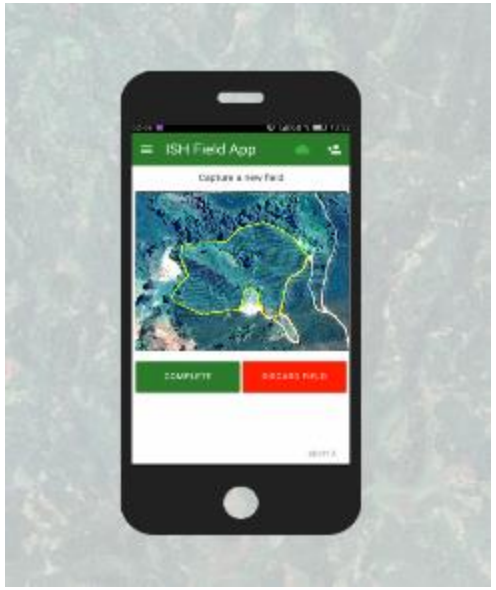

Innovative solutions for the efficient implementation of legal due diligence requirements on human rights risks and deforestation

Pia Rothe, Global Risk Assessment Services

4C Stakeholder Meeting Campinas, 13 June 2023

01

Introduction of GRAS

02

Analysis of social and environmental risks

03

Monitoring of deforestation-free supply chains

01 Introduction of GRAS

GRAS is a comprehensive solution to implement and monitor sustainable and deforestation-free supply chains and implement respective commitments

Identifying deforestation and degradation of high biodiverse areas

Implementing secure and efficient **monitoring** of global supply chains

Mapping and **managing** sustainability risks in agricultural production

Supporting credible and cost-efficient **certification** processes

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GRAS is an integrated one-stop-shop solution to map sustainability information and analyse compliance with relevant sustainability criteria

Biodiversity Areas

Deforestation

High Carbon Stock

Social Indices

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GRAS has been supported by:

Bundesministerium für Ernährung und Landwirtschaft

FNR

aufgrund eines Beschlusses des Deutschen Bundestages

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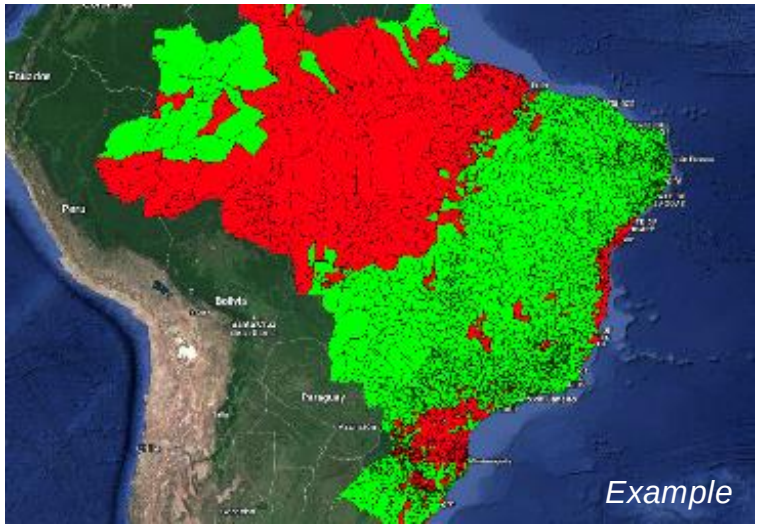
GRAS supports the analysis and monitoring of supply chains on different levels, integrating the approaches into innovative analysis and reporting tools

The risk assessment approach enables efficient identification of high-risk areas in the supply chain. Detailed analyses at field and plantation level verify compliance with deforestation criteria



Risk assessment of sourcing regions, administrative or plantation level

Detailed analysis of land use change

Interactive monitoring and reporting tools

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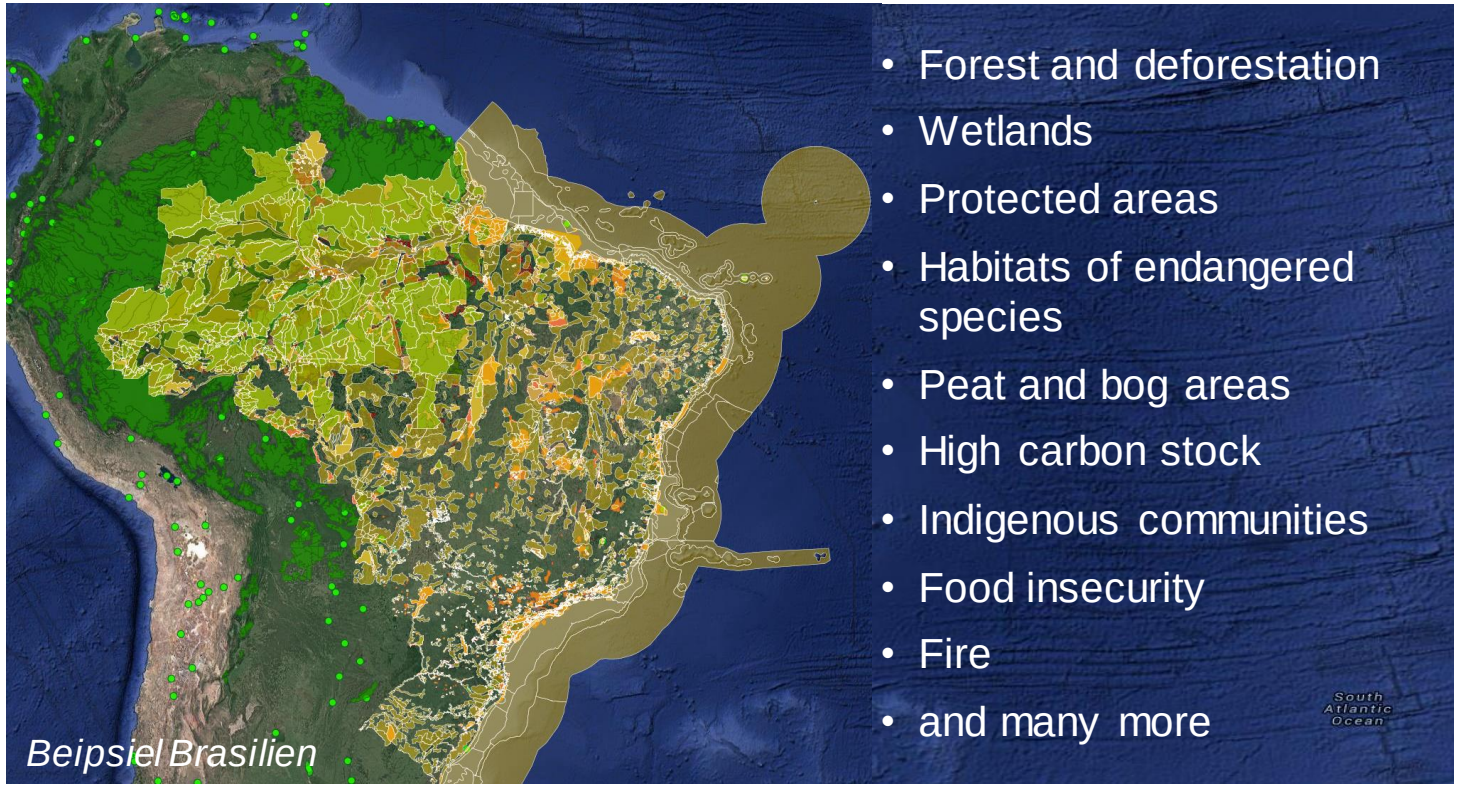
GRAS risk assessments can be implemented globally and take into account relevant data sets on environmental and human rights topics



- Forest and deforestation
- Wetlands
- Protected areas
- Habitats of endangered species
- Peat and bog areas
- High carbon stock
- Indigenous communities
- Food insecurity
- Fire
- and many more

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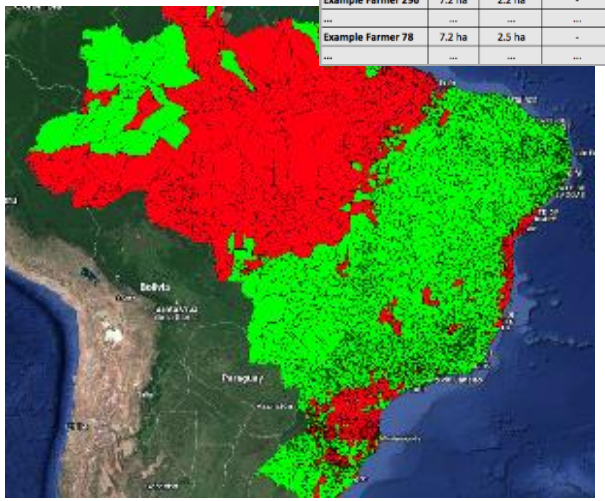
GRAS Index

Farmer	Analysed area	Land Use Change	Overlap with No Go Area	Overlap with Risk Area	GRAS Risk Level
Example Farmer 108	7.2 ha	-	-	-	low
Example Farmer 221	7.2 ha	-	-	-	low
Example Farmer 12	7.2 ha	-	-	-	low
Example Farmer 103	7.2 ha	-	-	-	low
Example Farmer 53	7.2 ha	-	-	-	low
...	...	...	...	...	...
Example Farmer 5	7.2 ha	1.2 ha	-	-	medium
Example Farmer 100	7.2 ha	1.2 ha	-	-	medium
Example Farmer 122	7.2 ha	-	1.5 ha	-	medium
Example Farmer 342	7.2 ha	1.5 ha	-	-	medium
Example Farmer 296	7.2 ha	2.2 ha	-	-	medium
...	...	...	...	...	...
Example Farmer 78	7.2 ha	2.5 ha	-	1.7 ha	high
...	...	...	...	...	...



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02 Analysis of social and environmental risks

German Act on Corporate Due Diligence in Supply Chains focusses on human rights risks

- Effective for companies with >3000 employees since January 2023 (from January 2024 also for companies with >1000 employees)

Child labour	**Forced labour & Slavery**	**Freedom of association**
Occupational Health & Safety	**Discrimination and unequal treatment**	**Withholding of an adequate wage**
Environmental Risks and Damage harmful for people	**Unlawful taking of land, forest and waters**	**Inappropriate use of security forces**

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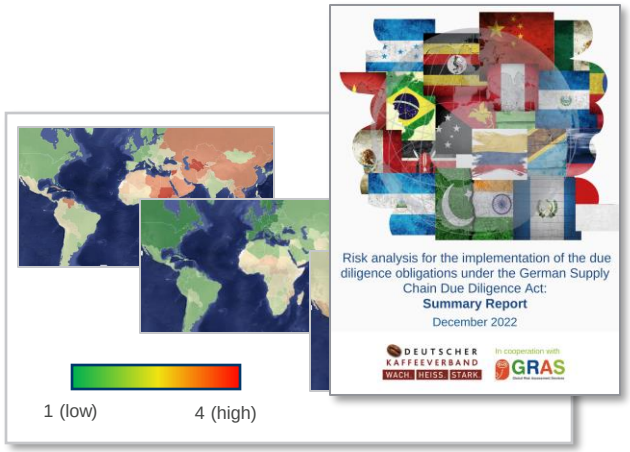
GRAS supports German companies with a sector and country-specific risk analysis of human rights violations and manages a grievance mechanism

- Independence and confidentiality
- Information on accessibility, responsibility and implementation is publicly available
- Access for potential stakeholders and anonymity

Ear4U

Powered by:
DEUTSCHER KAFFEEVERBAND
In co-operation with:
GRAS Global Risk Assessment Services



- Identification of risks as well as prioritisation and weighting
- Disclosure of results to internal decision-makers
- Conducted annually as well as on an ad hoc basis in case the risk situation changes

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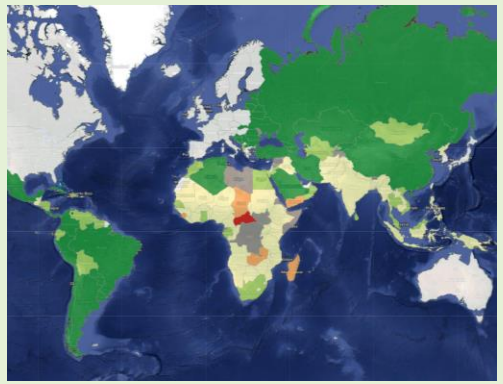
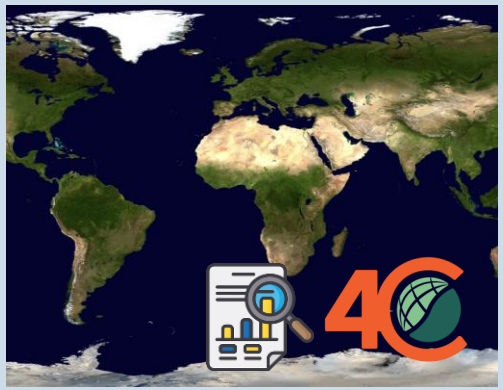
The quantitative basis of the risk assessment is the literature review and indices & statistics. The results of additional approaches are added qualitatively



Indices & statistics

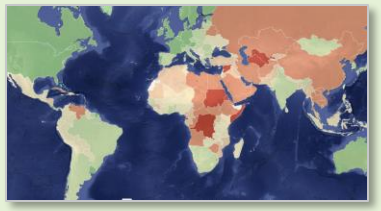
Literature review



Georeferenced and subnational data

Structured internet research

Quantitative risk evaluation per criteria and country

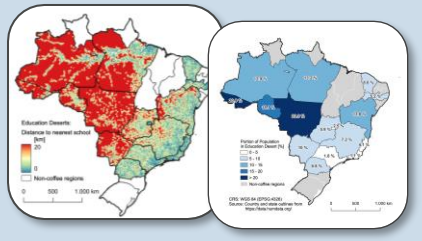


Risk Score

4 (high)

1 (low)

Qualitative supplement with country-specific and subnational information



Overview of results in summary report & 18 concise country reports

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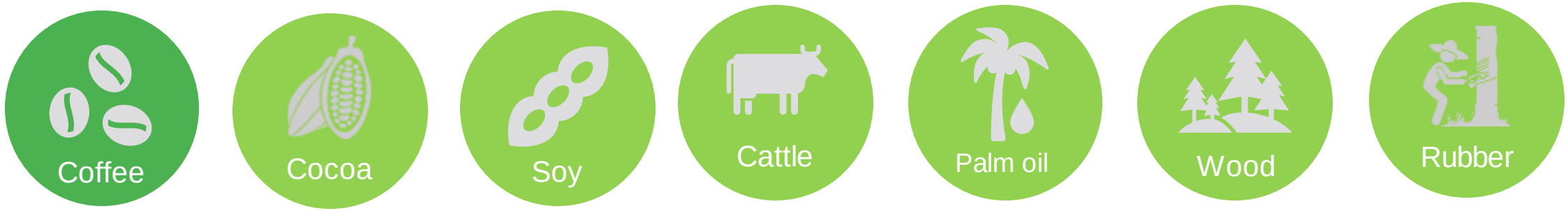
03 Monitoring of deforestation-free supply chains

Obligations described in the draft version of the EU Regulation

Proof that products are **deforestation-free** and **legal**

- Cut-off date for deforestation: December 31, 2020
- In accordance with all relevant legislation in force in the producing country



Collection of **farmer information and field coordinates/ outlines**

Provide information that production is **deforestation-free and legal**

Conduct a **risk assessment**

Passing on the information **through the supply chain**

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GRAS and 4C provide tools to collect and analyse relevant data for specific plantation areas, e.g. collecting geo-coordinates, analysis of deforestation

Collecting information

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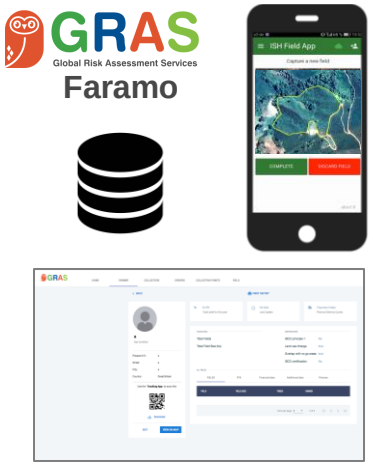
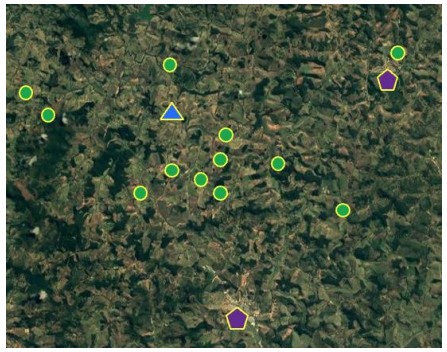
Faramo



- Mobile app for efficient data collection on the ground
- Collect basic farmer data
- Geo-coordinates & plantation outlines
- Photos of legal documents
- Questionaire on legal requirements
- Farmer management system
- Train the trainer approach



FARAMO - Management, analysis and visualization of plantation outlines and production data

4C certification includes the collection of geo-coordinates of farmers

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Identifying deforestation

GRAS uses remote sensing technology to detect land use change and deforestation

Examples

Sentinel 2 (ESA, Copernicus):
- 10x10m spatial resolution
- Launch Sentinel-2A: 2015
- Images available every 5 days

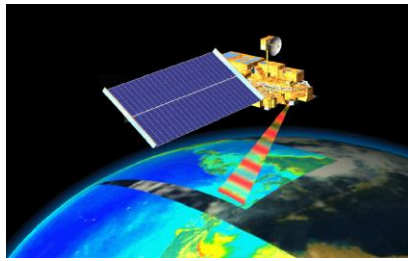
Landsat (NASA):
- 30x30m spatial resolution
- Launch Landsat 4/5: 1982/84
- Landsat 8/9 available every 8 days

Sentinel-2

SPOT

PALSAR

Landsat



MODIS

LiDAR

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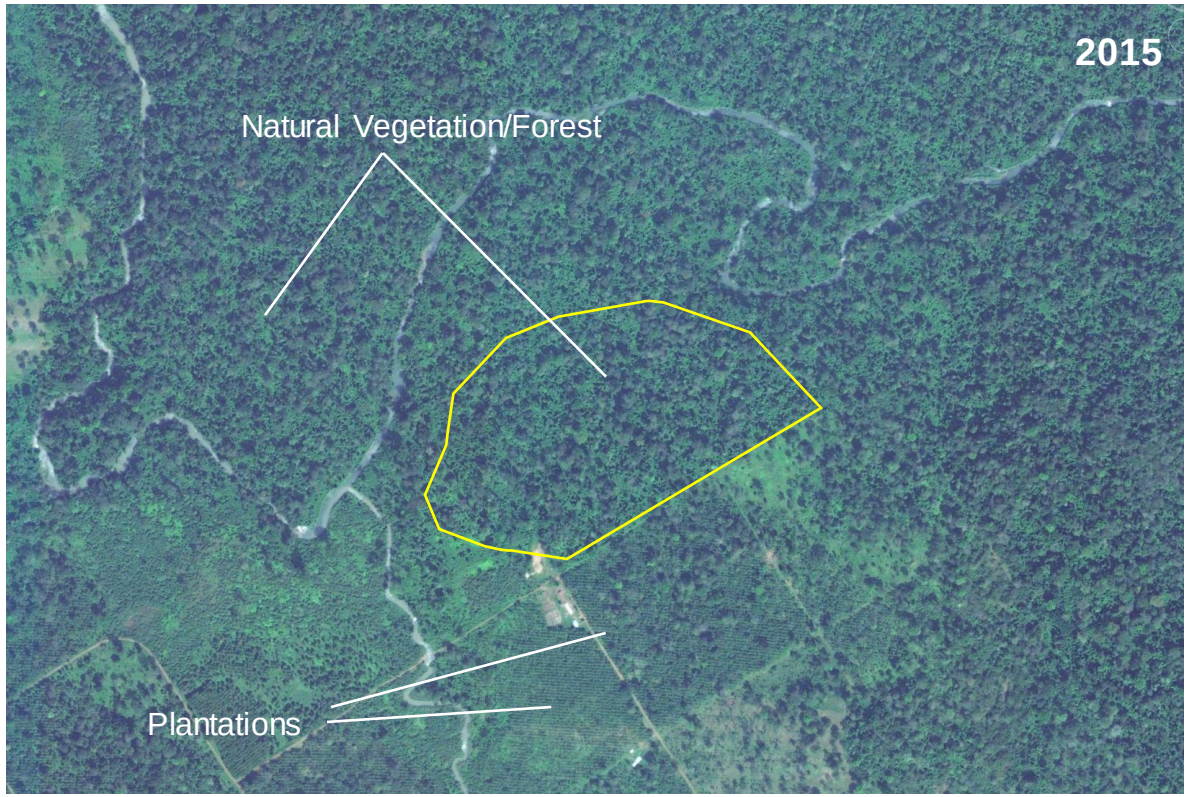
GRAS uses high resolution satellite images and additional datasets on forest density and height to identify and verify the conversion of forest to plantations



Source: Maxar Technologies

Source: CNES / Airbus

Example

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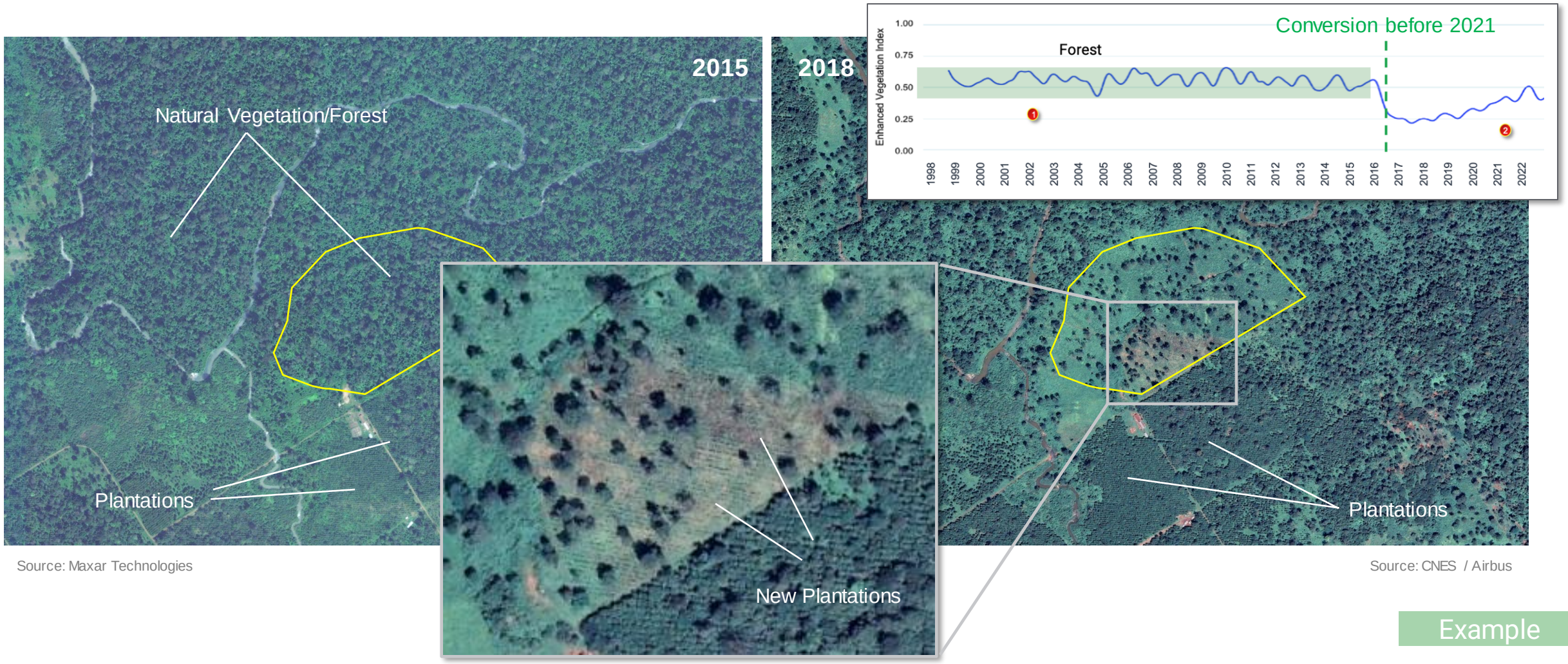
EVI time series support the identification of the point of time of land use change activities and the verification of compliance with deforestation criteria



Source: Maxar Technologies

Source: CNES / Airbus

Example

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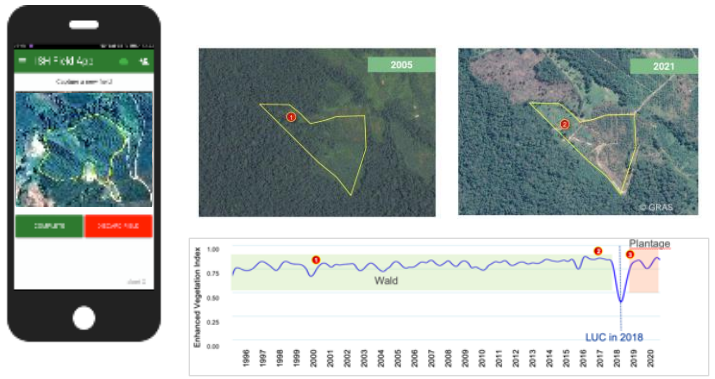
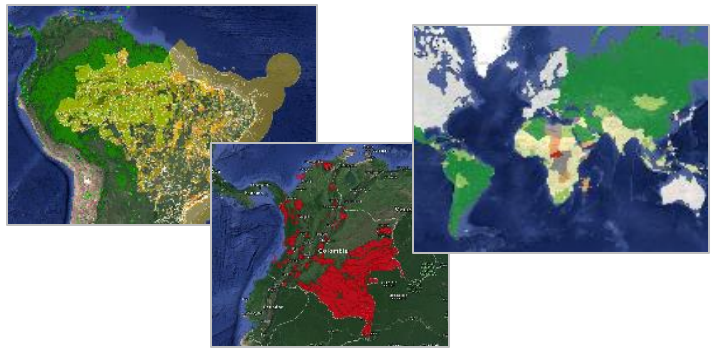
GRAS can conduct regulation-specific risk assessements and provide a tool to pass on information throught the supply chain



- Mapping of plantation areas
- Analysis using satellite data and innovative evaluation methods

Collection of geo-coordinates and proof of freedom from deforestation



- Consideration of all relevant environmental and human rights criteria of the EU regulation

Risk assessment

- Independent traceability platform
- Passing on of farmer information through the suppy chain by „digital handshake“

Traceability

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GRAS is ready to support companies globally with social and environmental risk assessments and monitoring of zero-deforestation supply chains

GRAS supports the fullfilment of Due Diligence and No-Deforestation obligations on multiple levels:

Country- and sector specific analysis of human rights & risks deforestation risks

Analysis of deforestation-free supply chains and traceability to producers

Tools to collect producer data and geo-coordinates and reporting

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Thank you very much!

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