

General Information

Natural Rubber (*Hevea brasiliensis*) is originally from Americas.

Top Leading Natural Rubber Producing Countries in 2023



Rubber cultivation covered
14 mio ha
in 2021



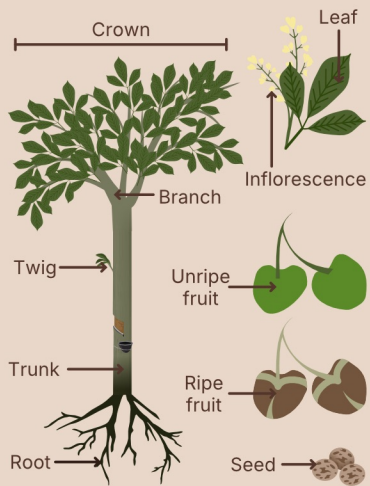
6 mio
smallholders produce the world's natural rubber.



Global natural rubber production hit
29.6 mio
metric tons in 2022.

Source: Jayathilake, H. M., de la Porte, C., Chang, J. W. J., Edwards, D. P., & Carrasco, L. R., 2023 | Statista, n.d. | GPSNR, 2023

PART OF THE RUBBER TREE



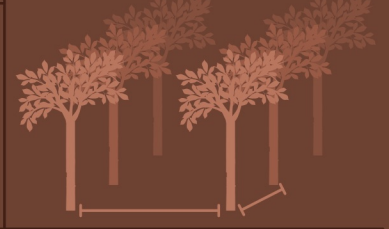
Good Agriculture Practices

Rubber trees grow in areas with annual rainfall ranging from 1,800 - 2,500 mm, ideally on slopes <math><15^\circ</math> and at elevations <math><400\text{ m}</math> above sea level.



The optimal population density is 500-600 trees/ha, with spacing configurations of 6x3 m, 4x4.5 m, or 7x2.5 m.

The latex is harvested by tapping the bark to cross the latex vessels from the top left to the bottom right.



Planting materials are clones produced through vegetative propagation, such as budding.



Latex harvesting usually starts when the trees are 5 to 6 years old and may continue until they reach 28.

Tapping is best conducted between 5:00 and 7:00 AM, with a recommended frequency of every 2 to 3 days.

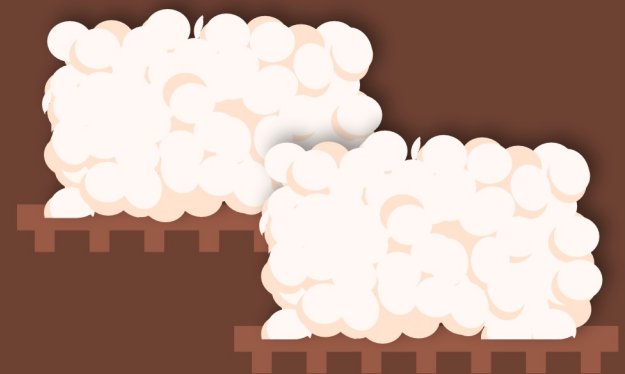
Common pest & disease (P&D):

- Leaf fall disease
- SALB (*Pseudocercospora ulei*)
- Pink Disease (*Corticium salmonicolor*)
- Black Stripes (*Phytophthora palmivora*)
- White Root Rot (*Rigidoporus microporus*).

Potential yield:
up to 2,5 tonnes/ha/year of dry rubber

Average DRC/rendement of wet rubber : 30%

Average yield:
0.9-1,5 ton/ha/year for smallholders
1,2-1,7 ton/ha/year for well-maintained farm



Current Issues



The European Union Deforestation-Free Regulation (EUDR) mandates that natural rubber commodities and their derivative products, whether imported or produced within the EU, must be verifiably free of deforestation and degradation, effective December 31, 2024*

*The European Commission has proposed a one-year delay to the implementation of the EUDR, but the decision is still under review.

Climate change disrupts rubber plant growth by altering temperatures and rainfall, shifting cultivation zones, and increasing pest risks. These changes can reduce yields and create financial difficulties for producers.



Price volatility in rubber leads producers to stop tapping, switch to alternative crops, or abandon farming altogether, while also discouraging young producers from entering the rubber farming sector.

Labor issues in the natural rubber industry include harsh working conditions, low wages, job insecurity, and a lack of skills development. Other concerns encompass child labor, the exploitation of migrant workers, and poor living conditions.



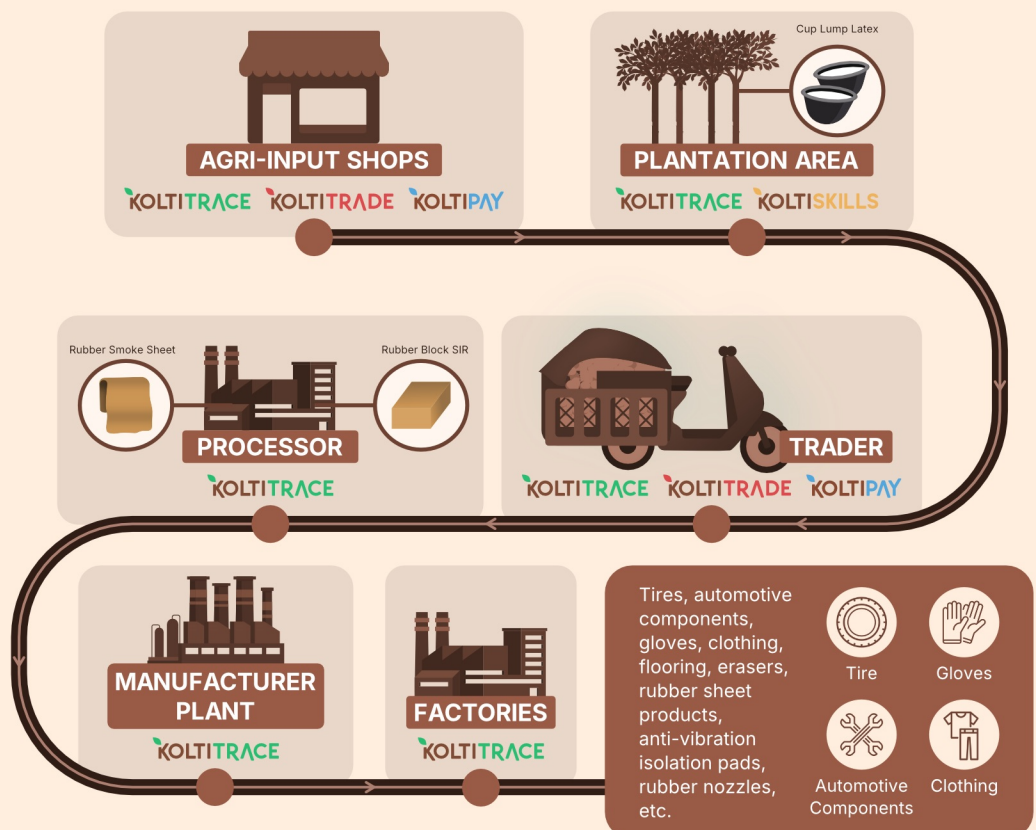
Rubber plantations are increasingly threatened by pests and diseases, notably leaf fall disease and white root disease, which have the potential to devastate entire plantations.

Certification

Certification ensures sustainability in natural rubber production, including those from FSC-FM and PEFC.



Supply Chain



Natural rubber is harvested as latex and cup lump in the field, then latex processed into unsmoked or smoked sheets while cup lump processed into SIR in the processing plants.

Approximately 76% of global natural rubber production is absorbed by the tire industry.