



Implemented by:



# LUNCHBREAK



Federal Ministry  
for Economic Cooperation  
and Development

## Challenges and Positive Experiences in Achieving Sustainability in the Rubber Supply Chain

06 February 2026, 12 – 1 pm

A close-up photograph of two hands, one darker-skinned and one lighter-skinned, gently holding a single green leaf with prominent veins. The background is dark and out of focus.

# Tools for more sustainable rubber sourcing

SASI Lunchbreak 6.2.2026, Gudrun Schlöpker, Global Nature Fund

# Global Nature Fund - projects



- International Foundation for Environment and Nature
- Non-profit non-governmental organisation
- Locations in Radolfzell, Bonn, Berlin
- Currently 36 projects in the areas of Living Lakes and Water, Sustainable Development and Development Cooperation, Business and Biodiversity and Nature Conservation

## Global Nature Fund – Supply chain related action



- Member of Fair Rubber e.V. and since 2021 hosting the Fair Rubber secretariat
- Member of Fairtrade Germany and of the supervisory board
- Participating in supply chain related boards and committees (ABT Foundation, Donau Soja, Nestlé Germany NGO advisory board, UEBT Standards' Committee)
- Co-founding member of Food for Biodiversity e.V. (2021) and strongly supporting the secretariat
- Since 1/2026 hosting secretariat of the FONAP e.V. - forum sustainable palm oil
- Implementation partner for businesses in several supply-chain related projects

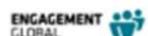




# Natural rubber supply chains – fair trade and the responsibility of companies

- webinar and workshop activities for companies
- Factsheet
- support

Gefördert durch



mit Mitteln des



Gefördert durch die

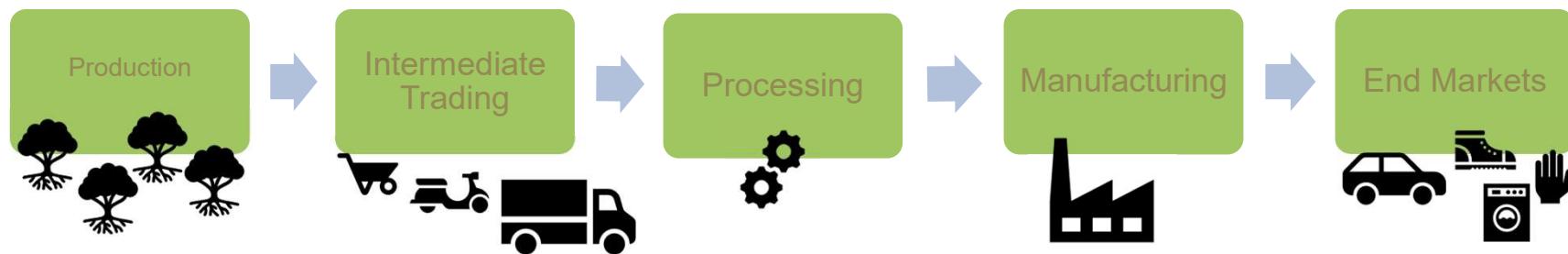


## Development in the four most relevant rubber origins

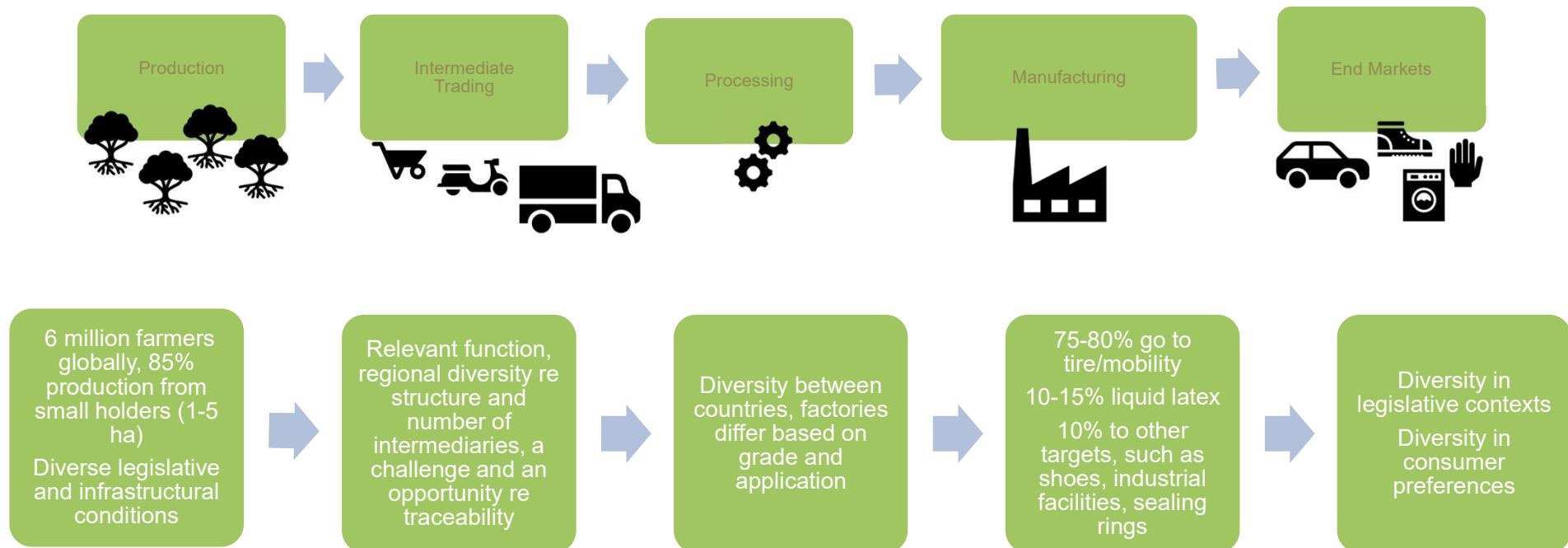
	 Thailand	 Indonesien	 Côte d'Ivoire	 Vietnam
Cultivated area 2024	3,9 Mio. ha (stabil ggü. VJ)	3,2 Mio. ha (+1,0% ggü. VJ)	985.000 ha (+6,5% ggü. VJ)	910.000 ha (+0,1% ggü. VJ)
Production 2024	4,7 Mio. t (-0,4% ggü. VJ), Prognose +1,2% für 2025	2,3 Mio. t (+0,9%), Prognose -9,8% für 2025	1,8 Mio. t (+16%), weiter steigend in 2025 erwartet	1,2 Mio. t (-2,1%), Prognose -1,3% für 2025
Context	<ul style="list-style-type: none"> <li>Über 90% des Kautschuks stammt von 1,68 Mio. Kleinbäuer:innen.</li> <li>Staatliche Förderpolitik - Rund 90% sind staatlich registriert</li> <li>Hauptsächlich frischer Latex, kurze Lieferketten, hohe Qualität.</li> <li>Herausforderung: Arbeitskräftemangel.</li> <li>Thai Rubber Trade (TRT) betreibt EUDR-Beschwerdesystem.</li> </ul>	<ul style="list-style-type: none"> <li>Ca. 92 % des Kautschuks stammt von 1,54 Mio. Kleinbäuer:innen.</li> <li>Lieferketten lang und fragmentiert, Rückverfolgbarkeit schwierig.</li> <li>Geringe Registrierung der Flächen, Landtitel oft unklar.</li> <li>Hauptsächlich Cup Lump-Qualität.</li> <li>Kaum staatliche Förderung, Fokus liegt auf Palmöl.</li> </ul>	<ul style="list-style-type: none"> <li>80–85% des Kautschuks stammt von rund 180.000 Kleinbäuer:innen.</li> <li>Staat fördert Anbau, Mindestpreis und Verarbeitung im Land.</li> <li>Probleme mit Landrechten und Besitzverhältnissen für Kleinbauern</li> </ul>	<ul style="list-style-type: none"> <li>62% des Kautschuks stammt von über 260.000 Kleinbäuer:innen.</li> <li>Viele Flächen in staatlichem Besitz.</li> <li>Zertifizierungen wie FSC und PEFC weit verbreitet.</li> </ul>

Data own collection, based on B&Company Inc. (2025), Directorate General of Estate Crops of Ministry of Agriculture (2024), EFI (2024, Nation Thailand (2025), Reuters (2025), Thai Natural Rubber Association (2024).

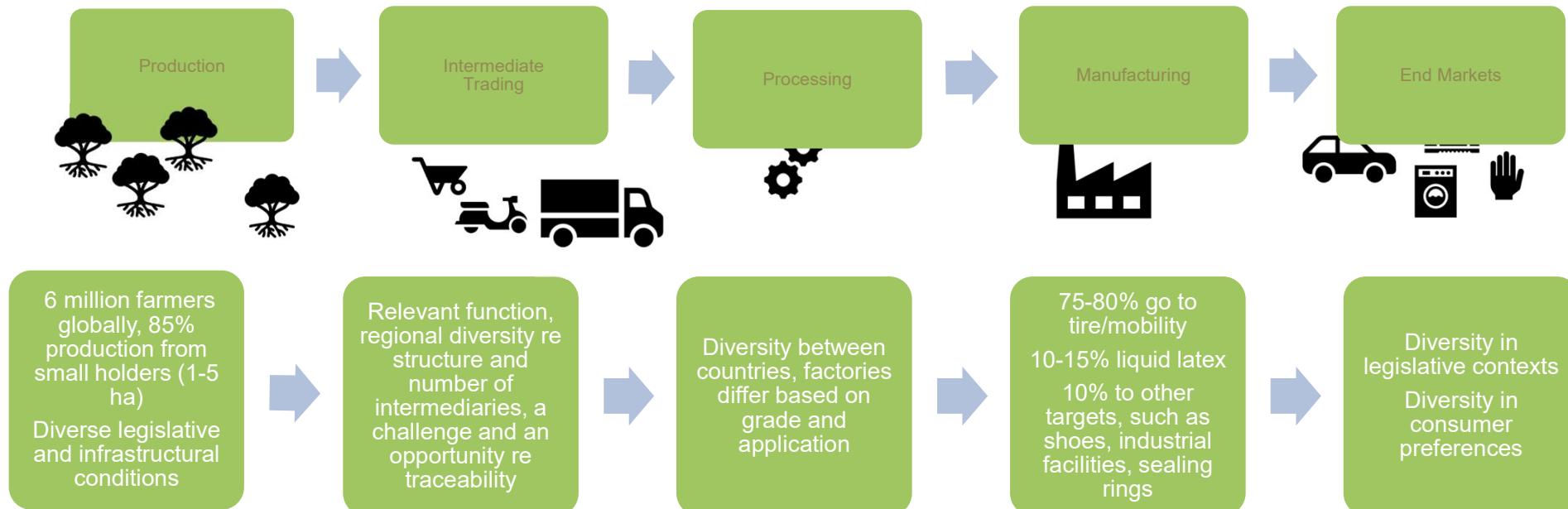
# Basic Rubber Supply Chain structure



# Basic Rubber Supply Chain structure



# Basic Rubber Supply Chain structure



In every part of the chain there are partners are looking for more sustainability and resilience via dialogue

# How do we achieve sustainable and resilient natural rubber value chains?

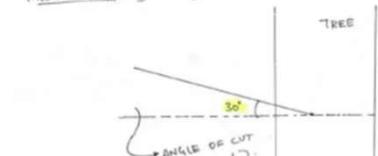
- no one-size fits all
- a tool-box
- elements along the value chain

## Remember:

*“small holders are the back bone of rubber production. If you want to ensure production, you need to invest in supporting them”*



Rubber tapping angle calculation:



→ Angle of cut =  $30^\circ$  to  $45^\circ$  (depending on the flow of the latex).  
→ length of the vertical cut from the ground to topmeter.  
 $\approx 25\text{ cm to 1m}$

(a) From the literature ideal angle of the hand tool for straight working =  $45^\circ$   
→ Angle of the rubber tapping = Angle of the cut + Angle of the hand tool at straight position  
 $= 30^\circ + 45^\circ$   
→ Angle of handle =  $75^\circ$   
→ Variation of the hand tool observed and taken into consideration are:  
 $30^\circ$ ,  $45^\circ$  and  $75^\circ$

[Rubber tapping hand tool— Study on Ergonomics and Product design | by Pratheek Punchathody | Medium](#)



## Relevant tools

- Multi-stakeholder platforms
- Long-term trading relationships and sourcing policies and contracts with clear social and ecologic conditions
- Certification (traceability, orientation and incentives for action)
- Benchmarks and data for fact-based decisions
- Corporate projects and private and public investments
- Supporting framework of governmental regulation and governmental support for the sector in producing and in importing countries

# Certification

## Benefits for smallholders

- Access to international and sustainability-driven markets
- More predictable income and economic resilience
- Capacity building and stronger producer organizations
- Greater participation and local decision-making
- Improved social and environmental production practices

## Benefits for brands

- Credible, independently verified sustainability claims
- Supply chain transparency and material traceability
- Support for risk management and due-diligence processes
- Competitive positioning in sustainability-driven markets
- More stable, long-term supplier relationships



- FSC
- Fair Rubber
- ISCC Plus, SA8000, amfori BSCI, SMETA,...

*Not a substitute for company own efforts!*

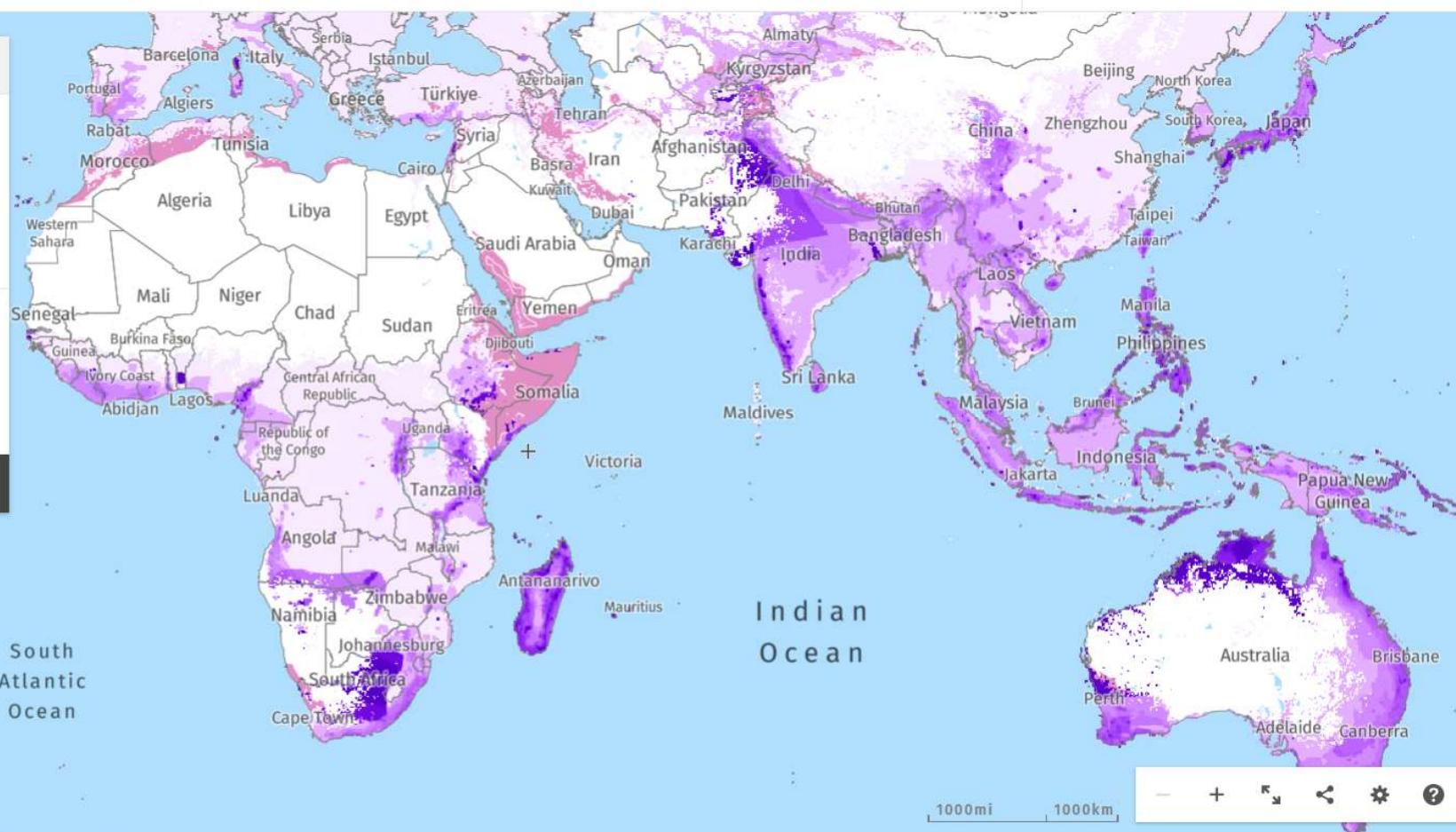
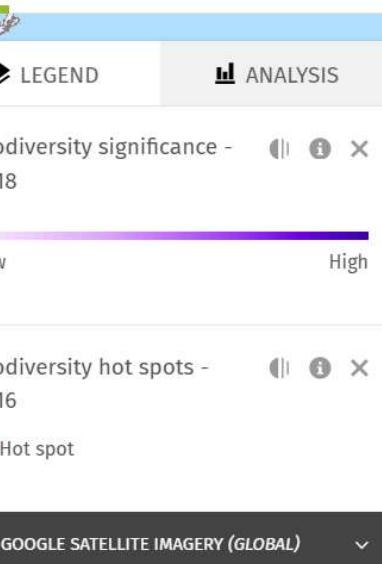
# Data driven, fact-based decision making



## Tools based on supply-chain knowledge

### Assessment of the biodiversity situation

- Not-for-profit tools like [Global Forest Watch](#), WWF [Biodiversity risk filter](#),
- For profit tools for deforestation mapping and more
- Detailed local and national maps
- Local in situ biodiversity mapping and monitoring on production plots and surrounding plots





ASPECT DO YOU WANT TO SEE?

5. Pressures on Biodiversity

Show more settings

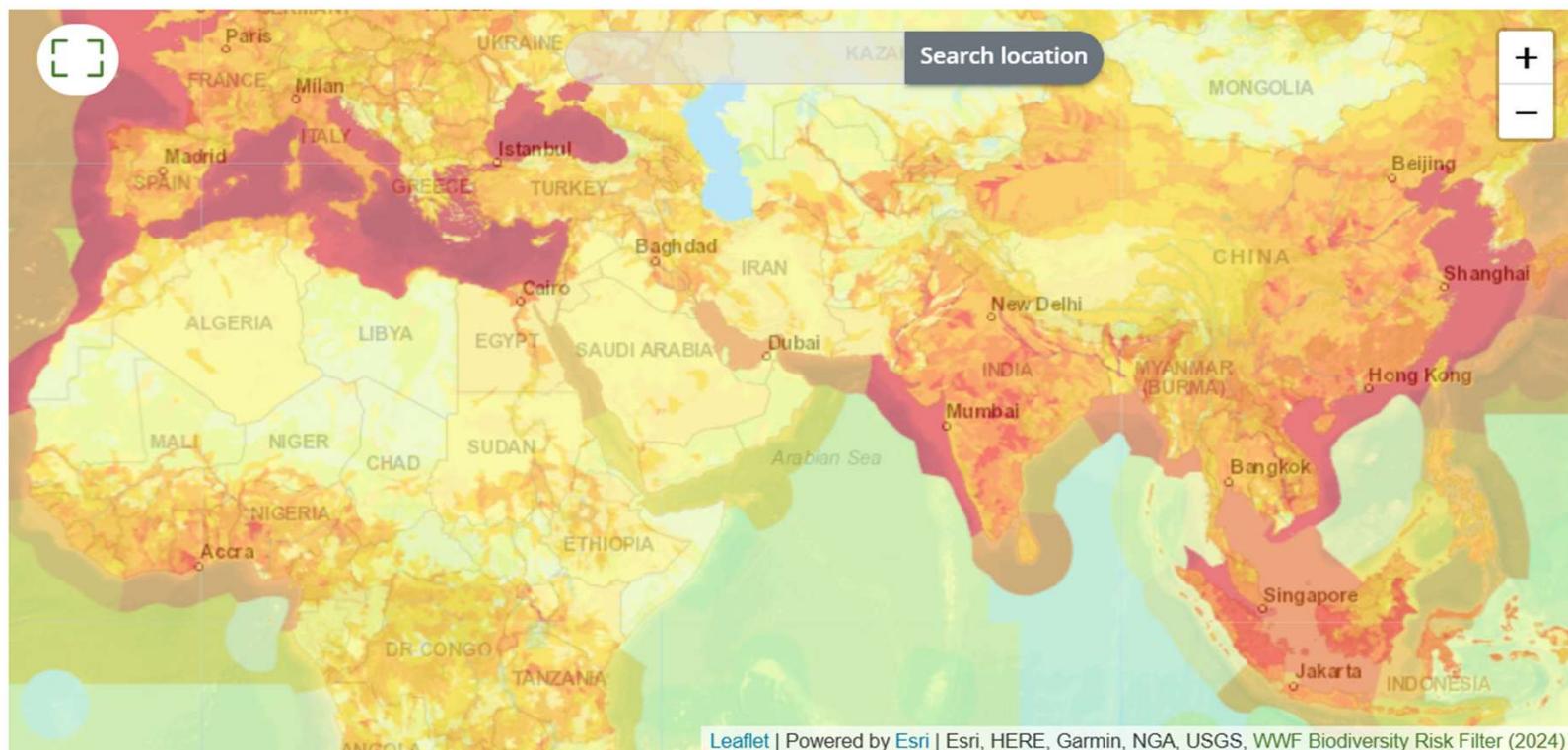
## WHAT AM I SEEING HERE?

### Pressures on Biodiversity

Businesses may negatively impact biodiversity and reduce ecosystem services through a number of direct drivers or pressures.

It comprises the industries: 1) Land, Freshwater and Sea Use Change, 2) Deforestation, 3) Invasives and 4) Pollution. See the specific risk category layers for more details.

WWF Biodiversity Risk Filter (2024)



# Data driven, fact-based decision making



## Tools based on supply-chain knowledge

Assessment of human rights and social situation

- Living [Income benchmarks](#)
- Living [Wage benchmarks](#)
- Fairtrade [human rights risk map](#), ...

For a comprehensive overall materiality or risk assessment all of these elements and some others are useful



## Indonesia

Indonesia is a Southeast Asian country with a population of 277.5 million. Fairtrade commodities originating there include coffee, herbs, spices and vegetables. There are currently 30,240 farmers organised into 27 Fairtrade certified farmer organisations in Indonesia.



Coffee



Herbs & Spices



Vegetables



Banana



Working Poverty at 2.15/day Total (ILO)

2.0%

### GENDER EQUITY

Gender Inequality Index (UNDP)

0.423

Working Poverty at 2.15/day Women (ILO)

4.0%

### CHILD RIGHTS

Child Labor (US Department of Labor)

4%

Children in Child Labor (Unicef)

2%

Primary School Completion (Unicef)

97%

Lower Secondary School Completion (Unicef)

88%

### FORCED LABOUR

Forced Labor (US Department of Labor)

Yes

Global Slavery Index (Walk Free Foundation)

6.7

### DISCRIMINATION

Equal Treatment and Absence of Discrimination (WJP)

0,49

SDG Indicator on Migration Policies (UNDP)

Meets

UN Population of Concern (UNHCR)

14,845

### SELF-DETERMINATION

People's Under Threat Index (Minority Rights Group International)

50

Legal Security of Indigenous Lands (LandMark)

2.6

### CIVIL LIBERTIES

Civil Liberties Ranking (Freedom House)

28

Fragile States Index (Fund for Peace)

63,7

### Most Salient Issue

FORCED LABOUR

LABOUR RIGHTS & C

GENDER EQUITY

SELF-DETERMINATION

CIVIL LIBERTIES

### IMPORTANT

These risks are presented at a general level: they depend on the organization. How different contexts. are required to assess and mitigate measures. assessments should prevent and mitigate

# Projects

- Investing where the needs are
- Answering to main regional and sector challenges
- Merging efforts re livelihood improvements and biodiversity and quality

## Examples of good practice



# Supporting legislative and institutional environment

## In producing and importing countries

- Smallholder support programs via inputs, trainings, premium for good practice
- Strong institutions in education, research, company associations
- Supportive tax environment
- Due diligence legislation and support to implement it ([ELAN](#) portal, [Helpdesk](#) for business and human rights, and many more)



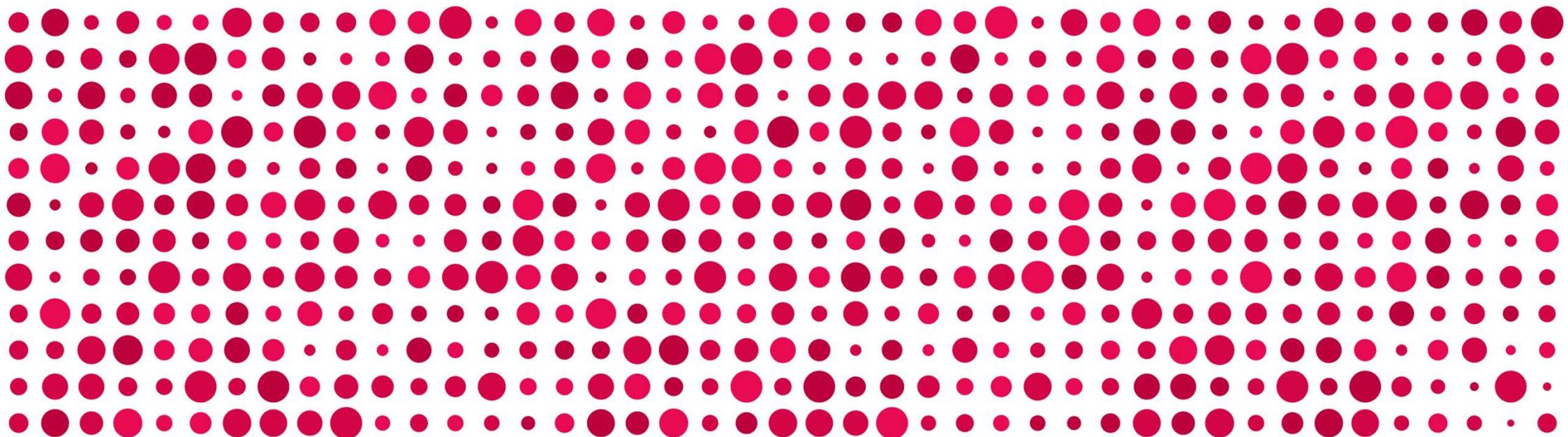
Transparency and communication and honest consideration of all interests involved are key for successful interventions. It is necessary to watch out for the right partners, to go long term and to invest into partnerships.

# Light and shadow during the EUDR implementation process

Lisa-Cathrin Leitner

ESN Technology Group

**E S N**



# HISTORIE ESN TECHNOLOGY GROUP

- 1991: Foundation at TGZ Würzburg **ESN Deutsche Tischtennis Technologie GmbH**
- 1993: Start of production in Hofheim i. Ufr.
- 1998: Development **TENSOR Technologie**
- 2012: Completion of the new building
- 2017: CEO: **Hans Persson**
- 2020: Transformation in **R&GN Family Foundation** with 100 % business interest
- 2022: Foundation of **ESN Technology Group**,  
**SPINSHIFT ESN Digital** and **ACE ESN Sports GmbH**
- 2023: Including **ESN EGEN GmbH** und **ESN TECHNOLOGY JAPAN**



# ESN TECHNOLOGY GROUP



Deutsche Tischtennis Technologie GmbH

Manufacturer and developer of innovative table tennis rubbers.



**SPIN INSIGHT**  
ESN DIGITAL

Developer and service provider for digital table tennis services. Measure spin, speed, and placement in real time.<sup>24</sup>



**A C E**  
ESN SPORTS

Promote talent through table tennis expertise, advanced technologies, and an innovative, flexible ecosystem.



テクノロジージャパン株式会社

ESN Technology Japan K.K.

# ESN TECHNOLOGIE GROUP

## Vision:

We are the global sustainable innovation leader in table tennis.

## Mission:

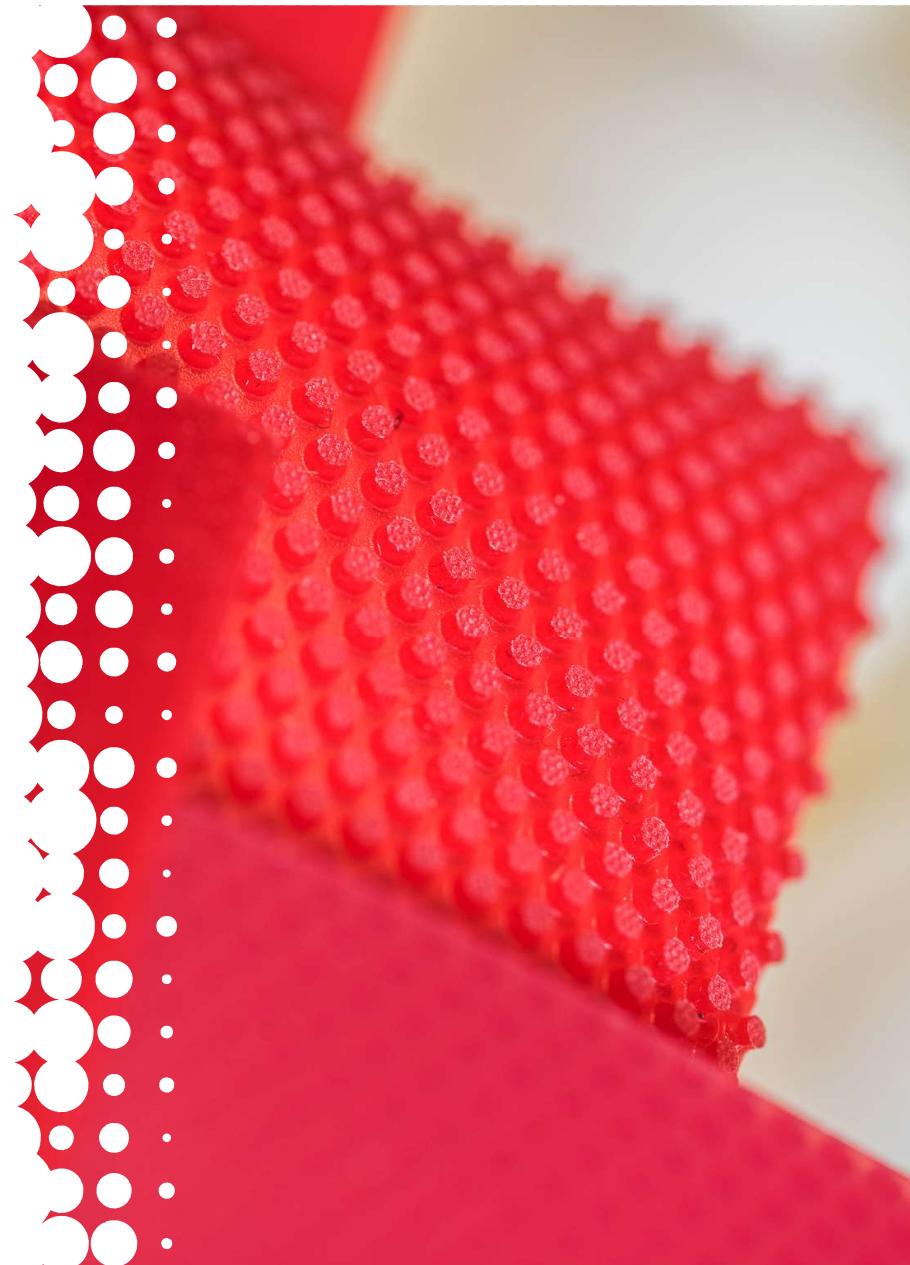
- We **develop and produce** premium table tennis rubbers for top players and the mass market.
- We are expanding the table tennis experience into **new digital dimensions** for the future of our sport.
- We **train talented table tennis players to become world-class players** by offering table tennis expertise, advanced technologies, and an innovative, flexible ecosystem.
- **Sustainability is the guiding star of everything ESN does.**



# ESN DTT - DEUTSCHE TISCHTENNIS TECHNOLOGIE GMBH

- A technology company in the elastomer industry
- The world's largest manufacturer and developer of table tennis rubbers for club players
- TT-rubber consists of Pimpled rubber and sponge material
- Sales of over 3 million rubbers/year
- B to B: Partnerships with leading table tennis brands
- Over 1000 specifications
- Approx. 260 employees in production and development

26



# SUSTAINABILITY AT ESN

- Sustainability is the guiding star behind everything ESN Technology Group does.
- CO2 reduction and measuring CO2 footprint
- Economy for the Common Good certified company
- Other topics:
  - Sustainable Products
  - Sustainable energy
  - Awareness in the daily live of our employees  
→ at work and private



# SUSTAINABILITY AS OUR GUIDING STAR



# FIRST STEPS IN THE RIGHT DIRECTION...

Sustainability proclaimed as a duty but also as risk management

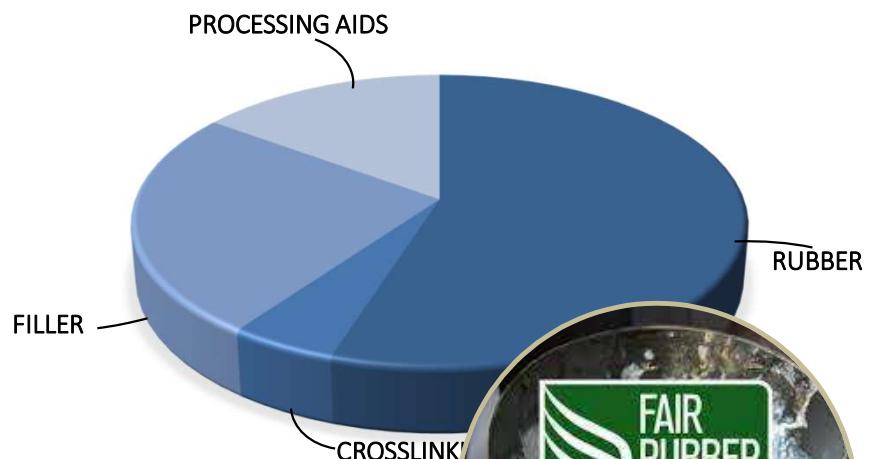
Started with smaller projects within the company

As a manufacturer, the potential lies in our product

Planning to switch to sustainable rubber as a large product component

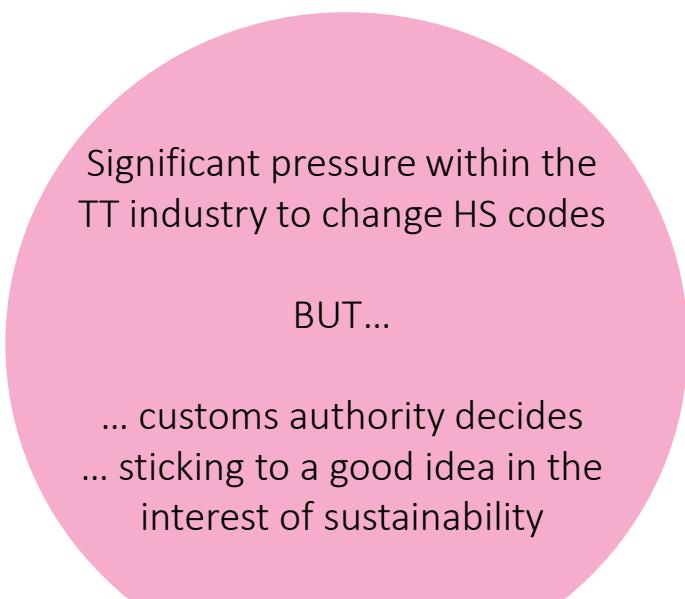
## Fair Rubber:

- Concept of ecological and social sustainability
- The intrinsic idea to improve sustainable was already <sup>29</sup> being implemented
- The idea behind the EUDR was appreciated



# EUDR: DO WE HAVE TO PARTICIPATE?

- Information were collected and the degree of impact had to be clarified



ESN was double affected in the field of natural rubber

Importer

Downstream operator

HS codes within the market have also diversified



30

4008  
sheets, strips, rods, bars, and profiles made of soft rubber

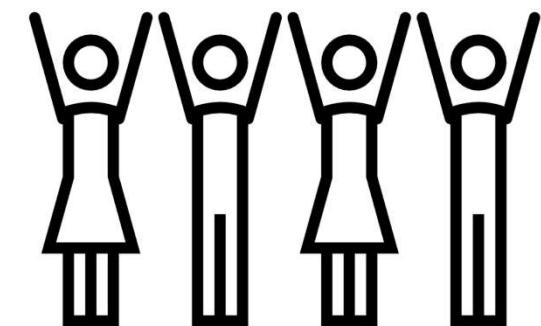
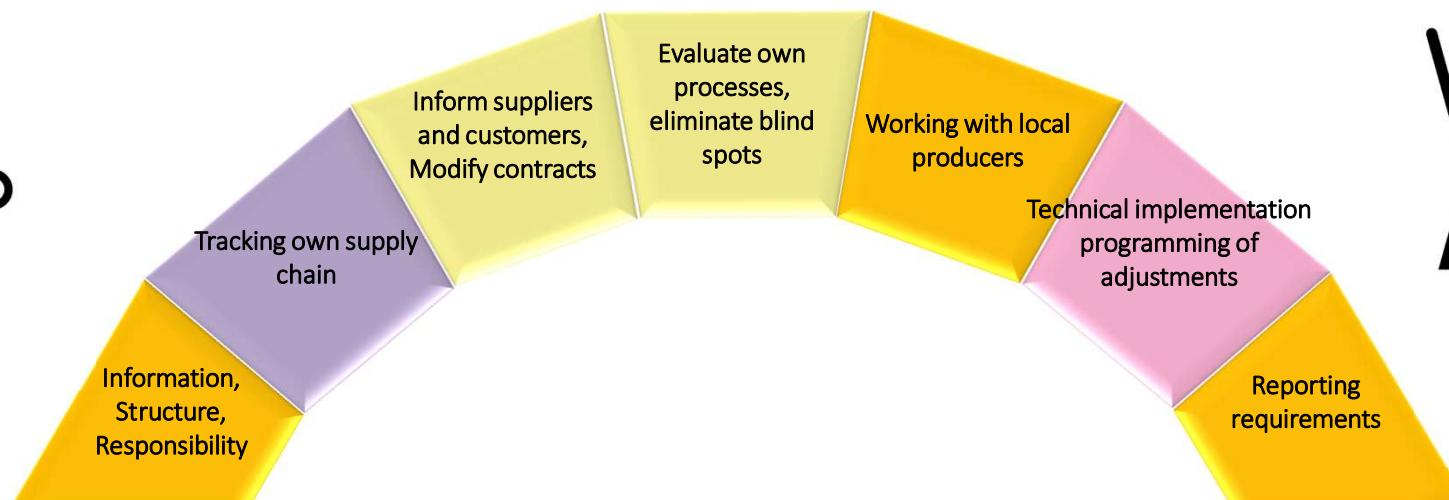
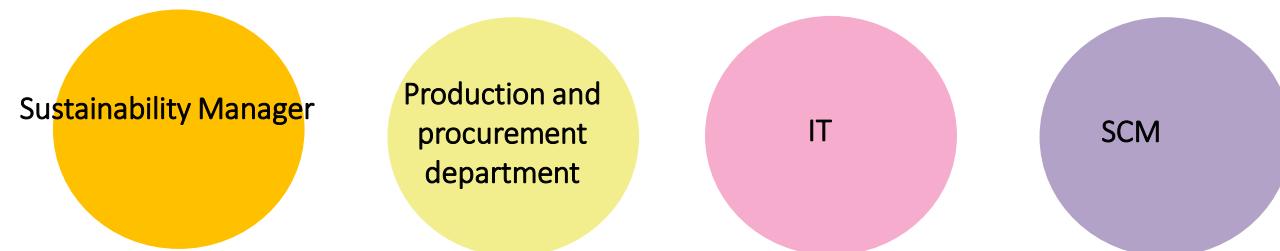
EUDR compliance required

9506 40  
table tennis equipment and products

EUDR compliance not required

# STRUCTURING AND GETTING IN LINE

- Formation of an internal Task Force with all involved departments



# STRUCTURING AND GETTING IN LINE

After addressing the responsibilities, the hands-on phase could begin....

BUT...

WHAT TO DO?

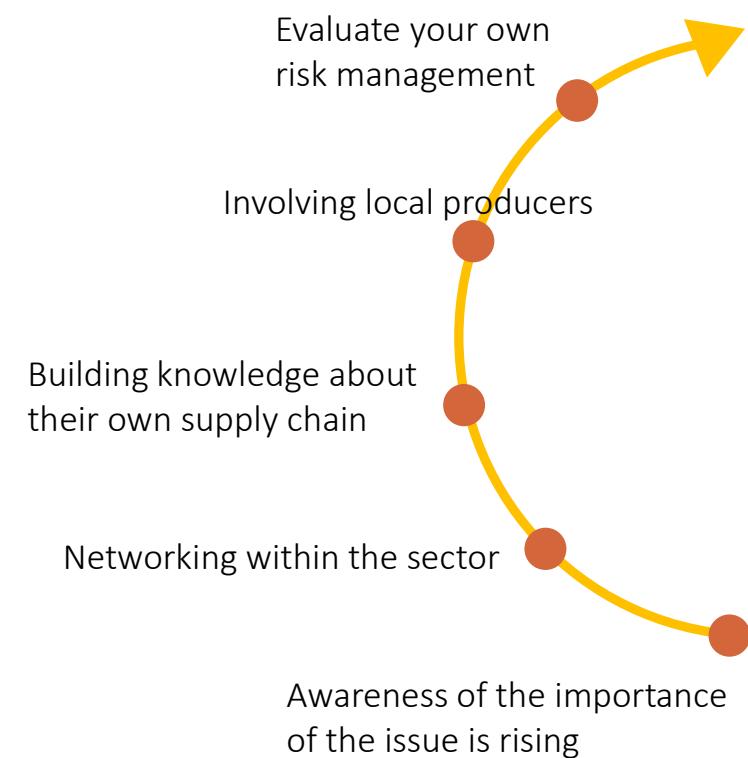
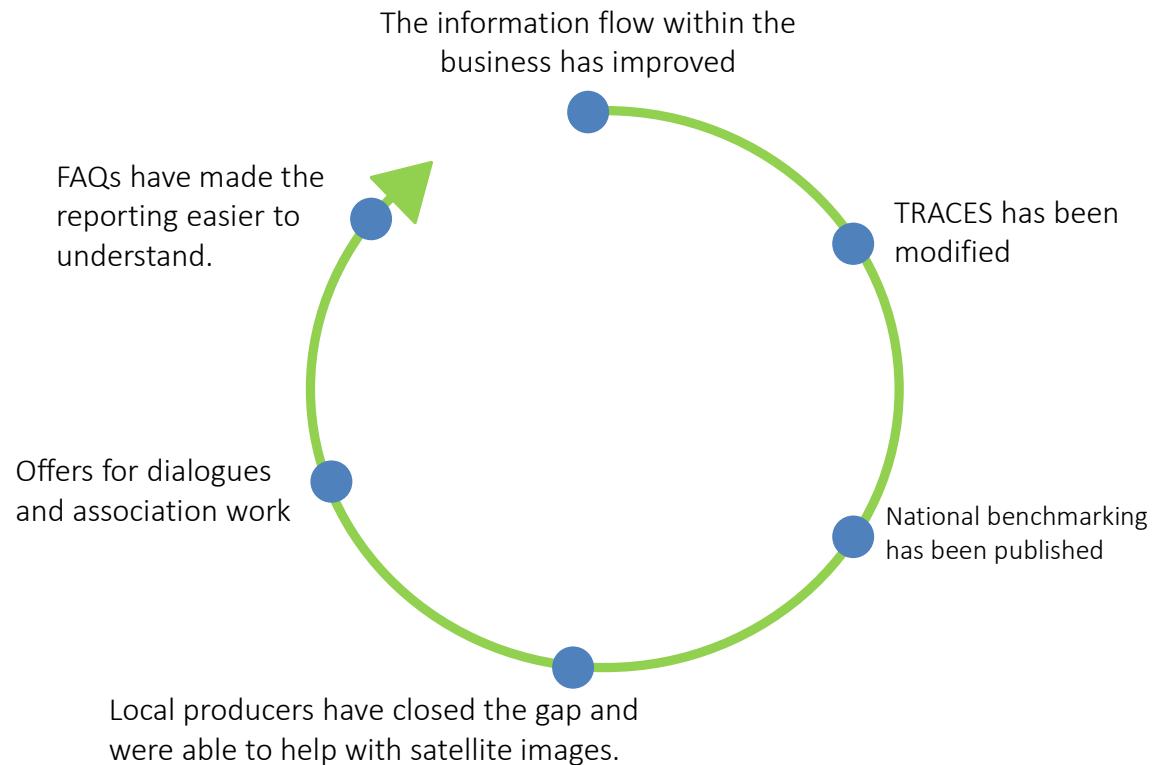
- Long period of uncertainty about what exactly is needed
- Significant administrative burden
- TRACES was not working
- National benchmarking was missing
- Limited communication with the EU Commission or national authorities
- Satellite images that forced to provide documentary proof
- Unpredictable risk in the upstream supply chain



Relief when the first postponement was decided at the end of 2024

# STRUCTURING AND GETTING IN LINE

...but within the last year, the situation has improved!



# WELL-INTENTIONED BUT POORLY IMPLEMENTED

- Many companies have invested massive resources in implementation
- Even local producers who were already living on the existence minimum had to invest
- Justification process starts
- Replacement of natural rubber by synthetic rubber already completed
- Massive loss of image for the importance of sustainability



34



**E) S) N)**

THANKS

FOR YOUR ATTENTION



# IMPRESSUM

**E) S) N)**

ESN TECHNOLOGY GROUP

Hans-Elbe-Str. 11  
97461 Hofheim i. Ufr.

<https://www.esntec.de>

Geschäftsführer: Dr. Hans Persson  
Amtsgericht Bamberg HR 10604

36



# RESILIENT LATEX SUPPLY CHAINS: VALUE FOR PEOPLE, PLANET & BRANDS

Feb 2025



....is possible...with the right enabling environment...

## •EXTERNAL INFLUENCING FACTORS

### STAKEHOLDER GROUPS



## •INTERNAL ENABLING ENVIRONMENT



## •BRAND SUPPLY CHAIN REQUIREMENTS



...AND THE  
RIGHT  
COLLABOR  
ATIVE  
PARTNERS



RESILIENT LATEX SUPPLY CHAIN

# Positive value for people



RESILIENT LATEX SUPPLY CHAIN

# Positive value for planet



RESILIENT LATEX SUPPLY CHAIN

## Positive value for brand







Federal Ministry  
for Economic Cooperation  
and Development

Implemented by

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

# Thank you for joining !

See you soon at our next SASI event!