pensions, and other non-timber forest product (NTFP) activities (e.g. Brazil Nuts). Due to the social and economic profile of the beneficiaries in the region, more than half of the households interviewed for the study mentioned were receiving national social welfare (Bolsa Família) payments (See Figure 4 below).

Figure 4. Average income per economic activity and number of tappers with predominant income source per economic activity (BRL)



Average income (BRL)

Number of tappers

Increase in income from rubber tapping and PSES premiums

Based on data from SOS Amazonia, Veja's PSES and rubber payments provided additional income for all rubber tappers, on top of the annual income they received from other sources. The increase in income due to Veja's payments is most significant for rubber tappers that were reliant on Bolsa Familia payments before engaging with Veja

.

Overall, compared to households' income per capita and other economic activities, the additional income received from rubber varied significantly between rubber tappers:

Lowest income families

Those in the 10th percentile that reported an annual income of BRL 2,415 or less

experienced an average of 124% increase in their income since supplying Veja mainly due to PSES .

Families with higher incomes

Those in the 9th percentile that reported an annual family income of BRL 17,136 or more

the PSES increased income by 8% (on average)

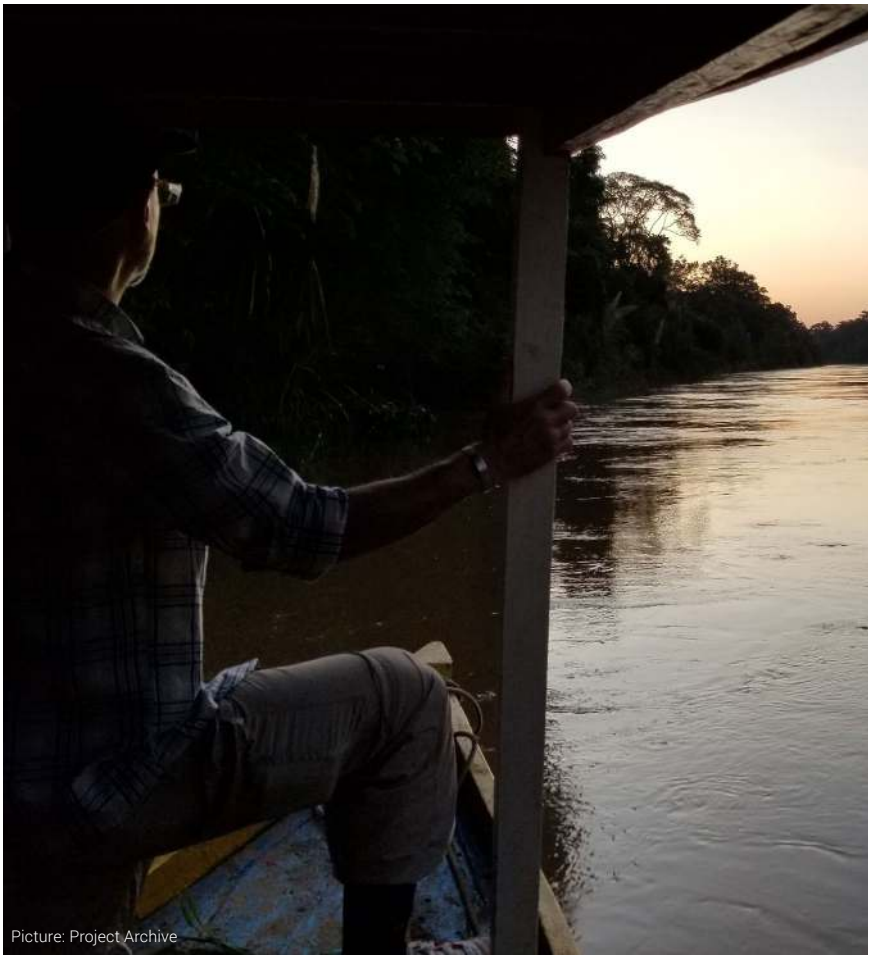


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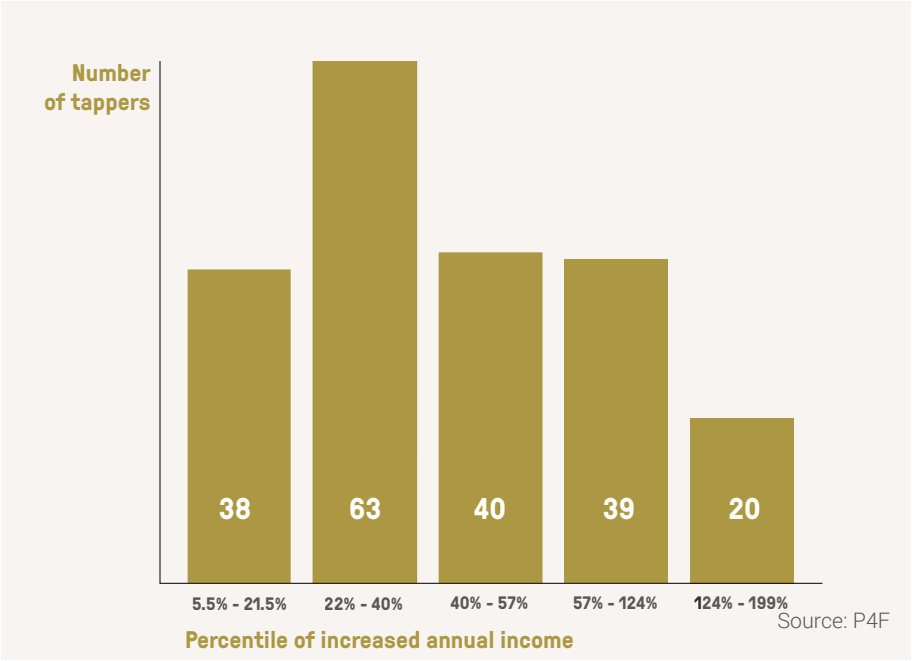
Figure 5. Number of tappers per percentile of increased annual income



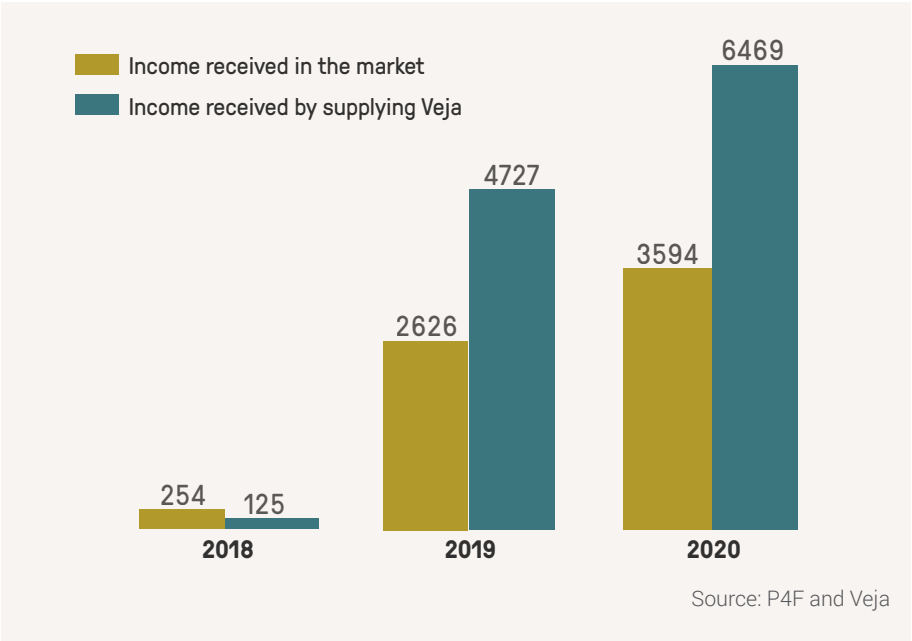
Source: P4F

From the data collected in 2018, the analysis verified that rubber tappers' involvement with Veja increased their annual income. Figure 5 shows how the tappers' income from rubber tapping has changed over the years based on data from both samples. First, it shows that tappers' average income they sold their rubber at increased significantly between 2018 and 2019, as a result of the training and extraction kits they received by Veja which allowed them to increase their production. Secondly, Figure 6 shows that the introduction of Veja's PSES framework further increased tappers' income significantly (on average 80% higher) by selling to Veja and signing up to deforestation commitments compared to what tappers would have received if they sold their rubber at market price.


Picture: Project Archive

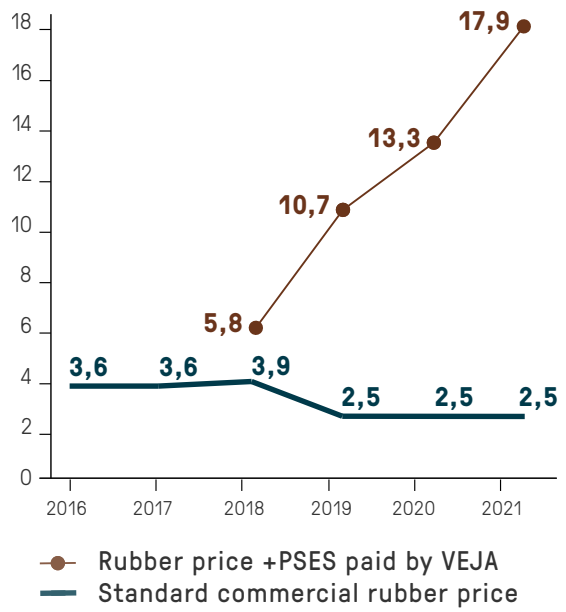

Picture: Project Archive

Figure 6. Average annual income of a rubber tapper between 2018-2020 (BRL)



Based on data from 2018, evidence suggests that the increase in income from rubber paid by Veja played a significant role in their total income. In comparison to 2019/20 data, the average income of tappers was nearly double of what tappers would have received if they would have sold rubber against the regular market price (BRL 1,450/year). Although no comparisons can be drawn between the two data sources since they derived from different households, data suggests that the new 200 tappers from 2019 produced significantly more rubber than their peers, likely due to factors not explored in the study but that can be related to the training received. Also interesting is that the market price of rubber fell between 2018 and 2019 but that PSES payments and the rubber price paid by Veja kept increasing (see Figure 7). This further emphasises the benefits for rubber tappers to sign up to the PSES.

Figure 7. Regional market prices for rubber vs. price paid by Veja (BRL/kg)



Source: Veja

Veja also supports local cooperatives with inputs to help them strengthen their sustainable rubber production as well a technical support to input data for the monitoring system, improve their internal governance arrangements, and manage the rubber received from tappers and transfer it to CooperAcre for processing. In 2019, local cooperatives received BRL1.02/kg, in 2020 BRL 2.50/kg and in 2021 BRL 3.00/kg of additional inputs from Veja.

Based on the data collected so far, our early hypothesis is that the additional income provided by Veja through rubber tapping and PSES payments not only improves local livelihoods, also creates financial incentives for communities to protect the Amazon and improves the monitoring of forested areas.

Lesson #3:

Engaging women in sustainable rubber production training raises awareness on women's important role in the value chain.

Historically, the role of women has been neglected in the native rubber value chain in Northern Brazil, which has led to inadequate research on the role of women in the supply chain. Men are traditionally considered the main rubber tappers and are supported by their wives. Women do not actively participating in cooperatives. Of the 1087 individuals (200 households) added by the project, only ten women self-identified as the main rubber tappers in their household.Yet most wives of rubber tappers participate in all steps of the rubber value chain. As one of the women tappers mentioned to P4F:

" I contribute in every single thing: from finding the way to the rubber tree, then cleaning the trails, then the cleaning of the bark, and tapping the tree. Then I have the rubber, which means I collect it, then wash it in the river, bring it home and let it coagulate. And the final step which is the selling, I also do." (Derenice)

Given women's key role in the rubber value chain, it is important that women also understand and are trained in sustainable production best practice to best ensure households protect the forest and can unlock the PSES payments. Besides, training women can help boost their confidence to contribute to cooperative decision-making.

Through Veja's workshops for women – supported by P4F – the project has shown some early signs that the role of women is better recognised by communities in the value chain. After P4F's intervention and the training women have received by IDS) (how to collect, store and manage the rubber) they have started to join the assembly meetings.

Picture: Project Archive

Awareness raising workshops on the role of women

IDS organised three workshops with five cooperatives and each workshop saw around 15 women participate. In total 49 women were trained. Although originally the workshops were entirely composed of male tappers, it shortly became clear that all tappers needed to be involved, to change mindsets to how communities were looking after the forests. In the workshops, the consultants explained their relationship with Veja, the cooperatives' role, the PSES payments, the importance of preparing the rubber, and providing good quality rubber using best practices.

The workshops also helped improve women's understanding of good practice, as two women explain:

"Well, in the year that these meetings started, we women did not participate, only the men did. So they started to do these meetings with us, these workshops. They are good because we then learn about how to take care of the rubber, because we women were not informed about the subject, only our husbands. So they did not tell us everything, only a little, so we did not understand how to care for it. So when we started gathering in these workshops we learned how to take care of it so we can help them" (Francisca).

"My participation was almost the same as his, right? All my life I have treated his seringa (rubber), when he went to carve, to separate, I would separate the seringa. I was used to collect and help, I always cleaned his rubber, pressed it. Sometimes we needed to sell it in the city, and he could not go, so I would travel to sell the rubber. All my life I have done this. Sometimes he would attend the meeting, but he would not explain everything that was taught, step-by-step, in the meeting. They would pass on a little of what they learned, but not every information that was given. So after these other workshops that you gave us, only then we gained more knowledge and feel more like working " (Mauricélia).

During interviews, various women also indicated that because the income from rubber tapping was seen as a household income, they often collectively decided how to invest their money.

Even though the pandemic disrupted IDS' activities, the workshops had a lasting impact for those that attended. Cooperative leaders have continued discussing the role of women in the rubber value chain. One interviewee mentioned a women group was now created in one of the communities to strengthen the work and support among women.

Picture: Project Archive

Conclusion

Veja's operations in Acre demonstrates how sustainable rubber production can improve incomes of local communities while protecting the forests The French shoe company has greatly benefited from improving their partnership arrangements by engaging with associations, cooperatives, and producer families to set up sustainable production protocols, deforestation monitoring methods, and PSES governance arrangements. This has allowed them to access a larger producer network and meet their non-deforestation commitments.

The case study also demonstrated the importance of technical assistance to help smallholders switch to sustainable rubber tapping and access PSES premiums. Over 200 rubber tappers in the region have received training on best practices in rubber tapping and how to support the monitoring of deforestation rates. The price premium they received for sustainable rubber production significantly improvedtheir incomes, especially for lower-income families. Additionally, the new PSES' monitoring system has proven to be robust, accessible, and capable of enhancing the collective monitoring of deforestation rates.

Finally, training women in sustainable rubber production training has helped them realise the importance of their work. There have been positive signs of cooperatives' and communities' increased awareness on women's role in the value chain.

Through improved stakeholder engagement processes in the sustainable production protocol, increased income for rubber tappers, and improved gender awareness, Veja strengthened its sustainable rubber supply chain while helping to protect the Amazon. Rubber cooperatives and associations have a stronger voice in decision-making and access to clear livelihood benefits, and it is now in Veja's interest to continue to maintain these relationships and in order keep their zero-deforestation commitment.

Picture: Project Archive

References

Alier, Joan M. (2007) *O Ecologismo dos Pobres: conflitos ambientais e linguagens de valoração.* São Paulo: Contexto, 2007.

CNUC (2021) "Reserva Extrativista Chico Mendes" Link here: http://sistemas.mma.gov.br/cnuc/index.php?ido=relatorioparametrizado.exibeRelatorio&relatorioPadrao=true&idUc=222

ISA. (2021) "Unidades de Conservação no Brasil: Reserva Extrativista Chico Mendes". Link here: https://uc.socioambiental.org/pt-br/arp/626 .

Keck, M. E. (1995) "Social Equity and Environmental Politics in Brazil: Lessons from the Rubber Tappers of Acre". *Comparative Politics.* Vol. 27 No. 4. Link here: https://www.jstor.org/stable/422227

Resor, R. (1977) "Rubber in Brazil: dominance and collapse, 1876-1945". *The Business History Review.* Vol. 51 No. 3. Link here: https://www.jstor.org/stable/3113637.

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