

# 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 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



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

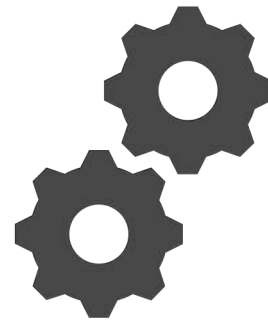
## Support auditors

- *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*

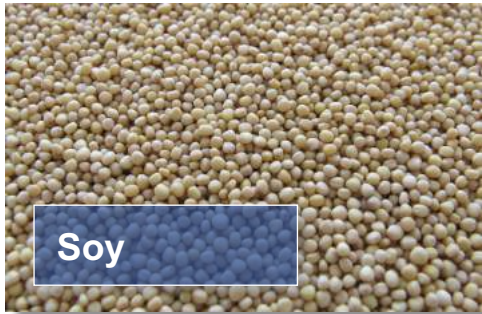


## Support certification systems

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



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





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



Sentinel-2



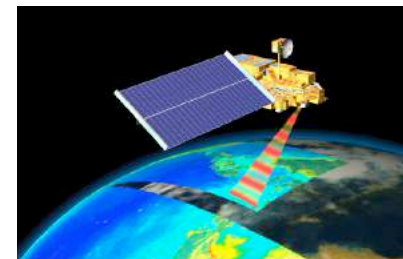
SPOT



PALSAR



Landsat

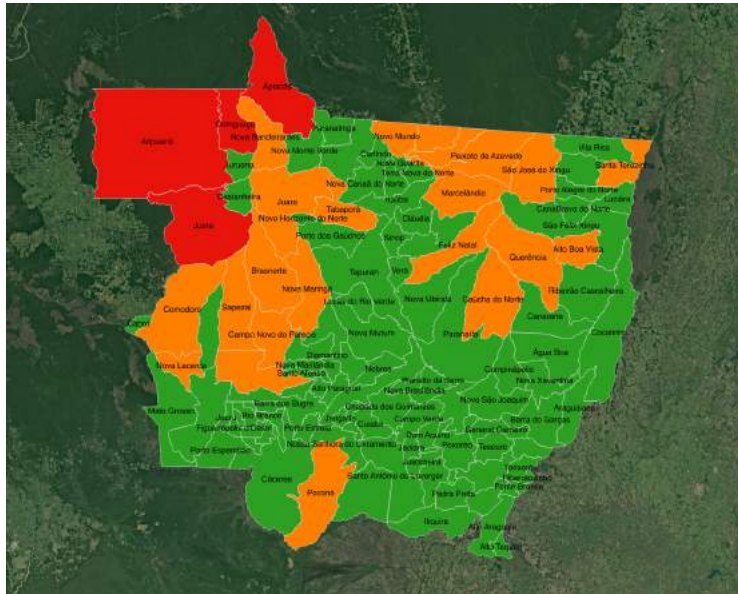


MODIS

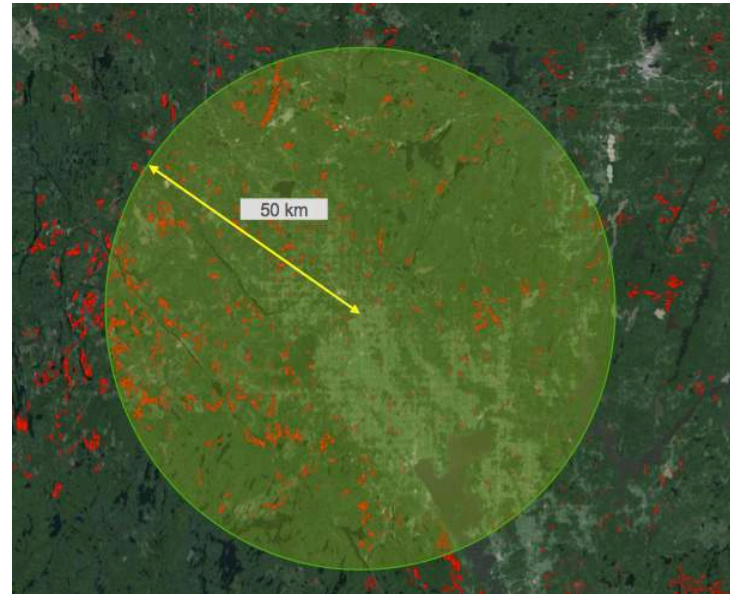


LiDAR

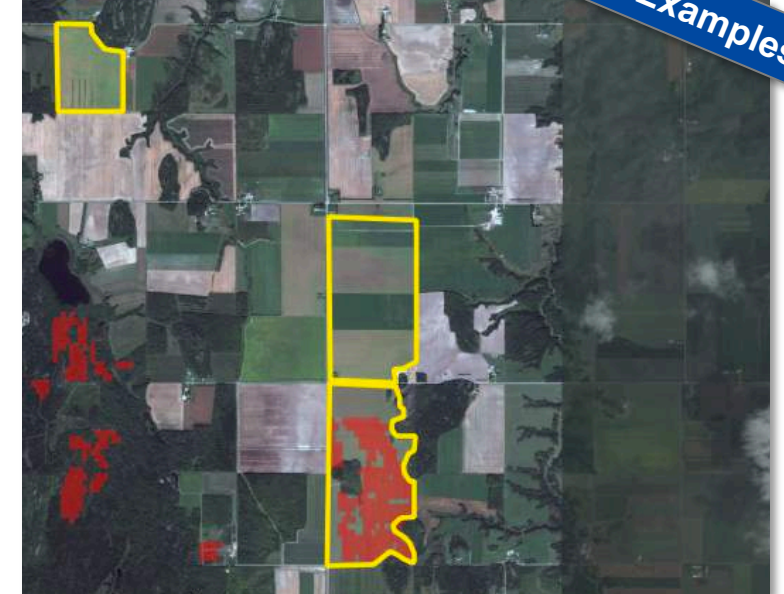
# GRAS analyses sustainability risks globally on different levels, depending on specific strategies, goals and local conditions



Administrative level and cluster analysis



Sourcing areas with a specific radius

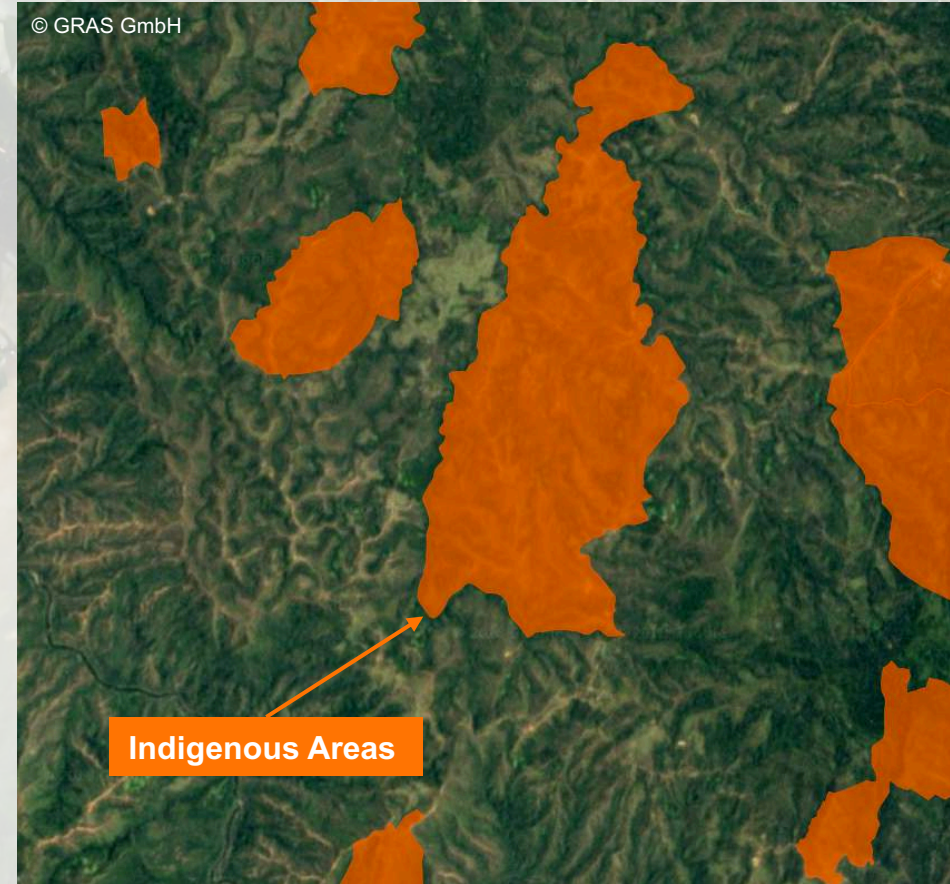
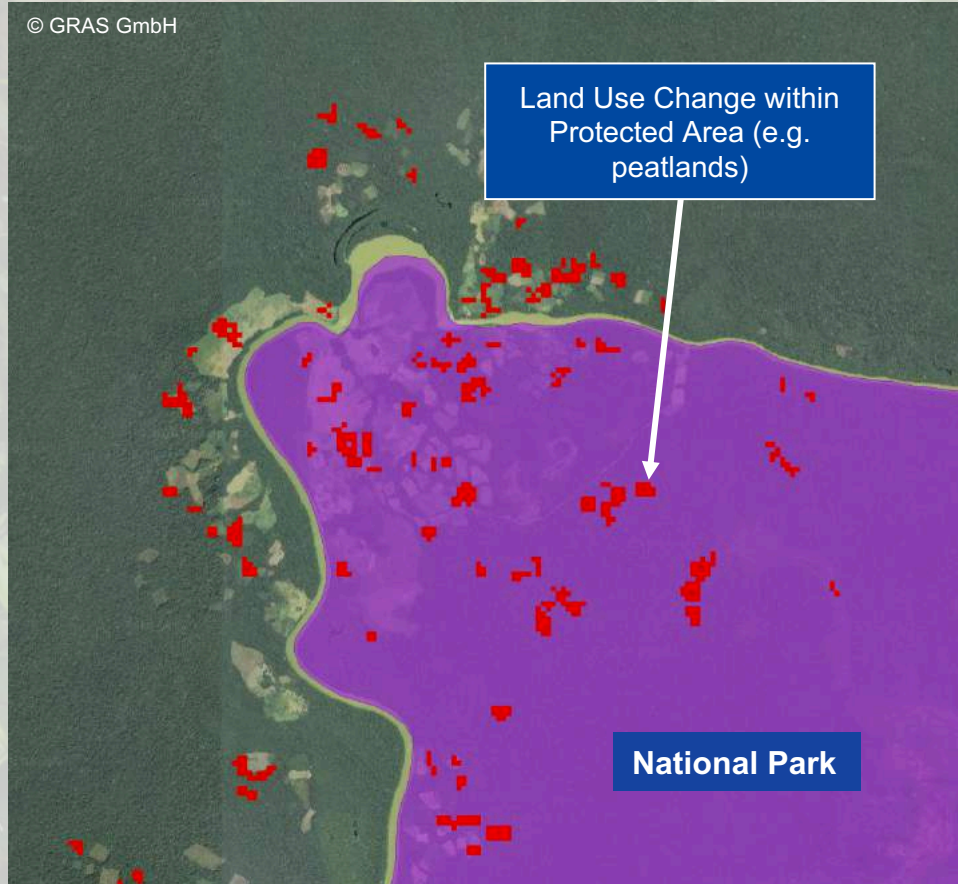


Examples

Detailed field analysis

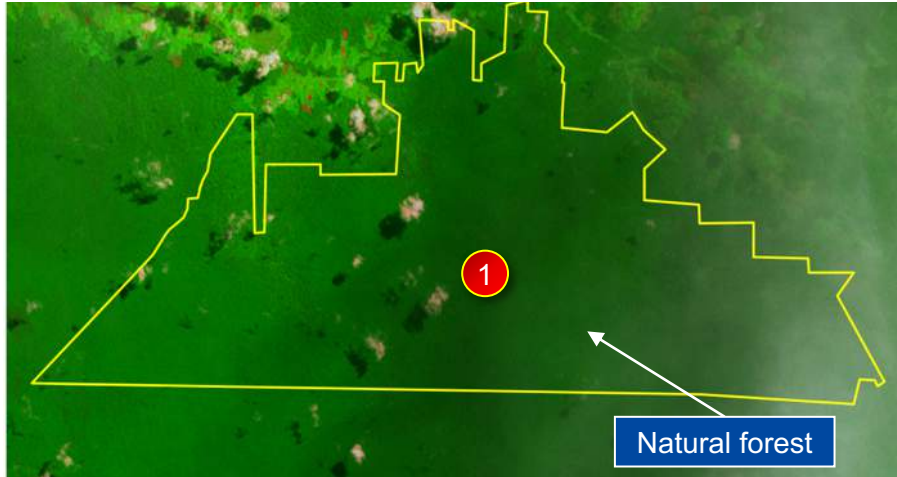


# GRAS can identify and monitor illegal logging within plantation areas and check violations against protected areas and indigenous areas

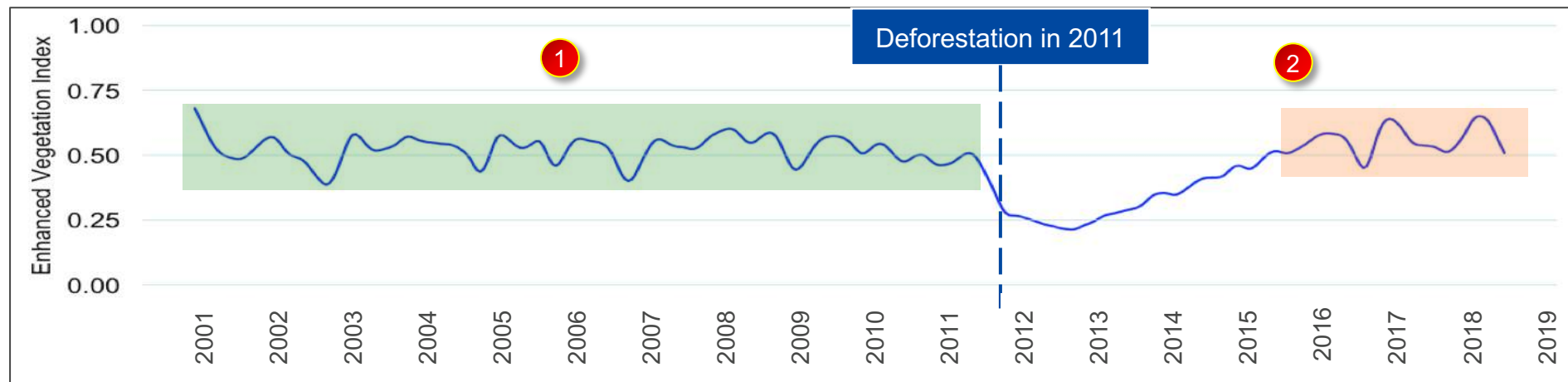
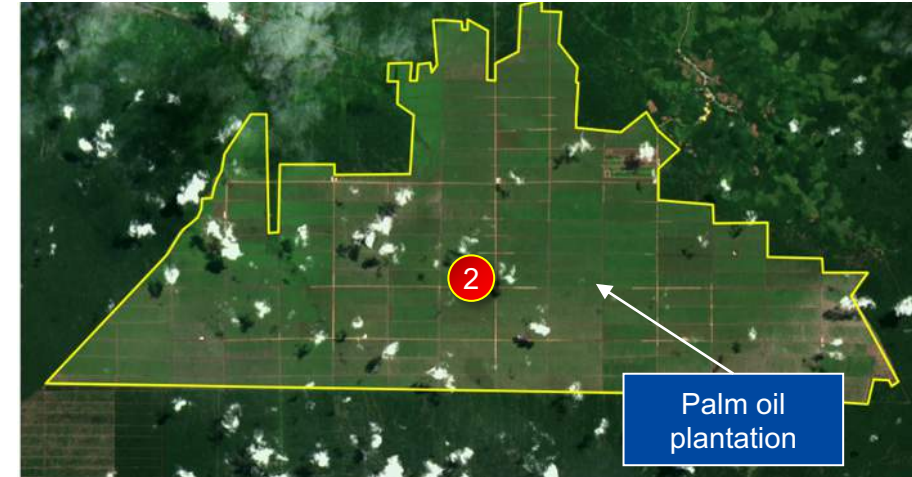


# Example palm oil: GRAS conducts detailed assessments to identify deforestation using EVI time-series and high-resolution satellite images

Landsat 5, 2005

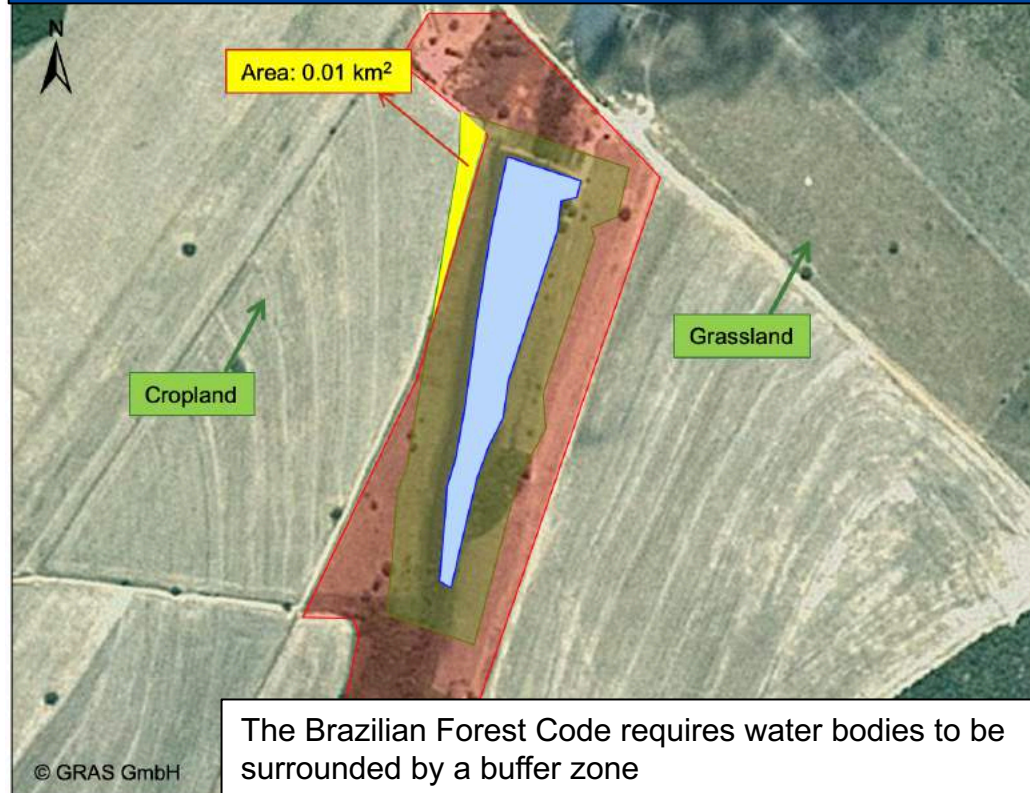


Landsat 8, 2015



# 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

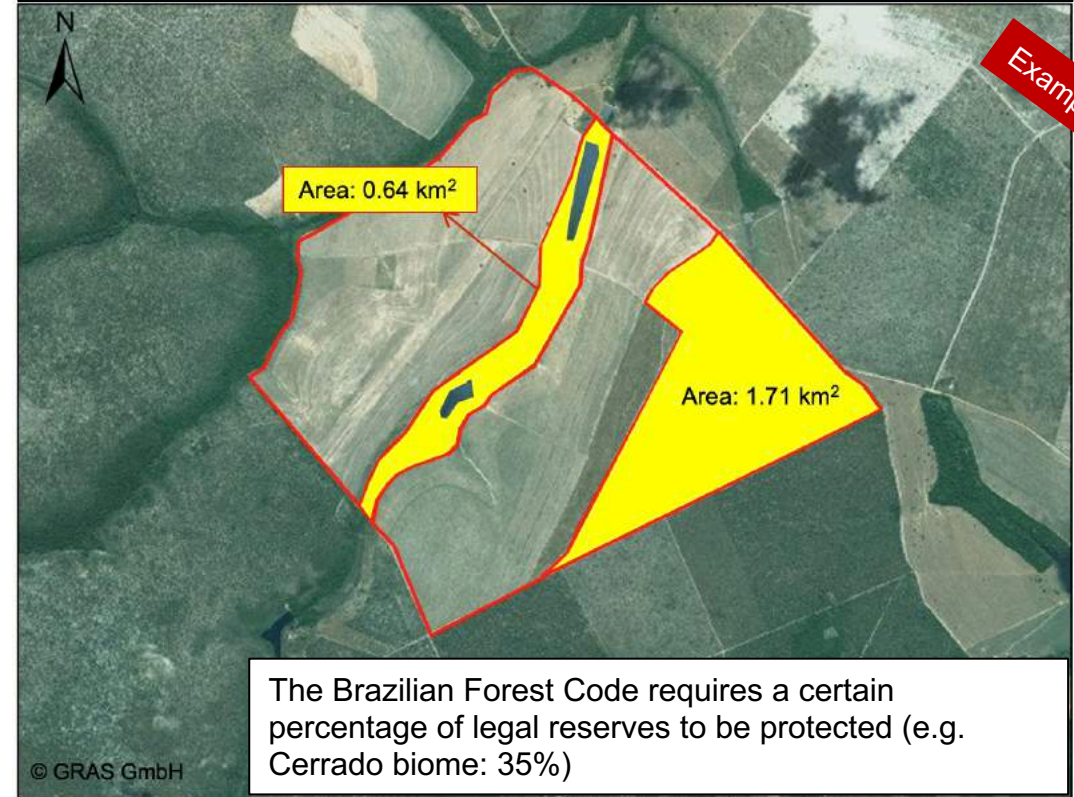


Legend

- Water body
- Available APP
- Required APP
- Area, which should be an APP but it is not



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

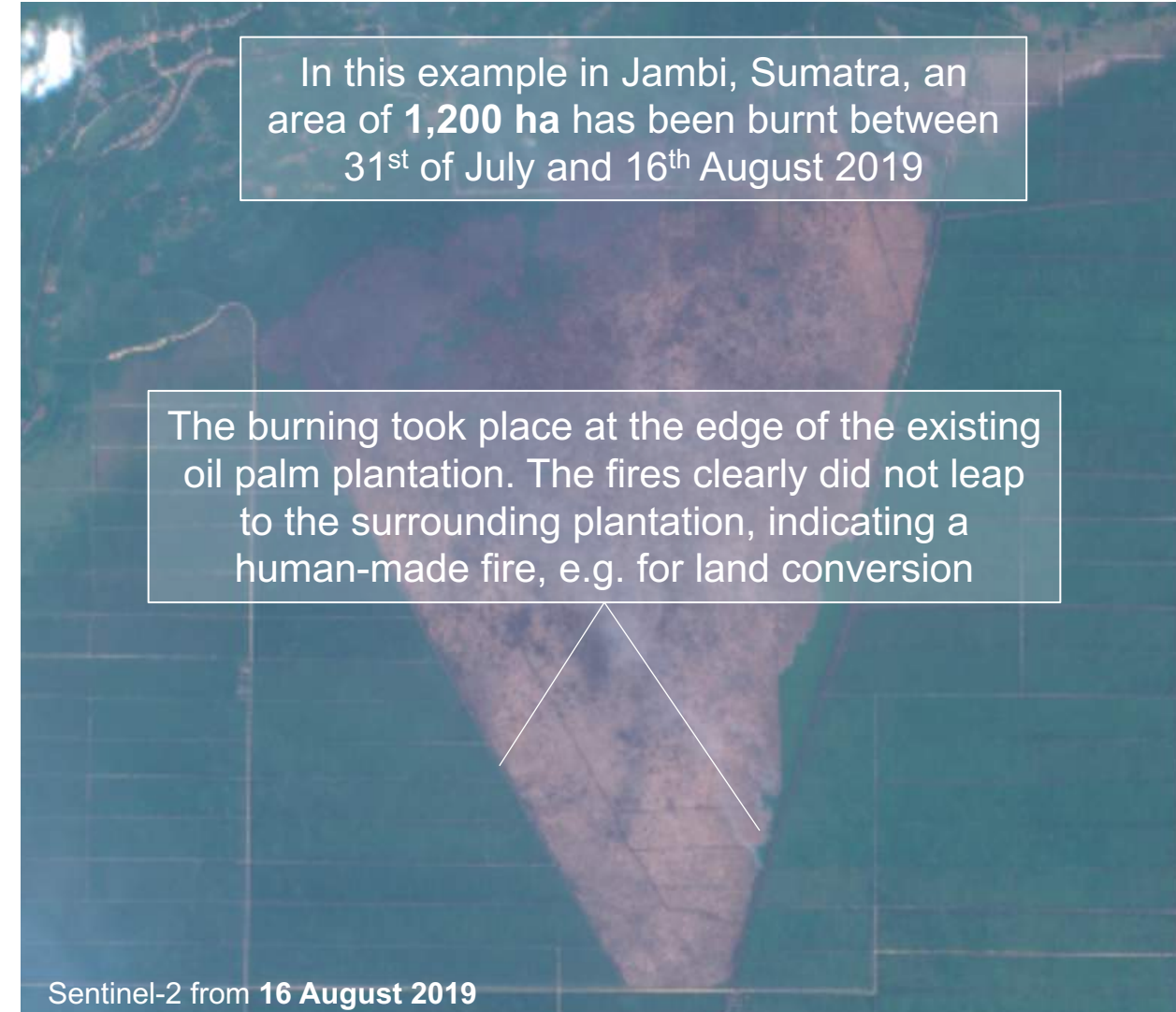
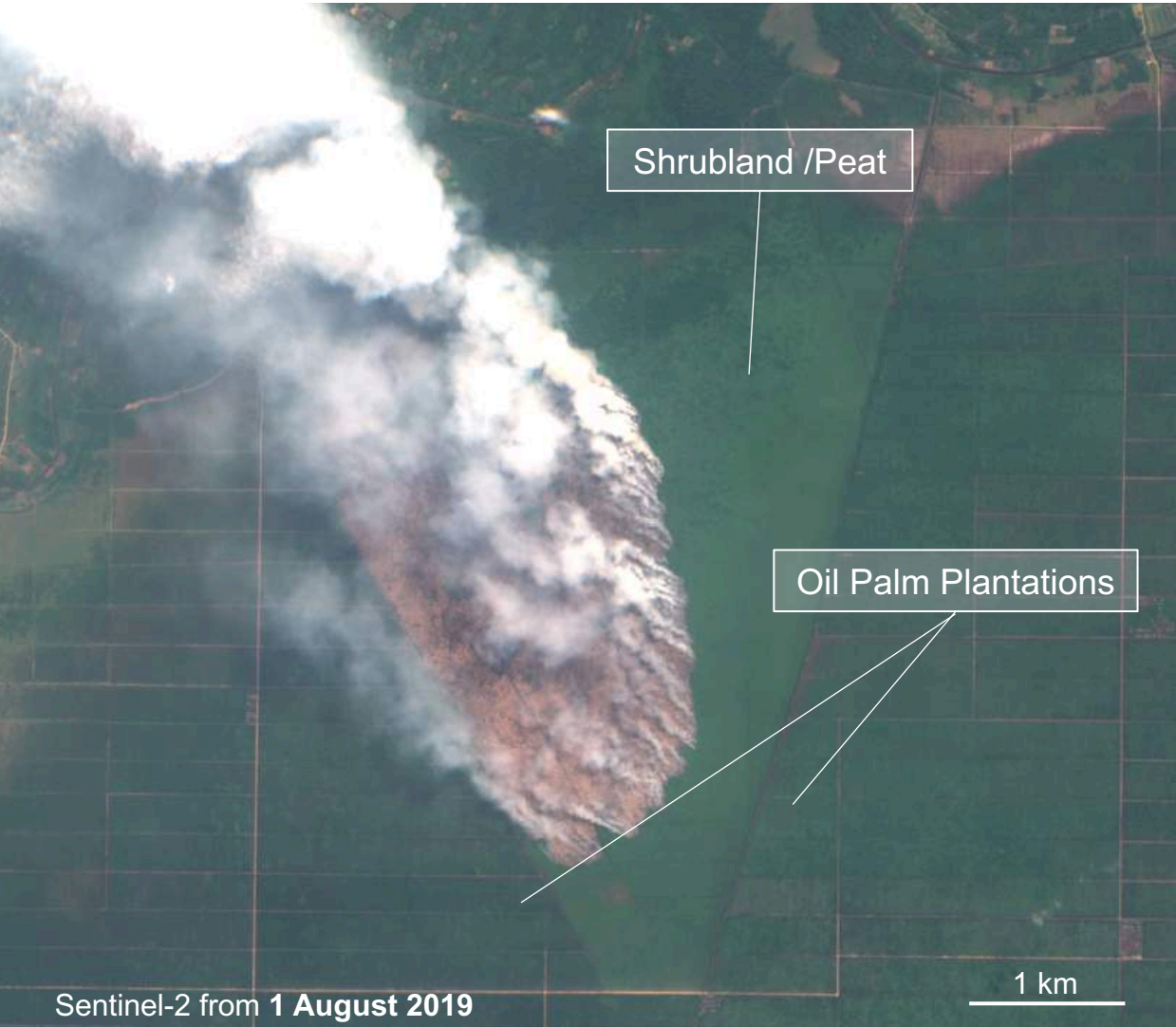


Legend

- Farm
- Legal Reserves

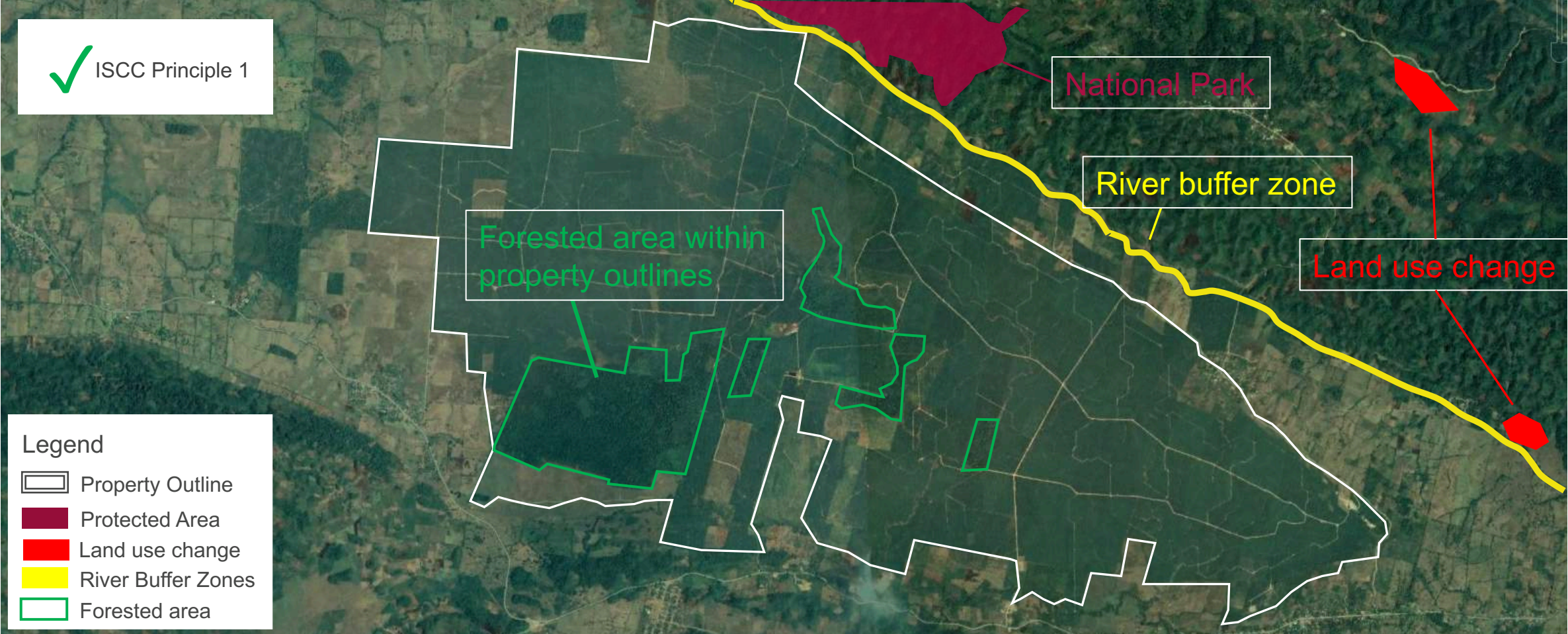


# GRAS can identify active fires and provides daily updated fire alerts








# A GRAS assessment provides comprehensive support to credible and efficient certification

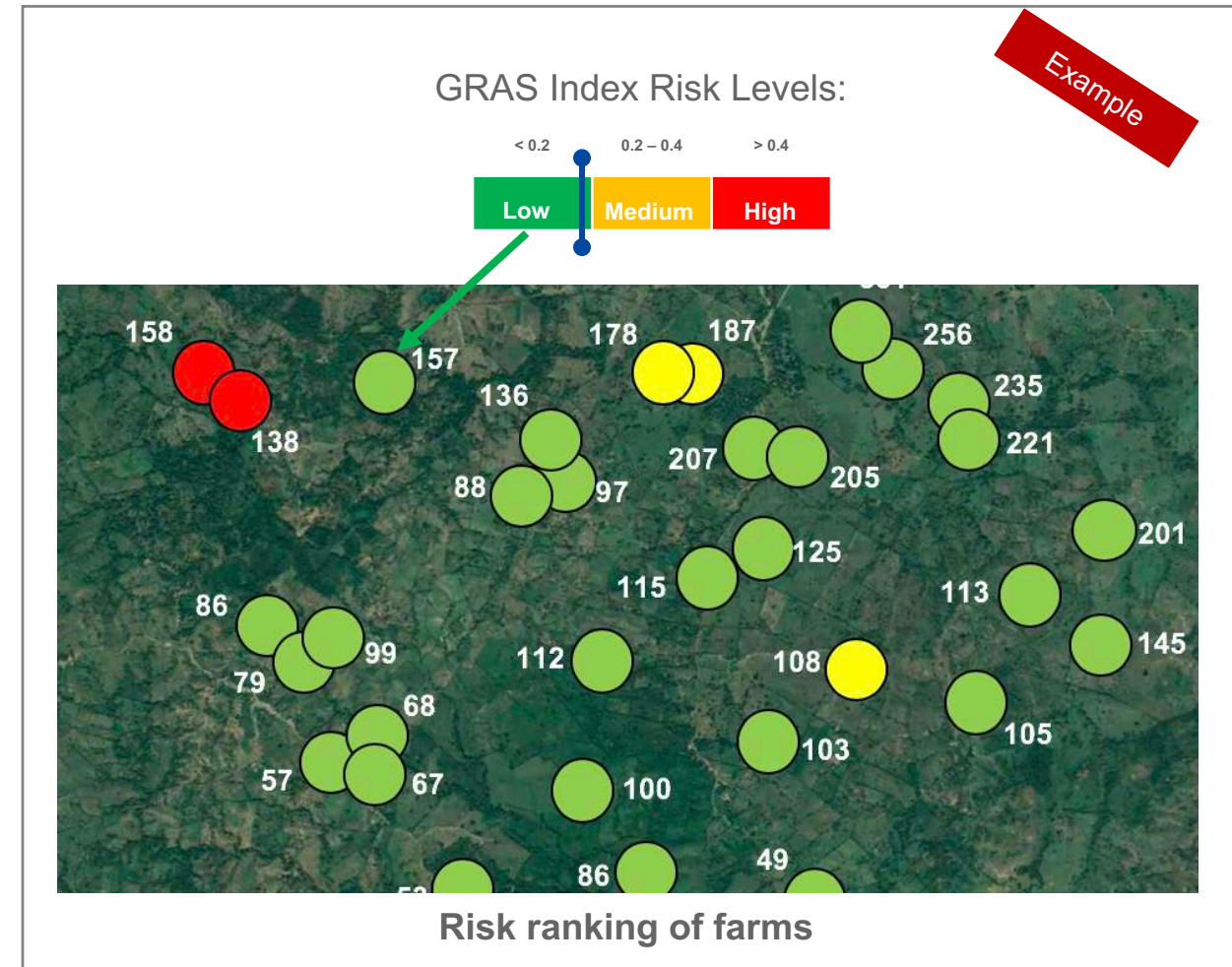
## Example Plantation



Fictive Example

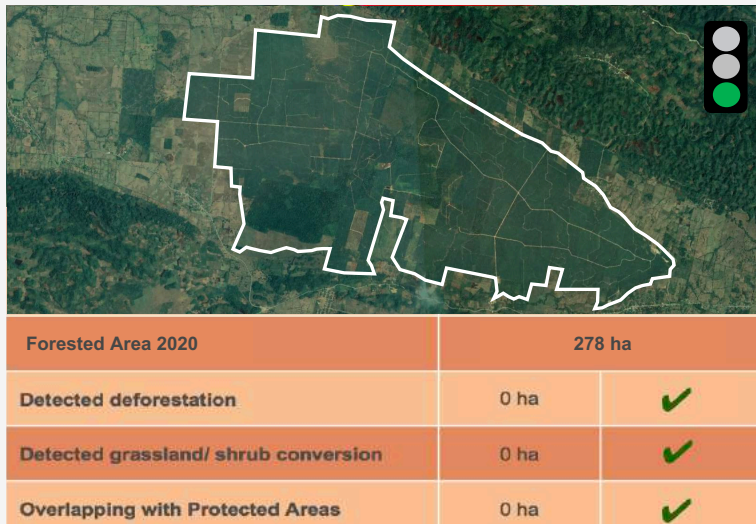
Based on the identified sustainability risks, GRAS calculates the GRAS Risk Index to easily determine the risk level of the assessed area

<b>Factor</b> <sub>Biodiversity</sub>		<b>0.34</b>
<b>Factor</b> <sub>Carbon</sub>		<b>0.28</b>
<b>Factor</b> <sub>LUC</sub>		<b>0.0002</b>
<b>Factor</b> <sub>Social</sub>		<b>0.226</b>
<b>GRAS Index</b>		<b>0.19</b> (Low risk)

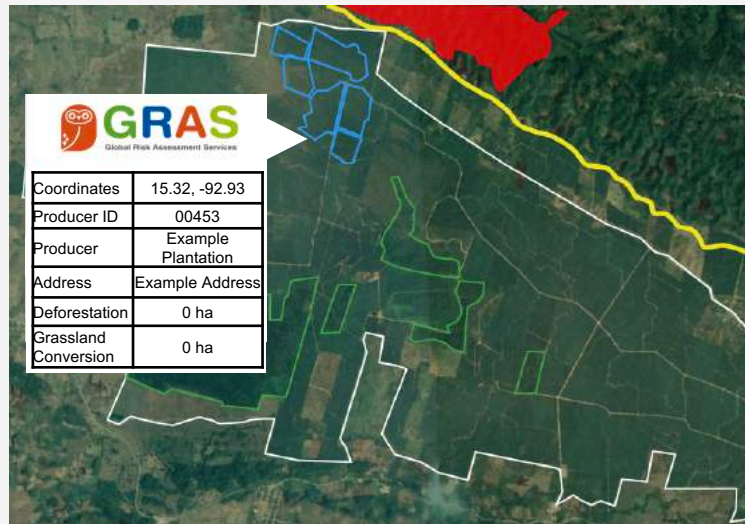


# GRAS can provide all analysis results in concise reports and interactive tools

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



Detailed Reports



Interactive Tool

GRAS  
Global Risk Assessment Services

Land Use Change Assessment

Search by Producer

	Lat	Long	Land Cover 2008	Land Cover 2017	Land Use Change Type
9	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
10	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
11	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
12	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
13	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
14	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
15	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
16	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
17	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
18	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
19	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
20	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
21	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
22	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
23	50.34658	-101.98746	Forest	Cropland	Deforestation
24	50.34658	-101.98746	Forest	Cropland	Deforestation
25	50.34658	-101.98746	Grassland, Native Grass	Cropland	Grassland Conversion
26	50.34658	-101.98746	Managed Grassland	Cropland	Grassland Conversion
27	50.34658	-101.98746	Forest	Cropland	Deforestation
28	50.34658	-101.98746	Shrubland	Cropland	Grassland Conversion
29	50.34658	-101.98746	Forest	Cropland	Deforestation
30	50.34658	-101.98746	Forest	Cropland	Deforestation
31	50.34658	-101.98746	Forest	Cropland	Deforestation
32	50.34658	-101.98746	Forest	Cropland	Deforestation
33	50.34658	-101.98746	Forest	Cropland	Deforestation
34	50.34658	-101.98746	Forest	Cropland	Deforestation

Dashboards and Databases

# With GRAS, certification becomes....



...more digital



...more transparent



...more effective



...less costly





Many thanks for your attention!

Follow us on   

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