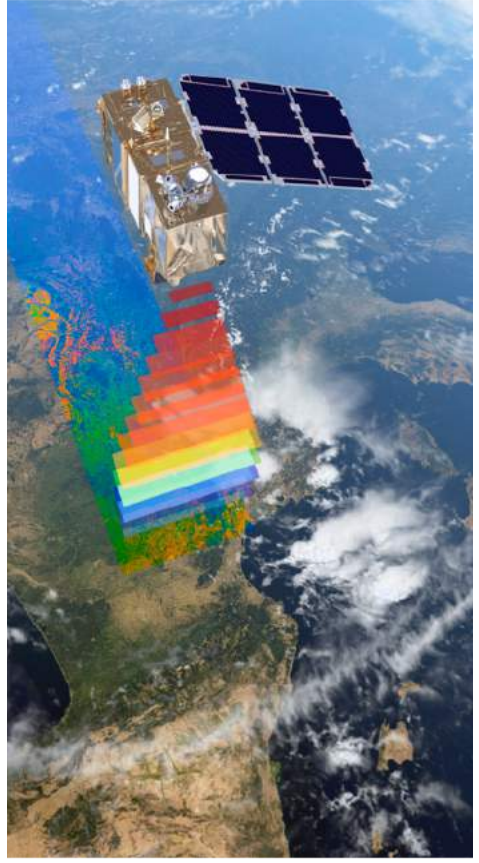

Certification support with Global Risk Assessment Services (GRAS)

ISCC System GmbH

ISCC Regional Stakeholder Dialog Latin America, 21 January 2020, Antigua/ Guatemala

ISCC uses GRAS to identify sustainability risks and verify compliance with relevant sustainability criteria

Biodiversity Areas

Deforestation

High Carbon Stock

Social Indices

GRAS
Global Risk Assessment Services

ISCC International Sustainability & Carbon Certification

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GRAS provides solutions to implement and monitor sustainable and deforestation-free supply chains and to support certification processes through

… **identifying** deforestation and degradation of high biodiverse areas

… **mapping** and **managing** sustainability risks in agricultural production

… **implementing** secure and efficient **monitoring** of global supply chains

… supporting credible and cost-efficient **certification** processes

ISCC International Sustainability & Carbon Certification

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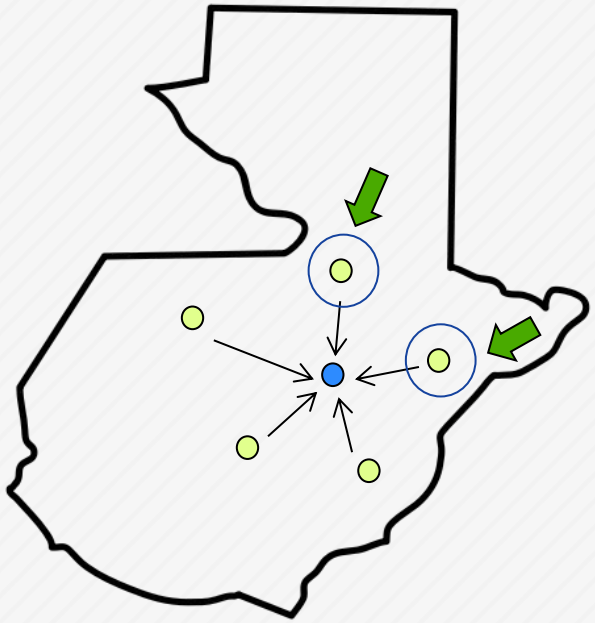
Auditors have to carry out risk assessments prior to verifying compliance with certification requirements



- First Gathering Point
- Farms that deliver biomass to First Gathering Point

- Auditor carries out risk assessments without clearly defined procedures
- Auditor selects sample farms for on site audits
- On-site verification is carried out

Audit preparation could be challenging due to lacking access to information

Support and guidance is required to facilitate risk assessment of:

- Biodiversity
- Carbon stock
- Land use change
- Social issues

GRAS
Global Risk Assessment Services

ISCC
International Sustainability & Carbon Certification

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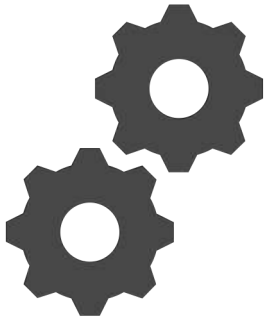
GRAS supports auditors, companies and certification systems to make certification more efficient and less costly

Support auditors

- *Identify sustainability hotspots for the audit*
- *Identify farmers that are compliant with relevant criteria*

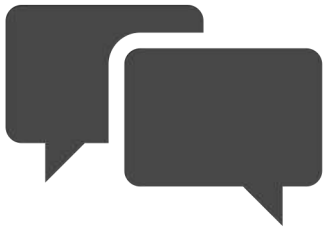
Support companies

- *Check certification suitability of farms and plantations*
- *Manage supplier on-boarding and avoid high sustainability risks*
- *Monitor dynamic supply base on a regular basis*



Support certification systems

- *Facilitate integrity assessments*
- *Clarify doubtful cases through fast and efficient analysis*



ISCC International Sustainability & Carbon Certification

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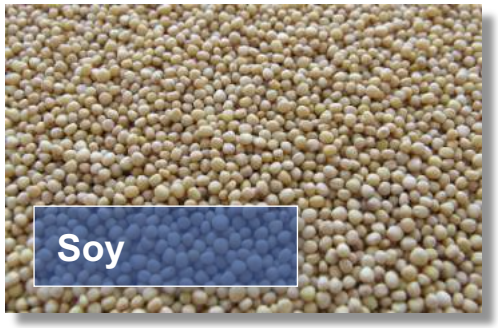
GRAS analysis can be applied globally for a huge variety of crops



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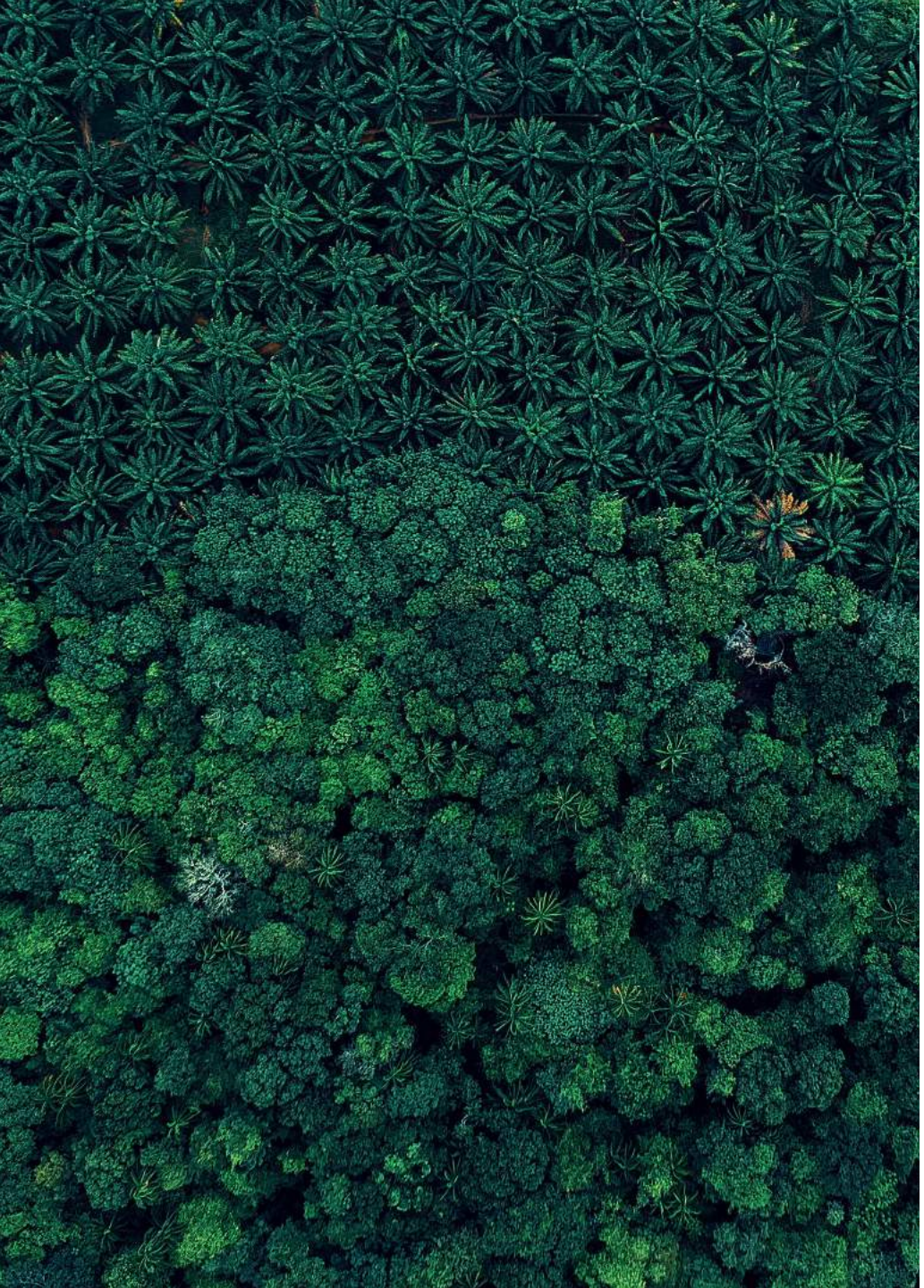
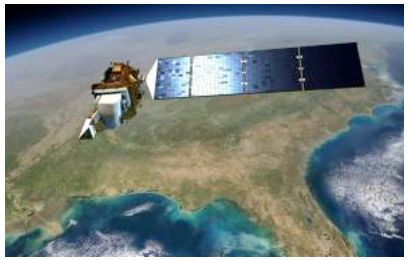


GRAS uses remote sensing technology to identify land use change, deforestation and degradation of land cover

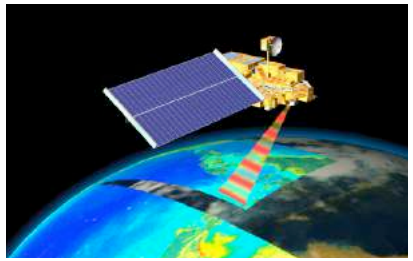
Sentinel-2

SPOT

PALSAR



Landsat



MODIS

LiDAR

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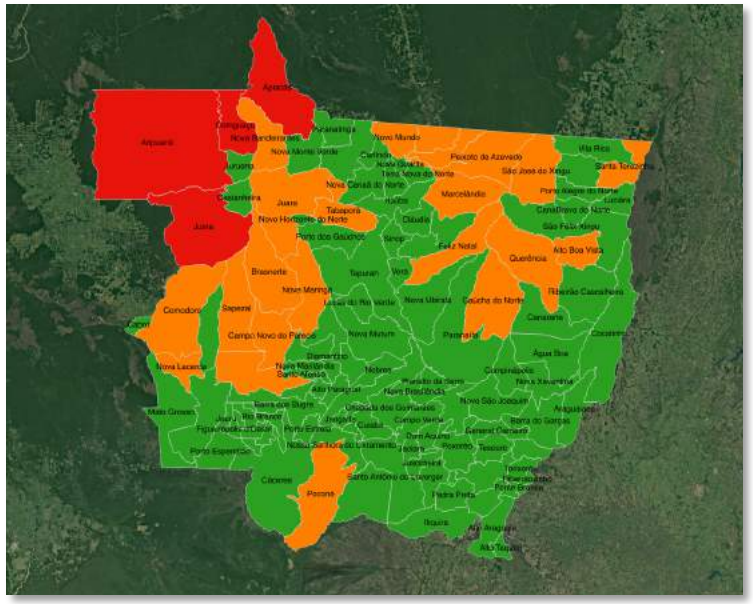
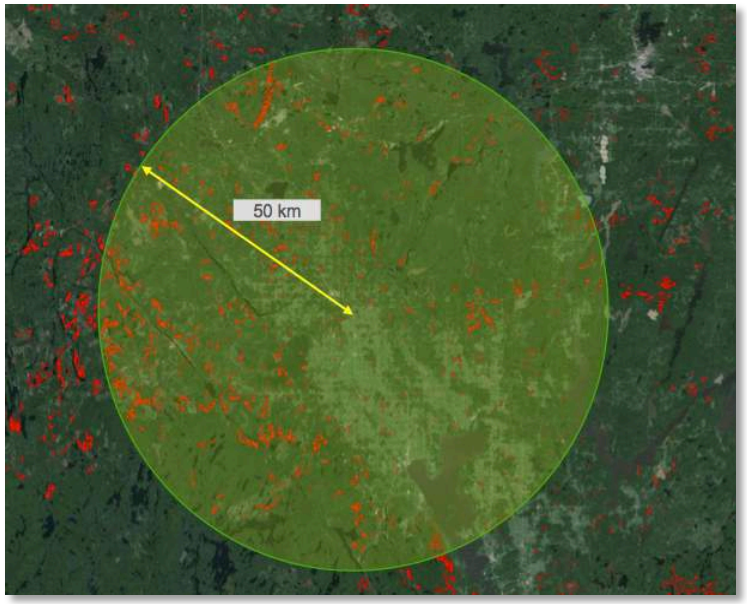
GRAS analyses sustainability risks globally on different levels, depending on specific strategies, goals and local conditions

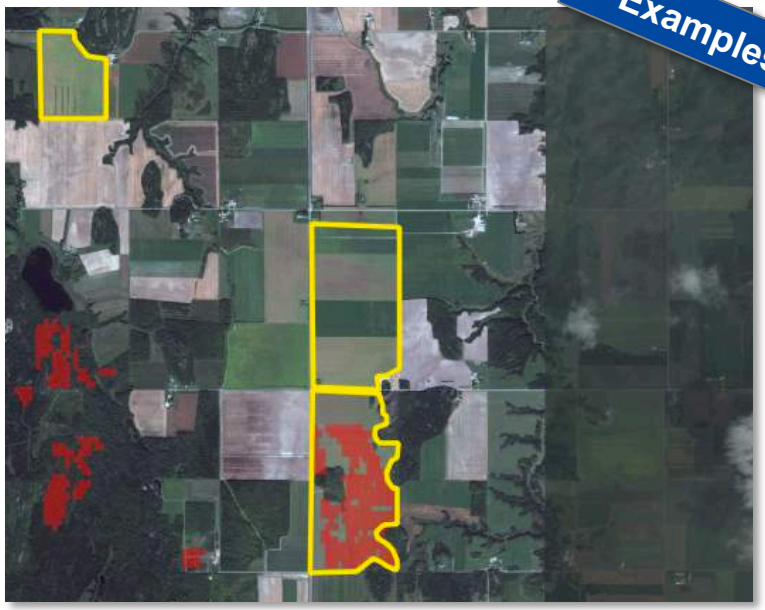


Administrative level and cluster analysis



Sourcing areas with a specific radius

Examples



Detailed field analysis

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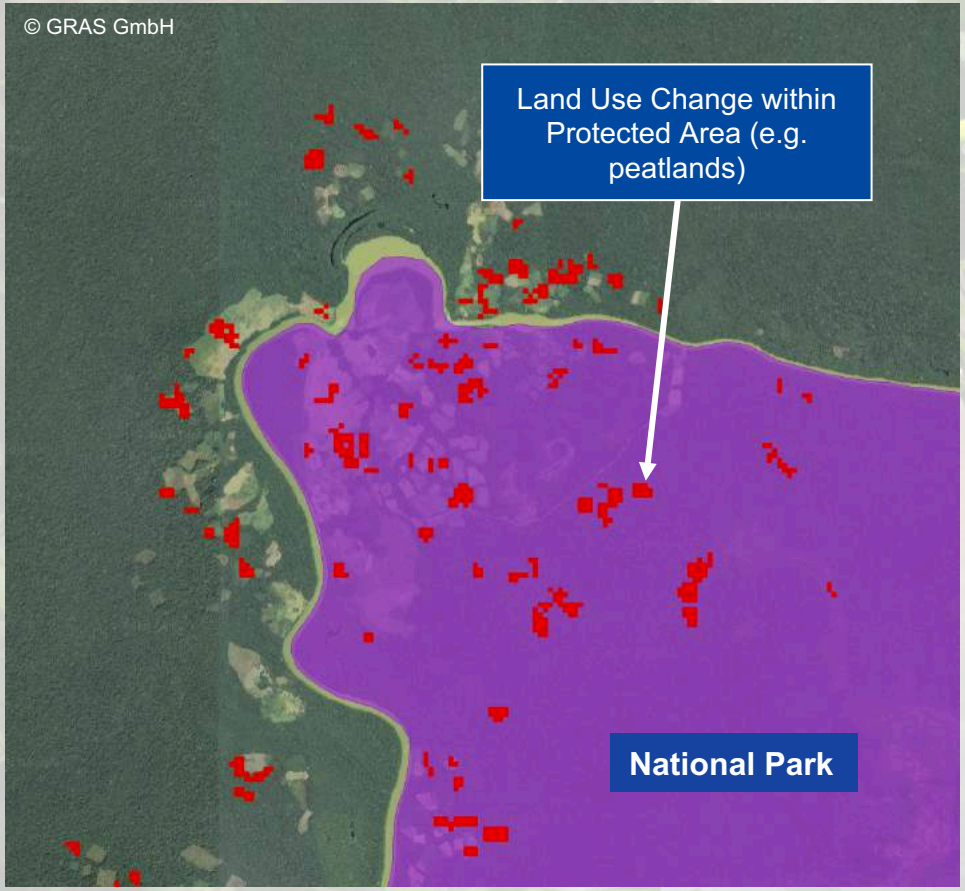
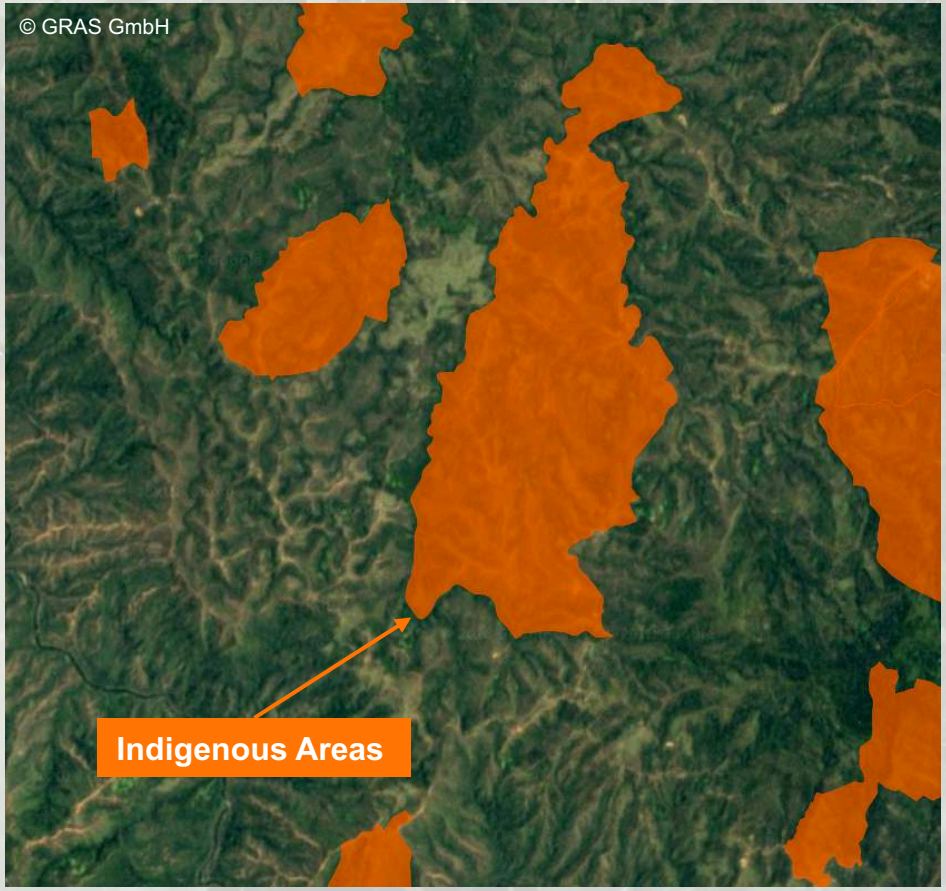
GRAS can identify and monitor illegal logging within plantation areas and check violations against protected areas and indigenous areas





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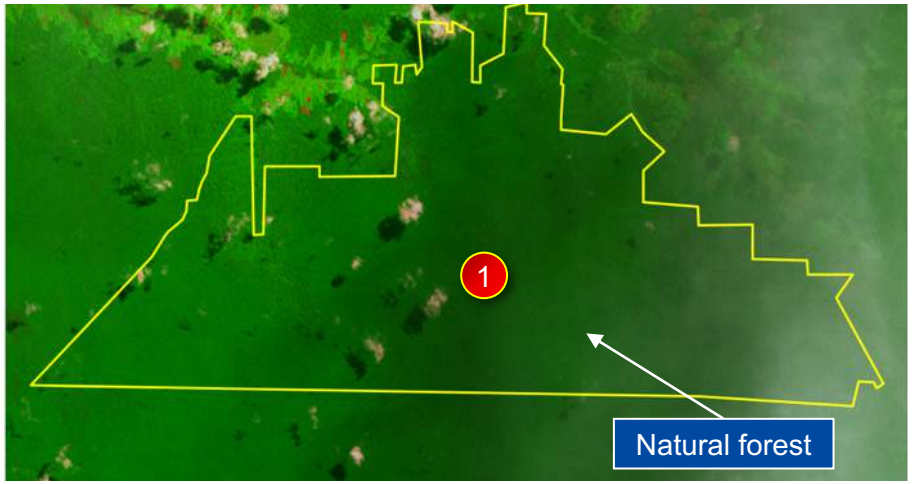
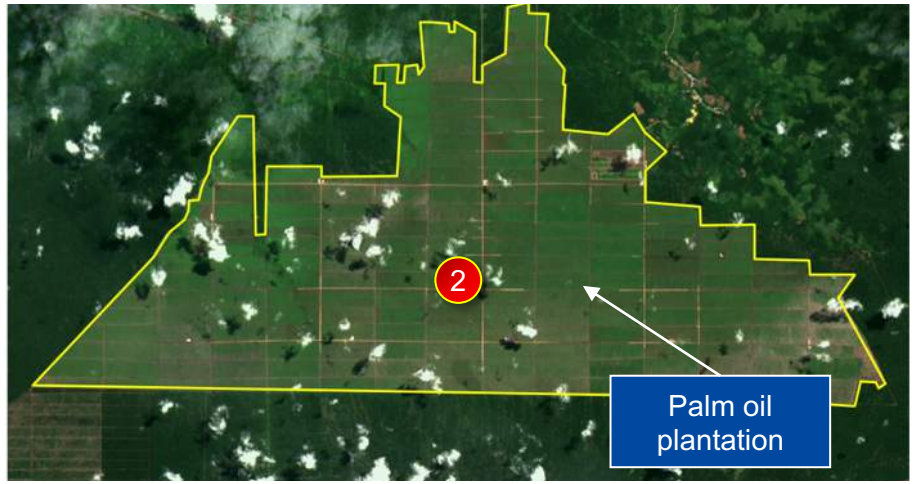
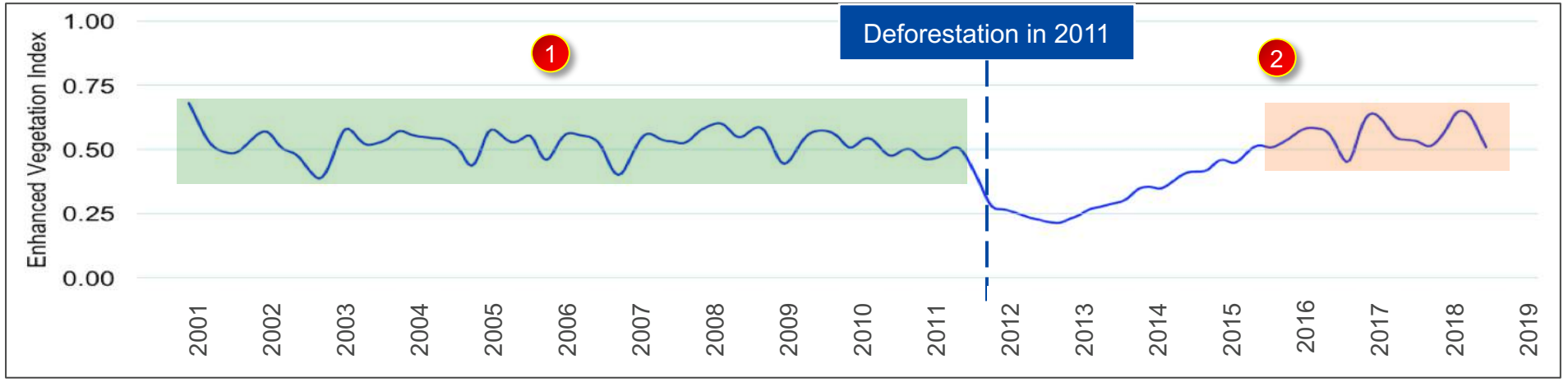
Example palm oil: GRAS conducts detailed assessments to identify deforestation using EVI time-series and high-resolution satellite images

Landsat 5, 2005





Landsat 8, 2015



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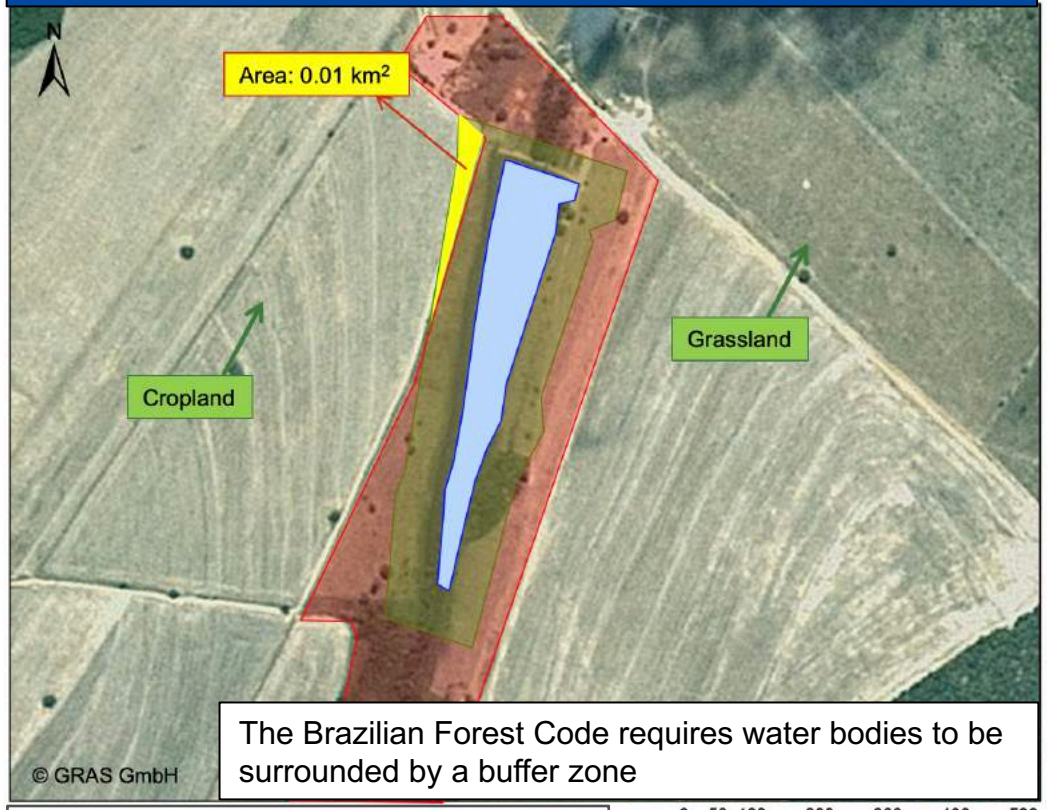
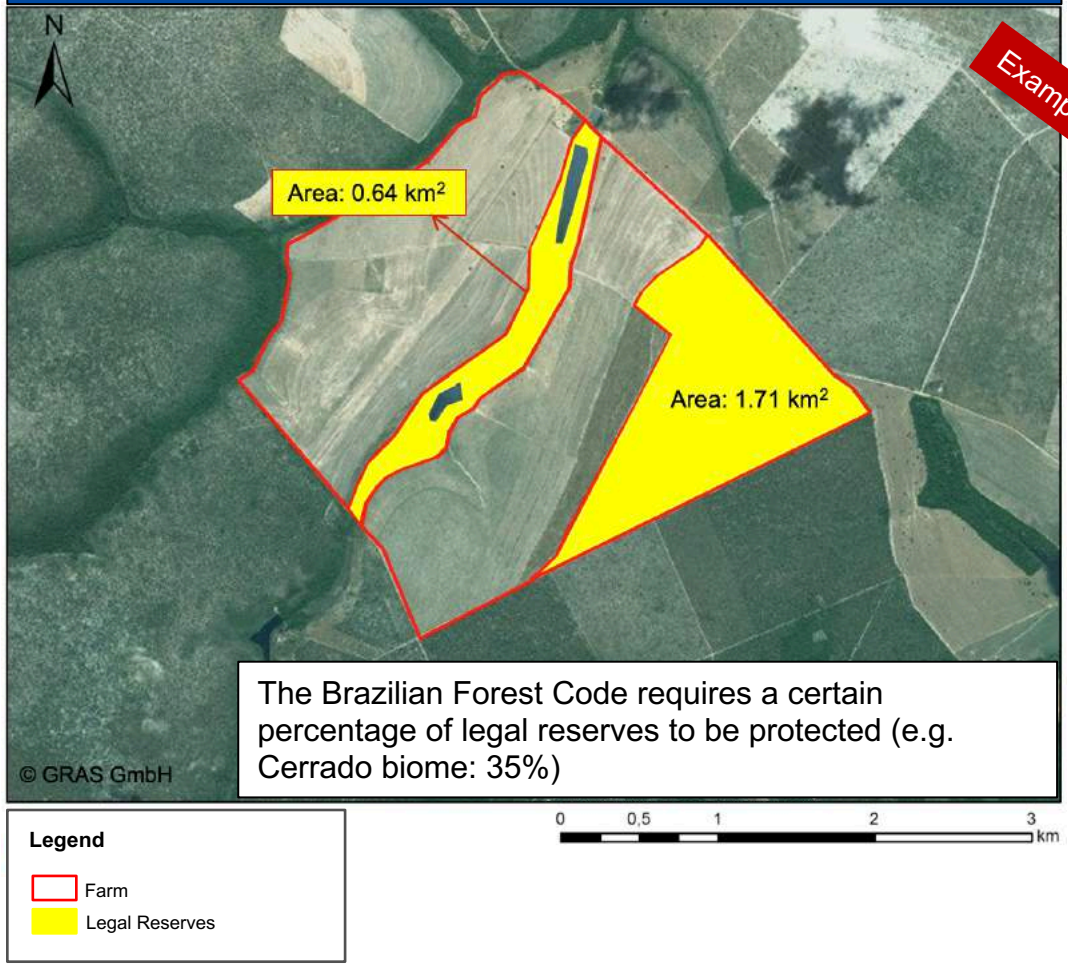
GRAS can check conformity with legal requirements, such as the Brazilian Forest Code

Areas of Permanent Protection (APP), e.g. buffer zones around water bodies



The Brazilian Forest Code requires water bodies to be surrounded by a buffer zone

Legal Reserve: requires farms to set aside a fraction of their farm to conserve biodiversity



Example from Brazil

The Brazilian Forest Code requires a certain percentage of legal reserves to be protected (e.g. Cerrado biome: 35%)

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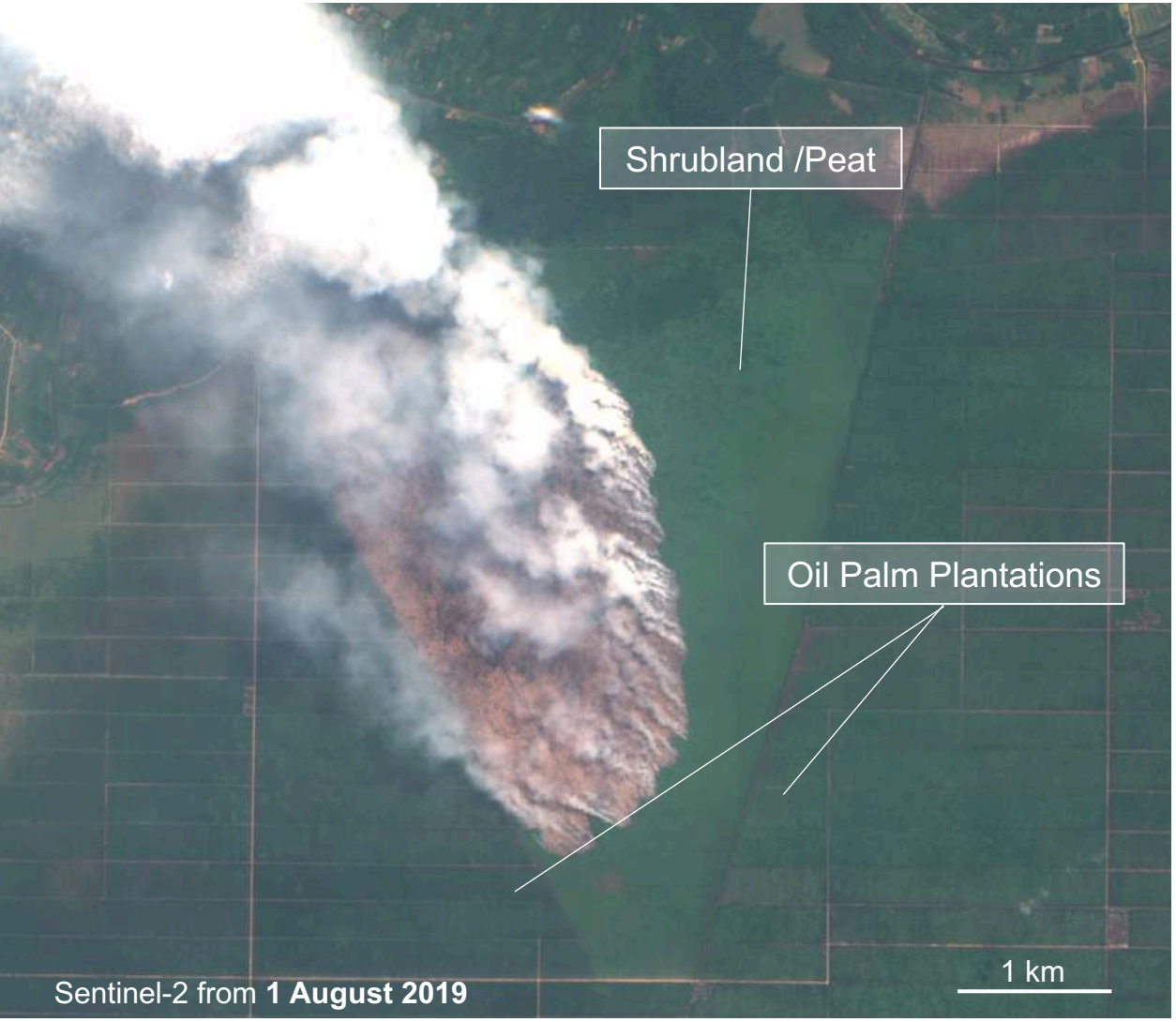
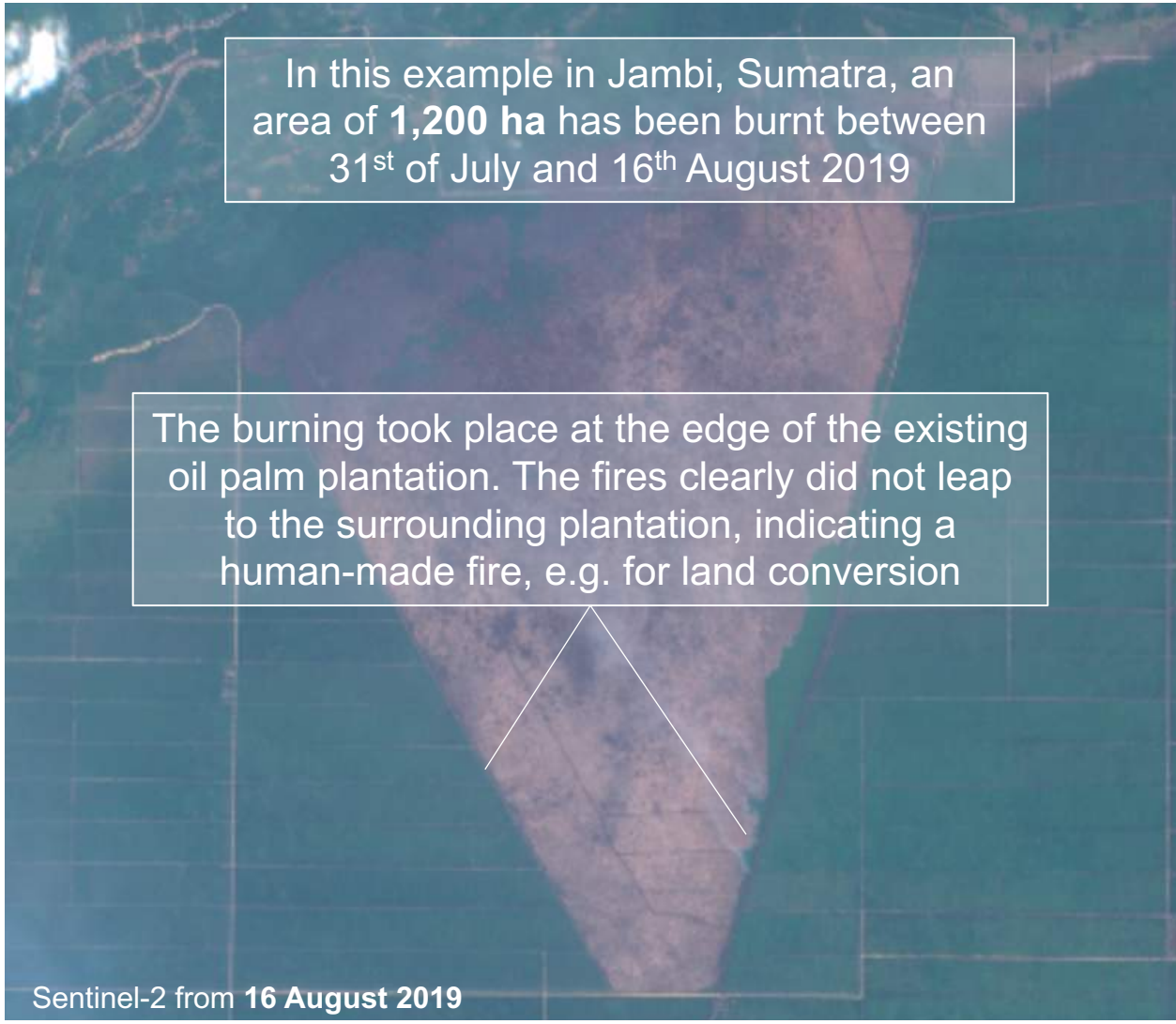
GRAS can identify active fires and provides daily updated fire alerts





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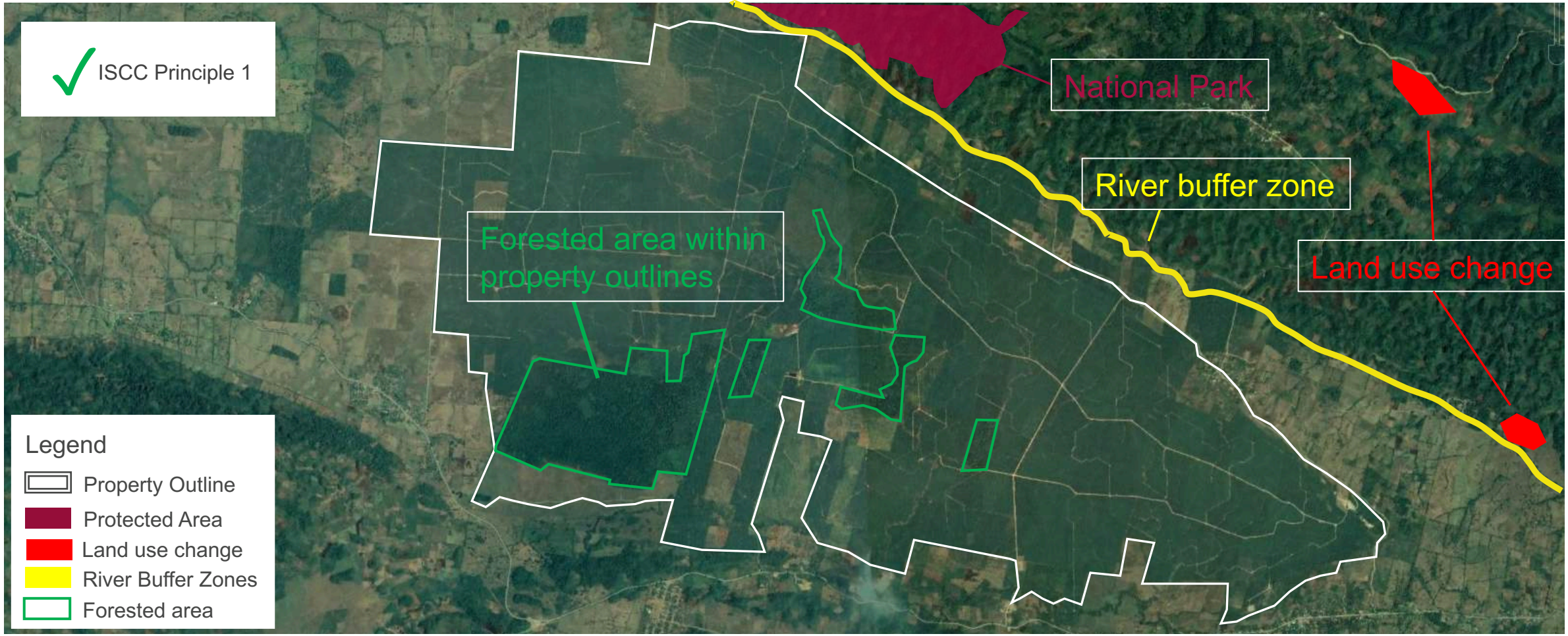
A GRAS assessment provides comprehensive support to credible and efficient certification

Example Plantation



Fictive Example

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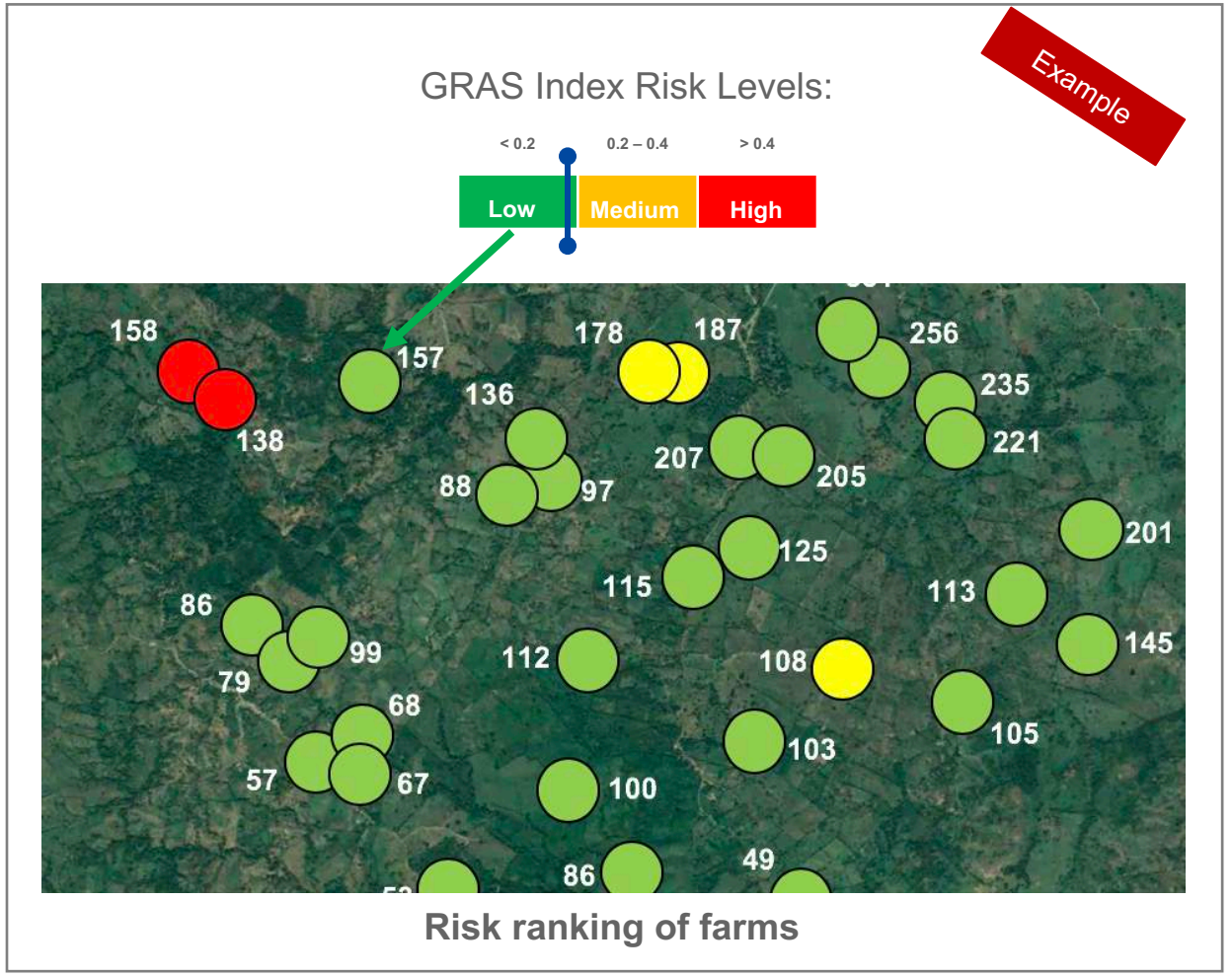
Based on the identified sustainability risks, GRAS calculates the GRAS Risk Index to easily determine the risk level of the assessed area

Factor$_{Biodiversity}$		**0.34**
Factor$_{Carbon}$		**0.28**
Factor$_{LUC}$		**0.0002**
Factor$_{Social}$		**0.226**
GRAS Index	GRAS Global Risk Assessment Services	**0.19** (Low risk)



Risk ranking of farms

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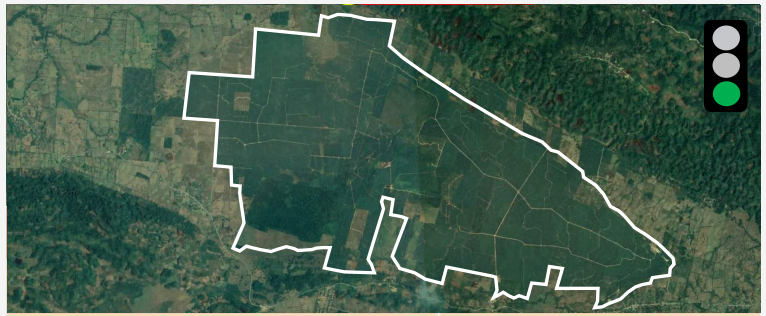
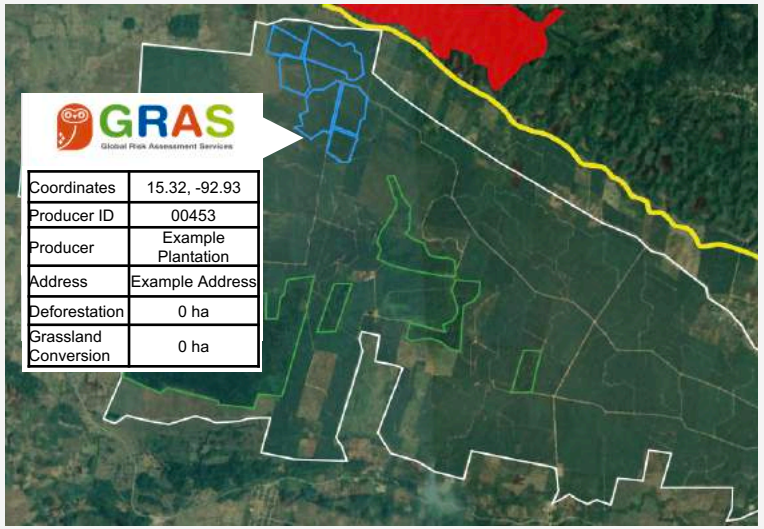
GRAS can provide all analysis results in concise reports and interactive tools

Plantations can be analyzed and a baseline for the subsequent monitoring can be set

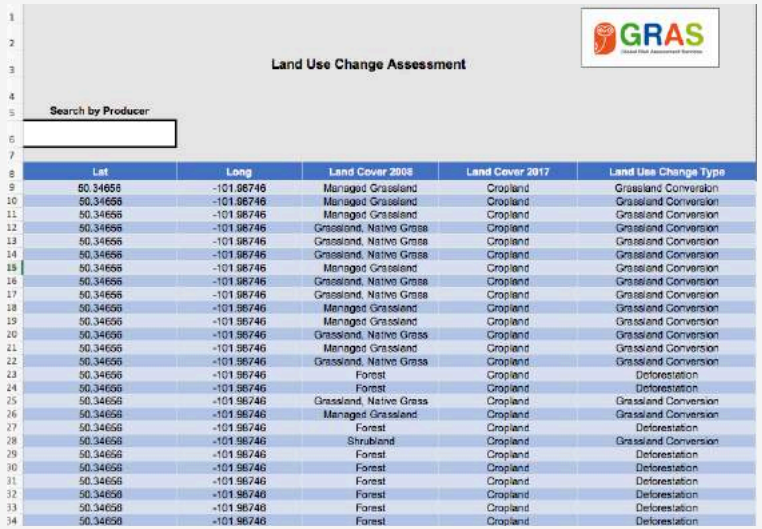


Forested Area 2020	278 ha	
Detected deforestation	0 ha	✔
Detected grassland/ shrub conversion	0 ha	✔
Overlapping with Protected Areas	0 ha	✔

Detailed Reports



Interactive Tool



Lat	Long	Land Cover 2008	Land Cover 2017	Land Use Change Type
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
50.34656	-101.98746	Managed Grassland	Cropland	Grassland Conversion
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Shrubland	Cropland	Grassland Conversion
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation
50.34656	-101.98746	Forest	Cropland	Deforestation

Dashboards and Databases

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With GRAS, certification becomes….

…more digital

…more transparent

…more effective

…less costly

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Many thanks for your attention!

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