

# Actions for Sustainable Natural Rubber Procurement

**Procurement Policy for the Sustainable Natural Rubber**



**What is Sustainable Natural Rubber?**



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## NEWS

2020.December.25 > Yokohama Rubber and RAOT hold seminar event in support of natural rubber farmers in Thailand

2020.March.16 > Yokohama Rubber Signs MOU with Rubber Authority of Thailand for Support of Sustainable Natural Rubber Procurement

2018.October.15 > Yokohama Rubber Adopts "Procurement Policy for the Sustainable Natural Rubber"



**Actions in Surat Thani, Southern Thailand**



**Promoting Agroforestry**

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## Grievance Mechanism

# What is Sustainable Natural Rubber?



## What kind of resource is natural rubber?

What do you all imagine when you hear the word rubber?

Perhaps you think of something soft, stretchy, bouncy, not slippery, and that suppresses sounds and vibrations. It brings to mind many things, and they are all the properties that rubber has.

Rubber can be roughly divided into natural rubber and synthetic rubber. Natural rubber is made from plants such as the para rubber tree, while synthetic rubber is made from sources including petroleum. While it has only been used industrially for about the last 200 years, it is believed that natural rubber will play an increasingly important role in the recycling-oriented society of the future.

### Natural rubber-producing para rubber trees

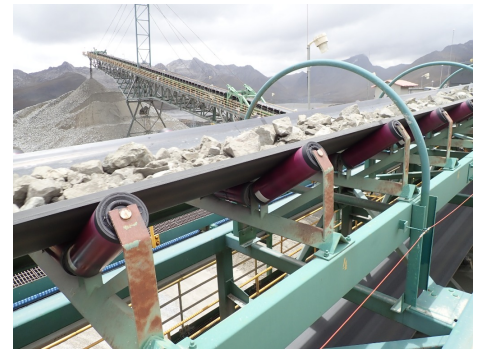
Today, most natural rubber used industrially is made by coagulating the rubber components contained in the latex collected by making incisions in the bark of para rubber trees (*Hevea brasiliensis*). The main sources of natural rubber are the hot and humid tropical areas of Southeast Asia, Africa and Latin America. Among these regions, Southeast Asia is home to about 80% of the world's production.

### Main uses of natural rubber

Natural rubber is used in tires, rubber bands, hoses, conveyor belts and other industrial rubber parts. It is used for variety of purposes, from the familiar to the uncommon, but about 70% is used in tire production. Due to its high strength, natural rubber is often used for large tires, especially those used for trucks, buses and industrial vehicles.



Hoses



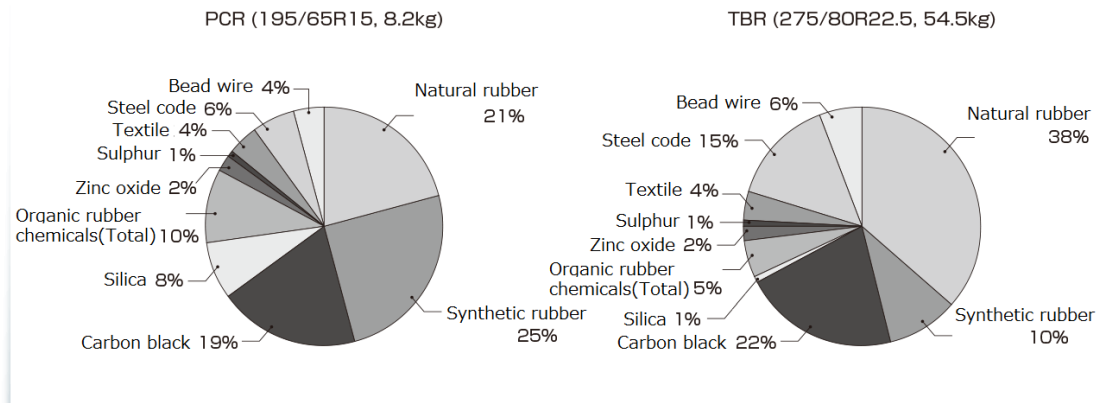
Conveyor Belts

## BluEarth-4S AW21

Tiers

### About 20% of the raw materials purchased by Yokohama Rubber are natural rubber

Yokohama Rubber makes a variety of products in addition to tires. Tires are often seen as black, round rubber products, but besides rubber, tires are made of a variety of materials and components including metal, fiber, carbon black and oil. Natural rubber is an important raw material that accounts for about 20% of the raw materials purchased by Yokohama Rubber. There are various kinds of tires for passenger cars, trucks and buses, for vehicles that carry heavy loads or are used in harsh conditions, and for agricultural vehicles. Large tires that require durability often use natural rubber. It is essential for Yokohama Rubber to secure a stable production of natural rubber for the foreseeable future in order to continue to stably supply products to our customers.



PCR: Passenger Tires, TBR: Truck & Bus Tires

### Natural rubber is an excellent resource

Para rubber trees absorb carbon dioxide from the air and make natural rubber that is used as a raw material for industrial products. It is also a natural carbon-positive resource (with CO2 absorption and fixation properties) because the para rubber trees store carbon within themselves. They also bring employment and income to natural rubber-producing areas, forming an industry that supports local economies.

## Trees that no longer produce latex are cut down and used in furniture

In order to stably produce natural rubber of the same quality, para rubber trees grown in natural rubber plantations are made from clones with the same genes. Therefore, seedlings are usually made using cuttings from trees of the same family. It takes five to six years after planting for the seedlings to grow trunks thick enough to produce natural rubber. In addition, para rubber trees actively produce latex until about 20 to 25 years after they are planted and gradually produce less, making it necessary to replant regularly. Aged and felled para rubber trees are widely used in furniture and flooring. They are quite versatile.

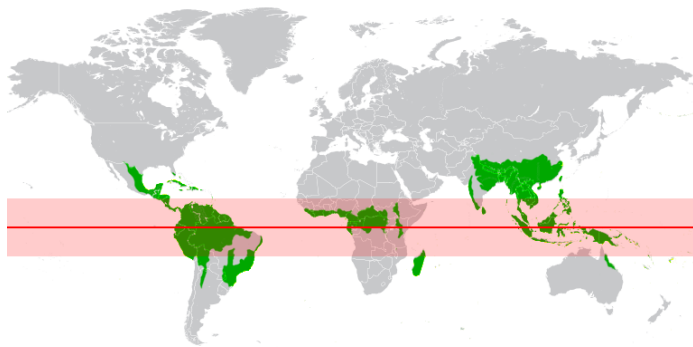
## Social risks at natural rubber plantations

Global natural rubber demand has nearly tripled over the last 40 years. This is due in large part to the growth in the global population and the rapid spread of motorization. On the other hand, there are concerns including about illegal deforestation, land deprivation and human rights violations, as well as the negative impact on biodiversity caused by deforestation and illegal logging.

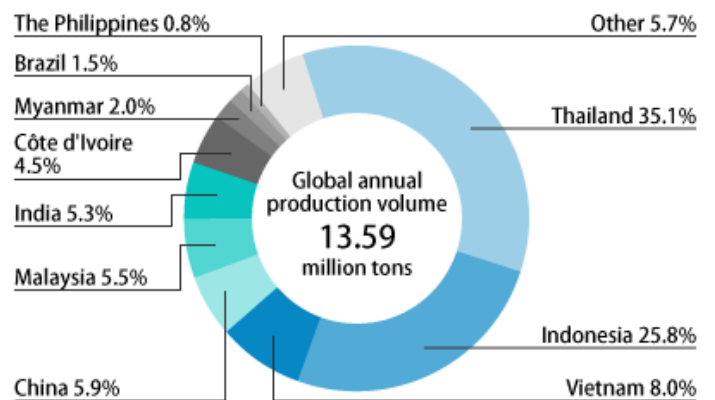
## Natural rubber plantations spreading in tropical areas with heavy rainfall

Of the areas where natural rubber is produced, Southeast Asia supplies about 80% of the world's supply. The rainforests in the region are vast. They are lands rich in biodiversity that are home to many rare creatures. The expansion of natural rubber and other plantations into such areas can affect the lives of invaluable living things. In addition, there are places that are threatened by illegal plantation development in natural parks and protected areas.

Instead of increasing the cultivation area to meet the increasing demand for natural rubber, it is important to increase production without diminishing tropical rainforests by increasing the yield per area and extending the production period, and to reduce the amount of natural rubber used by making products such as tires lighter and more compact.



Natural rubber grows between around 15 degrees latitude north and south of the equator  
Overlap with global rainforests (green)



International Rubber Study Group (IRSG) 2017

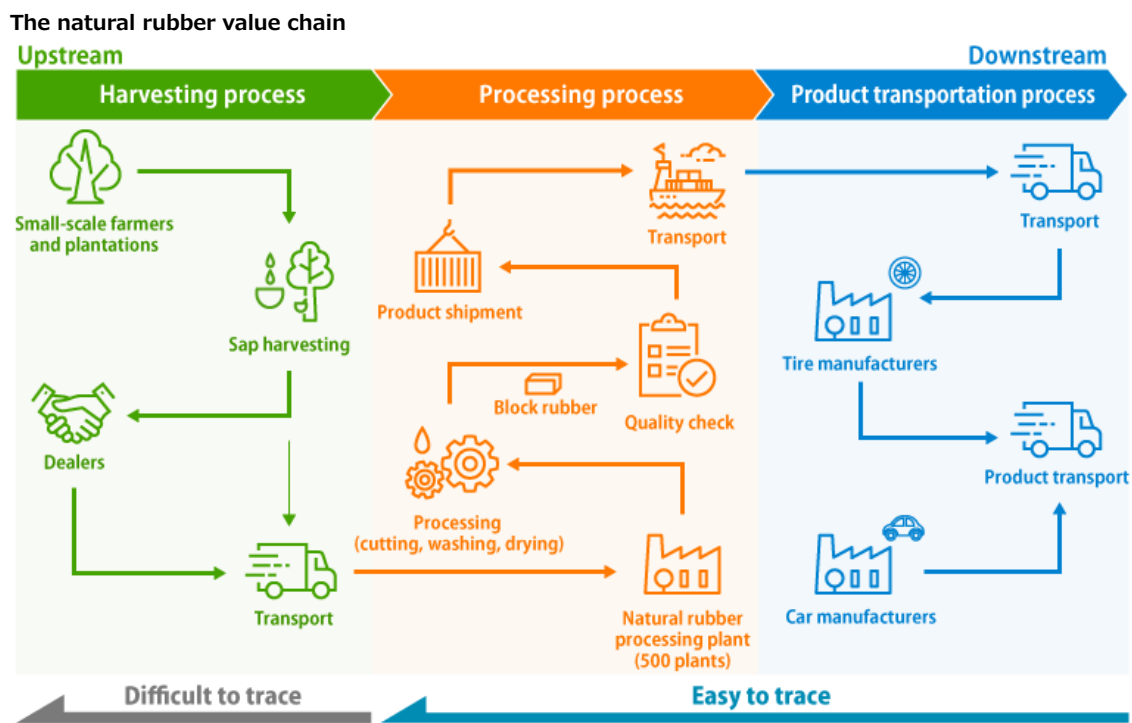
Major producers of natural rubber

## Social issues including human rights and poverty

Natural rubber production is dominated by small holding plantations instead of large-scale plantations. It is said that there are six million farmers (smallholders) who grow natural rubber on small farms centered in Southeast Asia. These small farms are concerned about problems that include economic poverty, inefficient production due to the lack of knowledge, know-how and experience in rubber harvesting, and the increased burden on nature due to the lack of consideration for the environment.

## Difficulty and importance of traceability








The price of natural rubber fluctuates in the international market. Dealers who have purchased raw rubber from natural rubber farmers check the market price for the day, and decide where to sell it or if they will store it in warehouses without selling. Although the latex from para rubber trees is extremely degradable, because raw rubber such as cup lumps made from hardened latex and unsmoked sheets (USS) can be preserved, it is traded from one dealer to another and across regions and borders depending on the circumstances. That is why it is very difficult to clarify the distribution route from producers to natural rubber processing plants (to ensure traceability). However, it is becoming more and more necessary to prove that purchased natural rubber was not produced on farms complicit in deforestation and human rights abuses.



## Initiatives to make natural rubber a sustainable resource

Yokohama Rubber is taking steps to make natural rubber a sustainable resource in order to fulfill its responsibilities as a global tire manufacturer. Through these initiatives, we aim to clarify the kind of plantations where purchased natural rubber was produced (establishment of traceability), and to build framework that will enable sustainable production of natural rubber in the future by addressing the problems faced by regions and plantations, which will make it possible to sustainably produce natural rubber in those regions. We also want to use these activities to contribute to the SDGs.

## Contributing to the SDGs through Actions for Sustainable Natural Rubber

SDGs Goal	Goals and Targets
	1.End poverty in all its forms everywhere.
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources.  12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.
	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
	16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.
	17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

### Signing and participating in international initiatives


In 2017 Yokohama Rubber announced its support for the goals of the Sustainable Natural Rubber Initiative (SNR-i) advocated by the International Rubber Study Group (IRSG), and began participating in SNR-i activities. Yokohama Rubber is also a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR), initiated by the Tire Industry Project (TIP) of the World Business Council for Sustainable Development (WBCSD).

### Revision of sustainable natural rubber procurement policy

The Yokohama Rubber Co., Ltd., revised its Procurement Policy for the Sustainable Natural Rubber in September 2021. The revision incorporates the policy framework adopted by the Global Platform for Sustainable Natural Rubber (GPSNR) at its second general assembly held in September 2020 into the procurement policy established by Yokohama Rubber in October 2018. The revision is a further indication of Yokohama Rubber's aim to contribute to the achievement of a higher level of natural rubber sustainability.

## Overview of the Procurement Policy for Sustainable Natural Rubber

- Enhancing traceability
- Respect for human rights and prohibit any form of harassment
- Fair and equitable treatment
- Prohibition of child labor and forced labor
- Compliance
- Initiatives for zero deforestation
- Consideration for biodiversity
- Abiding by the principle of free, prior and informed consent (FPIC) in regard to land rights
- Creation of innovative technologies
- Communication with suppliers

 [Procurement Policy for Sustainable Natural Rubber \(34.4MB\)](#)

## Implementation of supplier meetings for natural rubber suppliers

The Yokohama Rubber Group held its 2nd Suppliers Day meeting for natural rubber suppliers since 2016. A total of 42 representatives of 25 companies in 5 countries attended the meeting, at which Yokohama Rubber requested the suppliers' assistance in regard to the implementation of measures aimed at making natural rubber a sustainable resource, in line with our CSR policy; the Suppliers Day event helped to lead to strong mutual understanding with suppliers.

At the meeting, we explained the environmental aspects of our ESG mid-term plan and our human rights policy formulated in April 2022, and asked for cooperation in our efforts based on our "Sustainable Natural Rubber Procurement Policy" to deepen common understanding with our suppliers.

The president sent a message of appreciation to the suppliers for providing us with natural rubber of consistent quality, and presented trophies to suppliers who had made particular contributions to the company.

We also received a video message from Mr. Stefano Savi, Director of the Platform for Sustainable Natural Rubber (GPSNR), congratulating us on this event.



Suppliers Day

# Actions in Surat Thani, Southern Thailand



## Why do we work in Surat Thani?

Southern Thailand is now the center of natural rubber production, accounting for 60% of the natural rubber produced in Thailand. Surat Thani is an especially very important place for us because it is where Y.T. Rubber Co., Ltd. (YTRC) is located, the Yokohama Rubber Group's natural rubber processing subsidiary. However, in recent years, there have been confirmed outbreaks of leaf blight in the para rubber trees, requiring relevant countermeasures. That is why Yokohama Rubber has decided to start an initiative for sustainable natural rubber in Surat Thani.

## Start survey of natural rubber plantation in Surat Thani, Thailand

Yokohama Rubber began investigating natural rubber plantations in Surat Thani Province, Thailand from June 2019. We have visited and interviewed 250 farmers, mainly YTRC's business partners, by the end of May 2022.

Although the survey was temporarily suspended due to the spread of COVID-19 infection, during the period when the infection was under control, the survey was limited to those farmers who took thorough measures against infection and were willing to accept our visits.

The survey identifies and maps the location of plantations to ensure that they are not in natural parks or protected areas. We also check the number of years the plantation has been cultivated and whether the land is registered with the Rubber Authority of Thailand (RAOT) to make sure it is not illegal land and that the land development has not led to deforestation. For plantation workers, we check their work schedule, including working hours and days, whether they have a work quota, whether they are free to quit their jobs, whether they have health insurance, whether there are children under 18 years old on the plantation and how many are working there, and confirm that there is no forced labor or child labor. No illegality has been found in the farm survey to date. In addition, we ask if there are any difficulties involved in running natural rubber plantations. Through the survey, we were able to learn about the problems faced by the plantations and the issues that need to be resolved. We will continue this survey in the future, and 500 plantations will be surveyed by the end of 2023. Yokohama Rubber will accumulate the survey results to analyze the issues faced by natural rubber plantations, and use the data to contribute to the sustainable management of natural rubber farmers, as well as improve traceability.





Survey of natural rubber plantation in Surat Thani, Thailand



## Yokohama Rubber and RAOT hold seminar event in support of natural rubber farmers

The Yokohama Rubber Co., Ltd., and Rubber Authority of Thailand (RAOT) Surat Thani jointly held a seminar event to help Thai natural rubber farmers improve the quality and productivity of their natural rubber in June 2022. Fifty farmers from the Surat Thani area participated in the event and each received a complimentary 250kg of fertilizer developed using RAOT's specialist knowledge. The fertilizer contribution was warmly received and greatly appreciated by all participants.

In January 2020, Yokohama Rubber signed a Memorandum of Understanding (MOU) with the RAOT to cooperate in efforts to provide economic support and improve traceability to ensure transparency and soundness of the natural rubber supply chain. The MOU is a concrete action based on Yokohama Rubber's "Procurement Policy for Sustainable Natural Rubber." This seminar event has been held since December 2020 as part of the support to farmers under this MOU, and this was the third such event.



Natural rubber farmers and Yokohama Rubber Group staff at the seminar event



# Promoting Agroforestry



## What is agroforestry?

Agroforestry is a term created from the words agriculture and forestry, and refers to the grazing of livestock and cultivation of crops between planting trees. Yokohama Rubber is promoting agroforestry in natural rubber plantations.

## What it means to tackle agroforestry on natural rubber plantations

Having harvests from multiple types of crops such as fruits, herbs and wood in a natural rubber forest has many advantages, including a stable income and increased biodiversity on plantations. In particular, natural rubber is only produced for about 20 to 25 years after the trees are planted, after which the amount progressively declines. This makes replanting necessary to ensure efficient production. However, para rubber trees do not produce natural rubber until five to six years after they are planted. Rubber farmers may delay replanting or abandon their natural rubber businesses because of the loss of income during this period. Agroforestry is also an effective way for the sustainable production of natural rubber.

## Expected benefits of agroforestry

Agroforestry provides the following benefits besides providing a supplemental income when para rubber tree seedlings are too young to be harvested for latex.

The price of natural rubber fluctuates greatly with the market. Even after natural rubber is ready to be harvested, the various crops planted on the plantation will help to stabilize the income of the natural rubber farmers.

Rubber trees experience a period called “wintering” every year, when the leaves fall off all of the rubber trees at the same time before new leaves start to grow. Outside this period, the leaves tend not to fall off, so once the leaves that fell off during the wintering period have been decomposed by insects and microorganisms, etc., there is nothing left to cover the soil, which as a result tends to become very dry. If a variety of different plants are inter-planted together, the soil will always have fallen leaves covering it, which will protect the soil from becoming too dry. The decomposition of the fallen leaves also provides free fertilizer for the rubber trees, contributing to a reduction in costs for the farmer.

Rubber trees are affected by a disease called white root disease (WRD), the risk from which is particularly high in Southeast

Asia. Once a rubber tree becomes infected with WRD, the disease can spread to other nearby trees very rapidly, and when WRD has been in the soil, that area of land cannot be used to cultivate rubber trees for at least five years. On agroforestry farms, because a wider variety of different plant species are being grown, the range of microorganisms in the soil is much more complex, and it is believed that this makes it more difficult for WRD to gain a foothold.

Another benefit of having multiple types of plants in a rubber plantation instead of a monoculture of only para rubber trees is that it increases the number of insects and birds that utilize the plants, which also increased the biodiversity.



Natural rubber plantation by monoculture



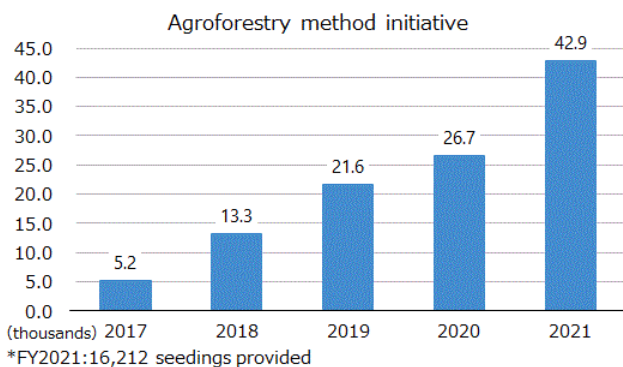
Natural rubber farm that practicing agroforestry

## Meeting Professor Sara Bumrungsri

YTRC has been collaborating with Professor Sara Bumrungsri of the Prince of Songkla University, who is an expert in agroforestry, to provide training courses on agroforestry to natural rubber farmers in Surat Thani Province, act as a contact between Professor Bumrungsri and farmers, and provide training venues. A study by Professor Bumrungsri showed that agroforestry plantations increased both the yield and income compared to ordinary natural rubber plantations. Nevertheless, as there are still few examples, YTRC is trying to encourage more farmers to adopt this farming method. When YTRC started this initiative in 2016, the 10 participating farms had an area of about 12 hectares, but in 2021, the number had increased to 57 with about 170 hectares. We plan to expand the area of agroforestry plantations to around 200 hectares by the end of 2030.



Dr. Sara of the Prince of Songkla University



An agroforestry seminar

## Voice of an agroforestry farmer

### Mr. Prajub Nuphet

It is now eight years since I first started using the agroforestry approach in a corner of my natural rubber farm. When I first heard about agroforestry, my immediate reaction was "That sounds like a really great agricultural technique!"

After implementing agroforestry for a few years, I stopped using chemical fertilizers altogether. The crops that I have planted on the farm include fruit trees, plants that are used to make spices, and trees the wood from which can be used to make furniture, etc. Not only has adopting agroforestry helped to give me a more stable income, the fact that I am doing something which is beneficial for everyone makes me feel very proud.

Over the past few years, rapid development in the Surat Thani district has led to a decline in the number of wild animals. However, since I started implementing agroforestry, there has been a pronounced increase in the number of butterflies and other insects, wild birds, etc. on the farm. In addition, although it hardly rains at all in Surat Thani during the dry season, the fallen leaves from the additional tree species help to retain moisture, so the soil doesn't dry out.

I am very grateful to YTRC for providing the seedlings. There is a lot that I don't know about agricultural techniques and market conditions in relation to crops other than natural rubber, so it would be great if I could access this kind of information. In the future I plan to start growing an even wider variety of crops, including coffee, vegetables, etc., and I hope to become an agroforestry expert so that I can transform my farm into a learning center.



## Future challenges and initiatives

We have only just begun our efforts to make natural rubber a sustainable resource. In the future, there are a wide range of issues that need to be addressed, such as moving toward the establishment of international standards for natural rubber, establishing traceability, and strengthening dialogue and cooperation with natural rubber farmers. Yokohama Rubber will continue to work toward achieving the SDGs by carefully tackling each of these issues.

# Yokohama Rubber Group Grievance Mechanism

The Yokohama Rubber is pleased to announce that we have established a grievance procedure in accordance with "Procurement Policy for the Sustainable Natural Rubber".

## Scope of the Grievance Mechanisms

- People who are involved in the natural rubber supply chain
- Stakeholders of GPSNR

## Contact for Grievances

External Site

[> The Contact Desk of Japan Center for Engagement and Remedy on Business and Human Rights \(JaCER\)](#)  
(Go to the external site)