



Forest Reference Levels and REDD+ results submitted to the UNFCCC;

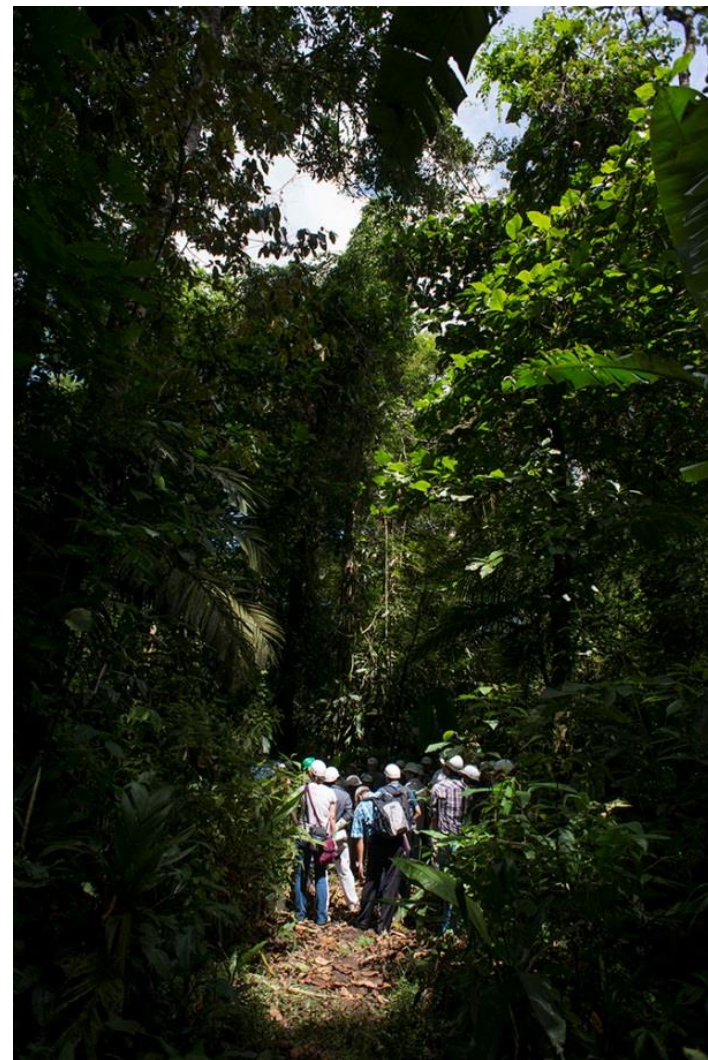
An overview

Marieke Sandker

FREL/FRL lead REDD+ FAO

February 2019

- ➔ Global overview
- ➔ How were FRELs created?
- ➔ Looking into REDD+ results
- ➔ How do the FRL and NDC relate

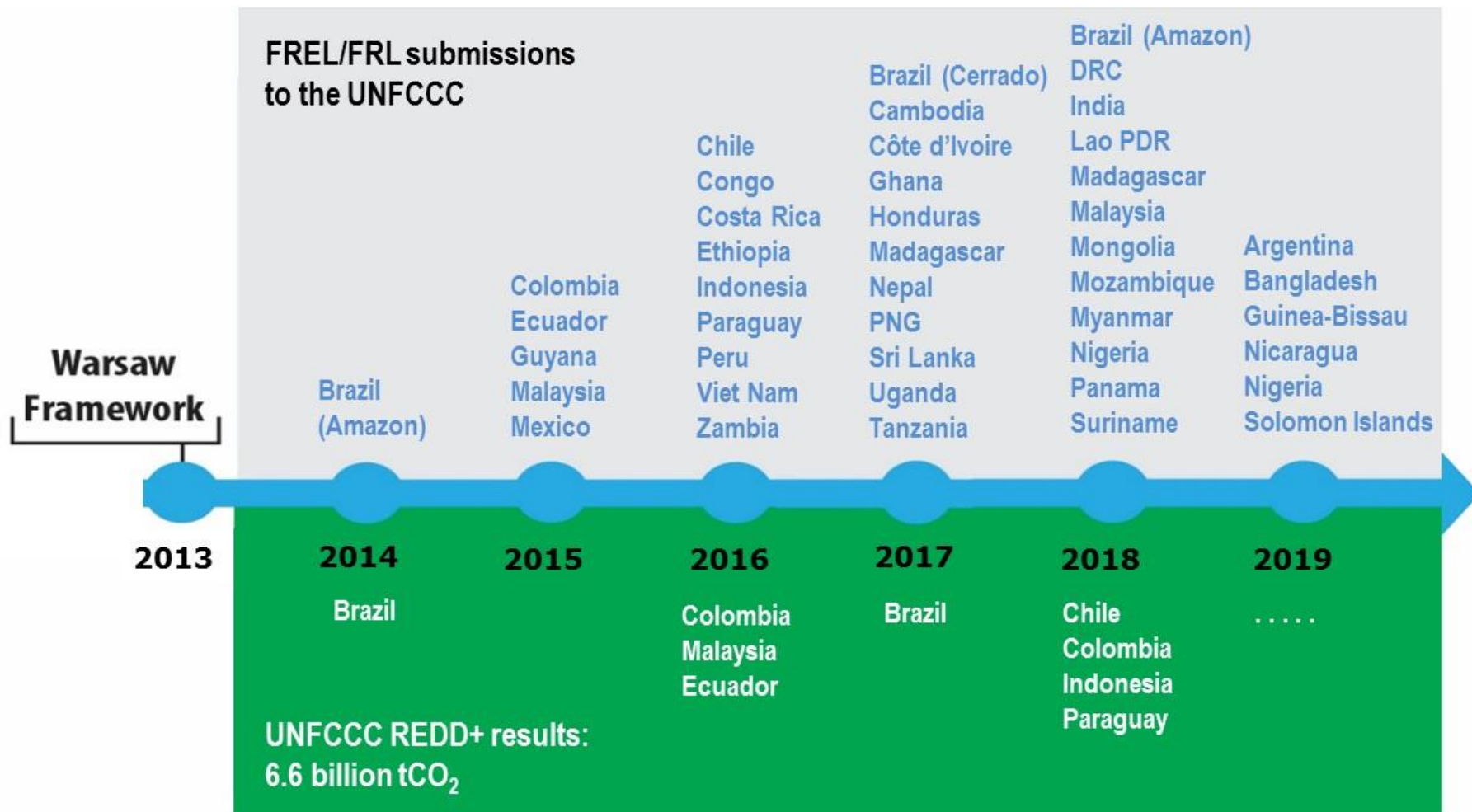


Global progress

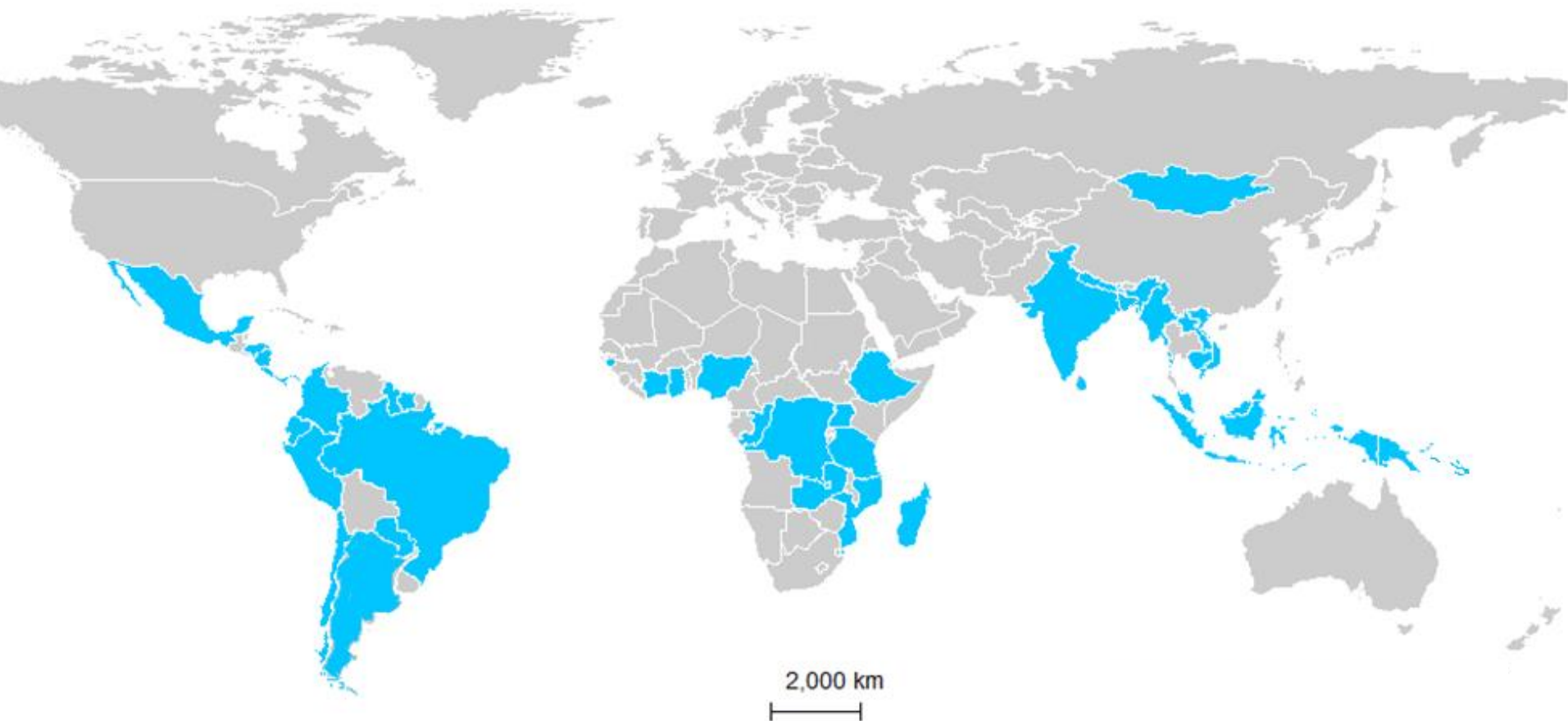


Warsaw framework is the starting point for FREL/FRL submissions to the UNFCCC

Global progress



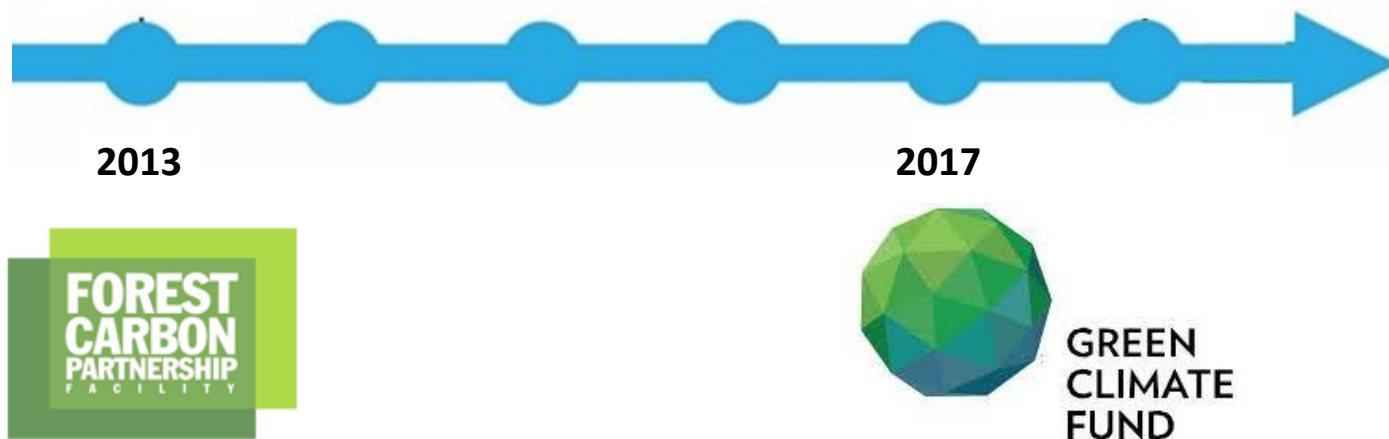
Representing a forest area of 1.5 billion ha



and 70% of worldwide deforestation

Objective FREL/FRL submission?

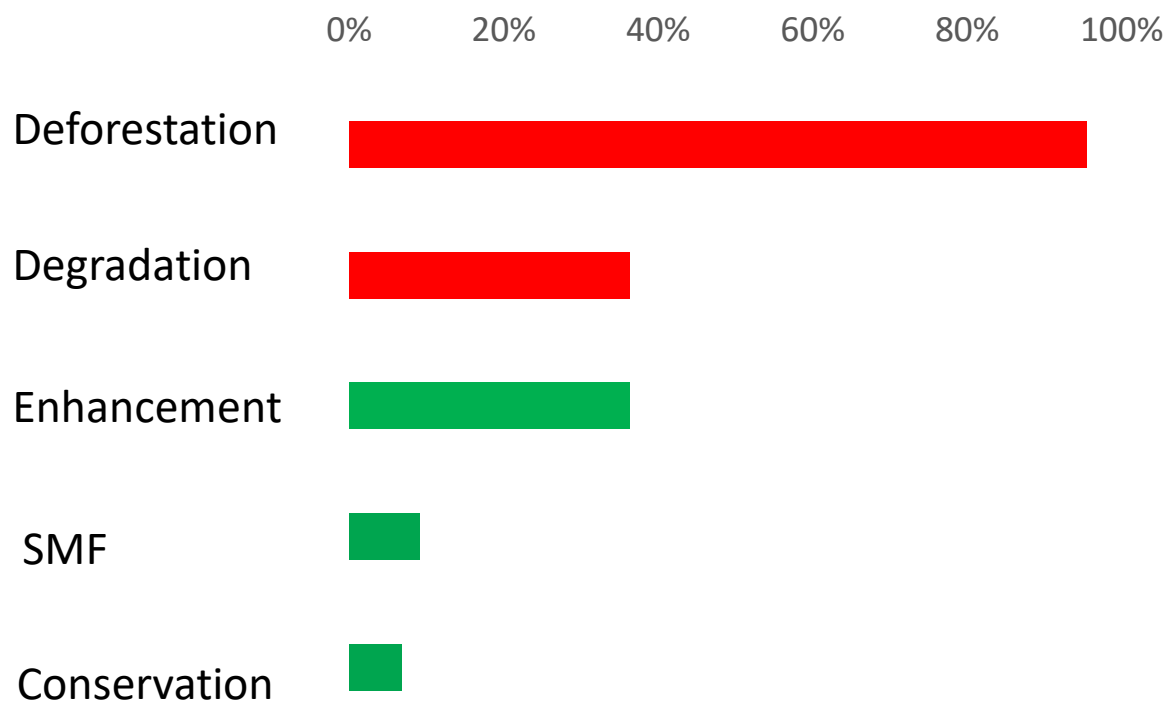
Several objectives but most countries
aspire results-based payments



What activities are included?

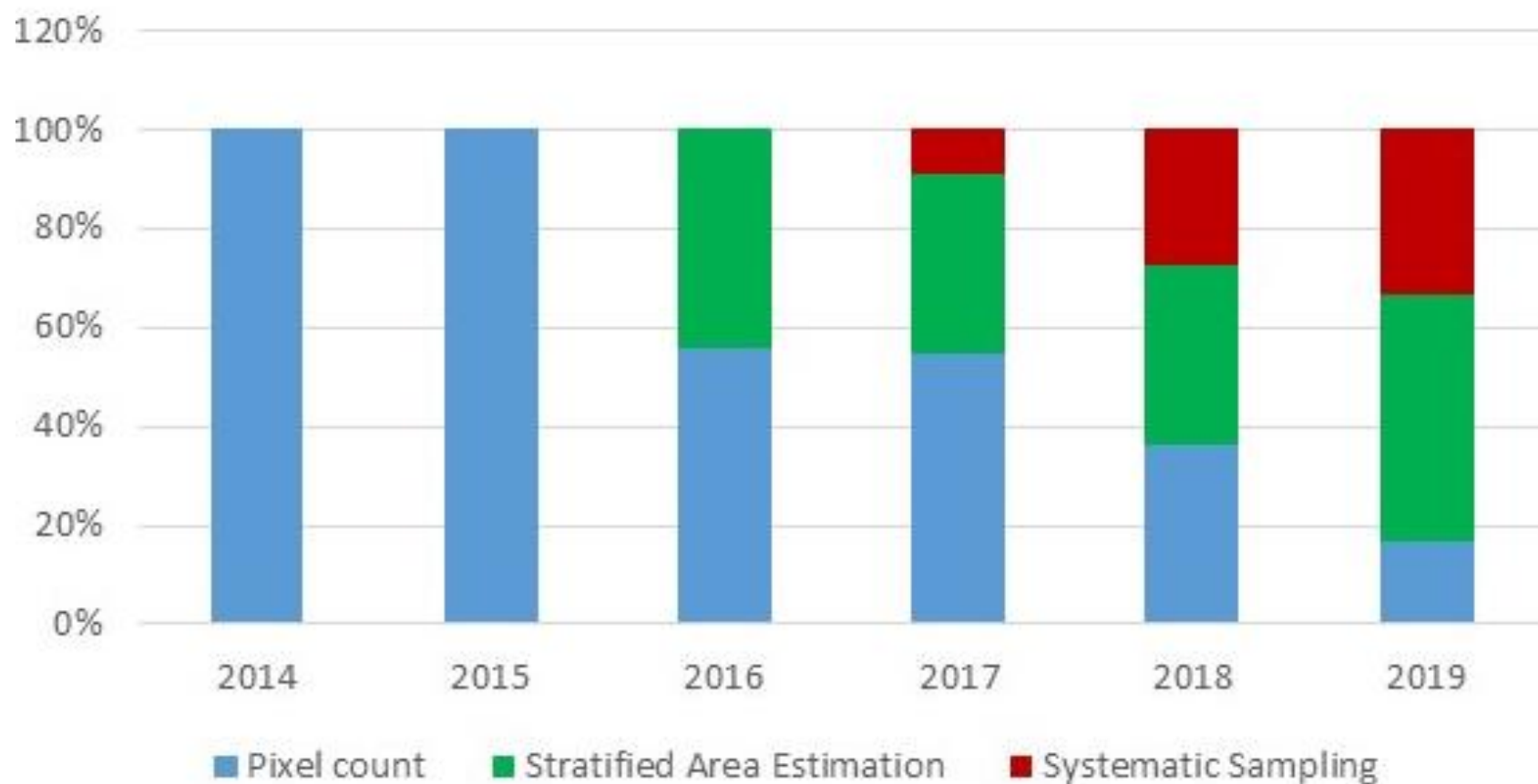
REDD

Plus



How was deforestation assessed?

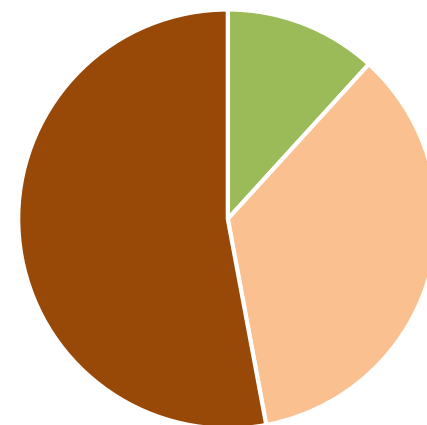
Methods used to assess deforestation



How was associated EF assessed?

Of 44 countries which submitted a FREL/FRL:

- Most countries use NFI to assess EF
- 96% of countries use inventory data



■ No NFI

■ NFI currently being established

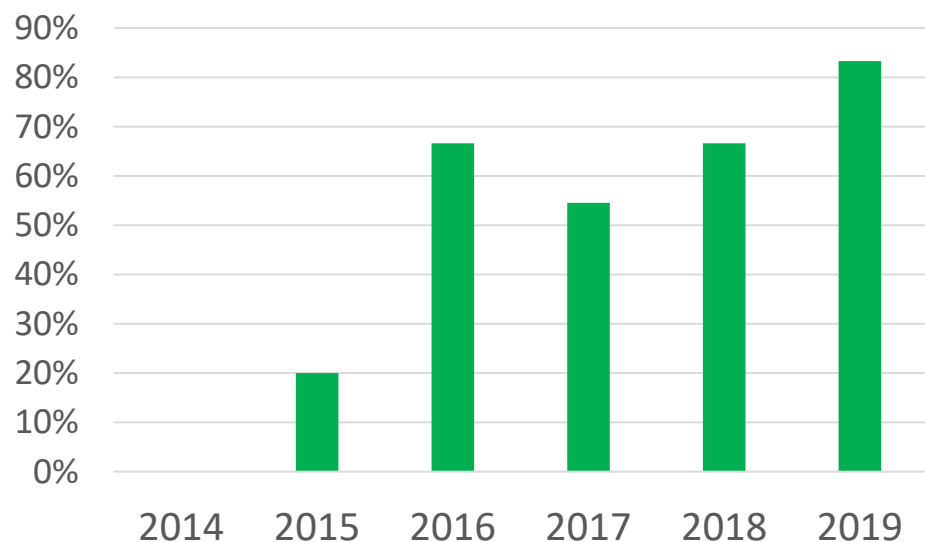
■ NFI

How was degradation assessed?

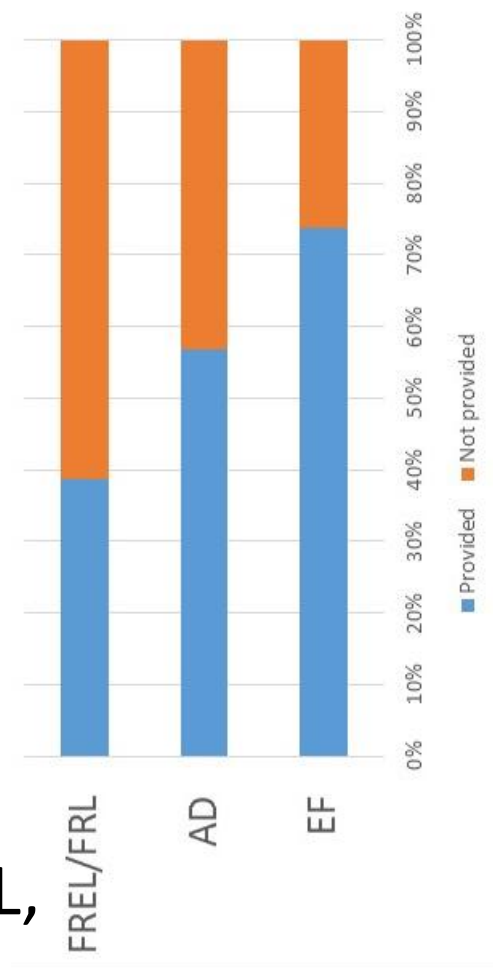
| Methodology | Country |
|---|--|
| Combination of RS and ground inventories | Cambodia, Chile, Indonesia |
| Combination of RS and ground inventories + multiple NFI cycles | Viet Nam |
| Combination of RS and ground inventories + stump counts from NFI | Lao People's Democratic Republic* |
| Official timber extraction statistics | Congo, Ghana*, Guyana, Suriname* |
| Sample data interpretation of disturbance or changes in forest subdivisions and ground inventories | Mongolia*, Panama*, Papua New Guinea, Nicaragua, Solomon Islands |
| Modelling supply–demand balance (WISDOM) | Ghana*, Nepal |
| Landscape fragmentation GUIDOS (with EF from NFI) | Nepal-ERPD |
| Proxy statistics (monitoring log truck numbers) | Ghana* |
| MODIS burned area and IPCC default values | Ghana*, Chile |
| Comparison of permanent sample plots | (Mexico, Uganda – in annex only) |

FRL Uncertainty reporting

Percentage of FRL submissions reporting AD uncertainties



Uncertainty reporting FRL, AD and EF



FAO support for MRV



Collect

Easy and flexible
survey design and
data management



Collect Mobile

Intuitive data
collection and
validation in the field



Collect Earth

Innovative land
assessment through
freely available
satellite imagery



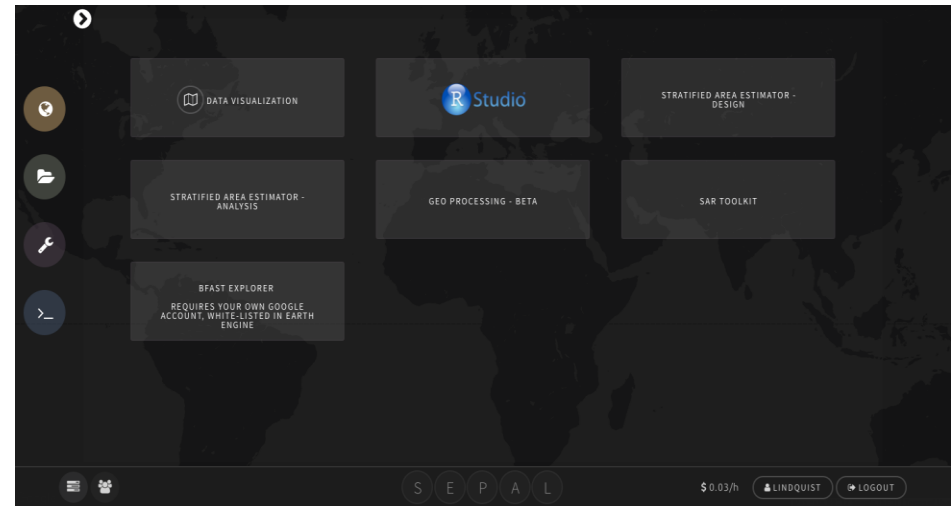
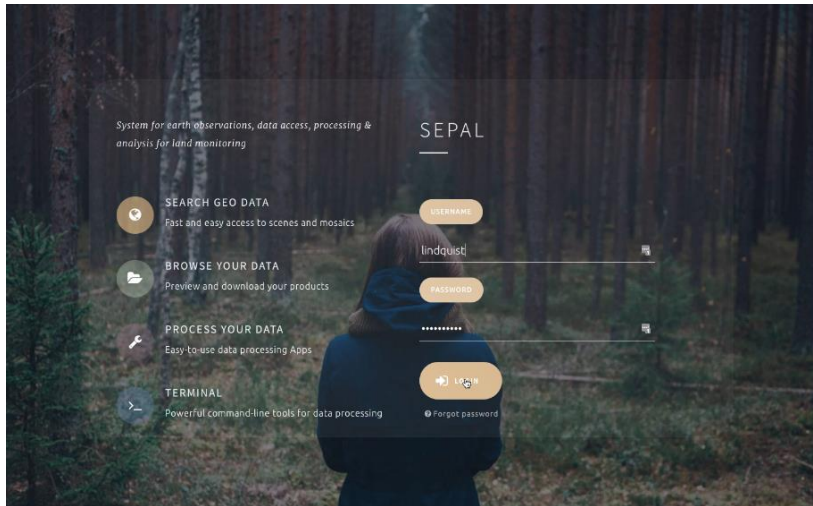
Calc

Efficient and
collaborative data
analysis and results
dissemination



SEPAL

System for earth
observation, data
access, processing,
analysis for land
monitoring

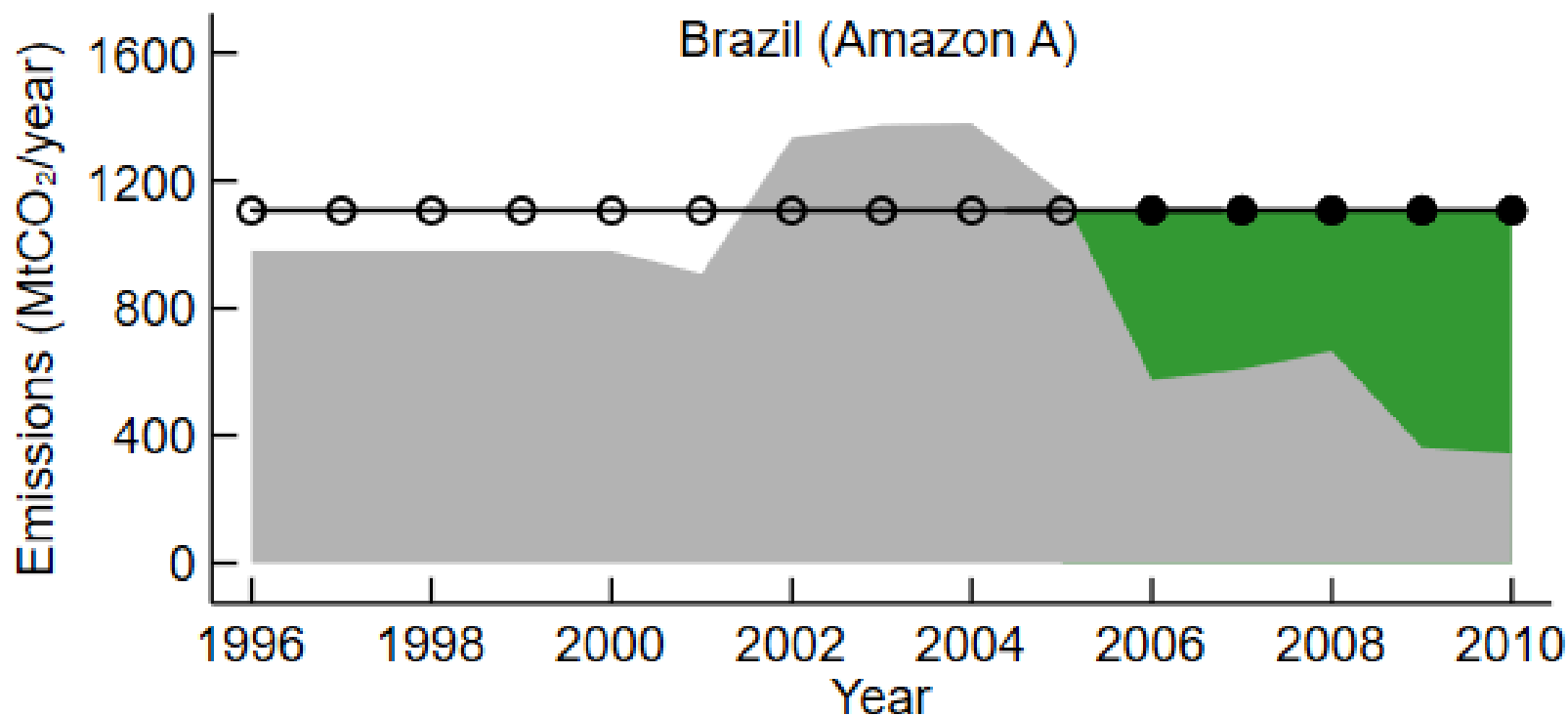


Cloud based platform for improving data access, processing, and delivery of satellite data to enable autonomous land monitoring capacity

- Create composites / mosaics of Landsat and Sentinel
- Process RADAR data
- Classification and change detection
- Image segmentation
- Time-series analysis
- Sample-based area estimation
- Compliant with GFOI Methods and Guidance



Stock take of REDD+ results



Stock take of REDD+ results

| Country | Results ('000 tCO ₂) | Results period |
|-------------------|----------------------------------|----------------|
| Brazil (Amazon) A | 2,971,022 | 2006–2010 |
| Colombia | 28,984 | 2013-2014 |
| Ecuador | 28,990 | 2009–2014 |
| Malaysia I | 97,470 | 2006-2010 |
| Brazil (Amazon) B | 3,154,502 | 2011–2015 |
| Chile (subnat) | 19,362 | 2014-2016 |
| Colombia | 31,475 | 2015-2016 |
| Indonesia | 244,892 | 2013-2017 |
| Paraguay | 26,793 | 2016-2017 |

6.603 bln tCO₂

Stock take of REDD+ results

6.60 bln tCO₂ ERs



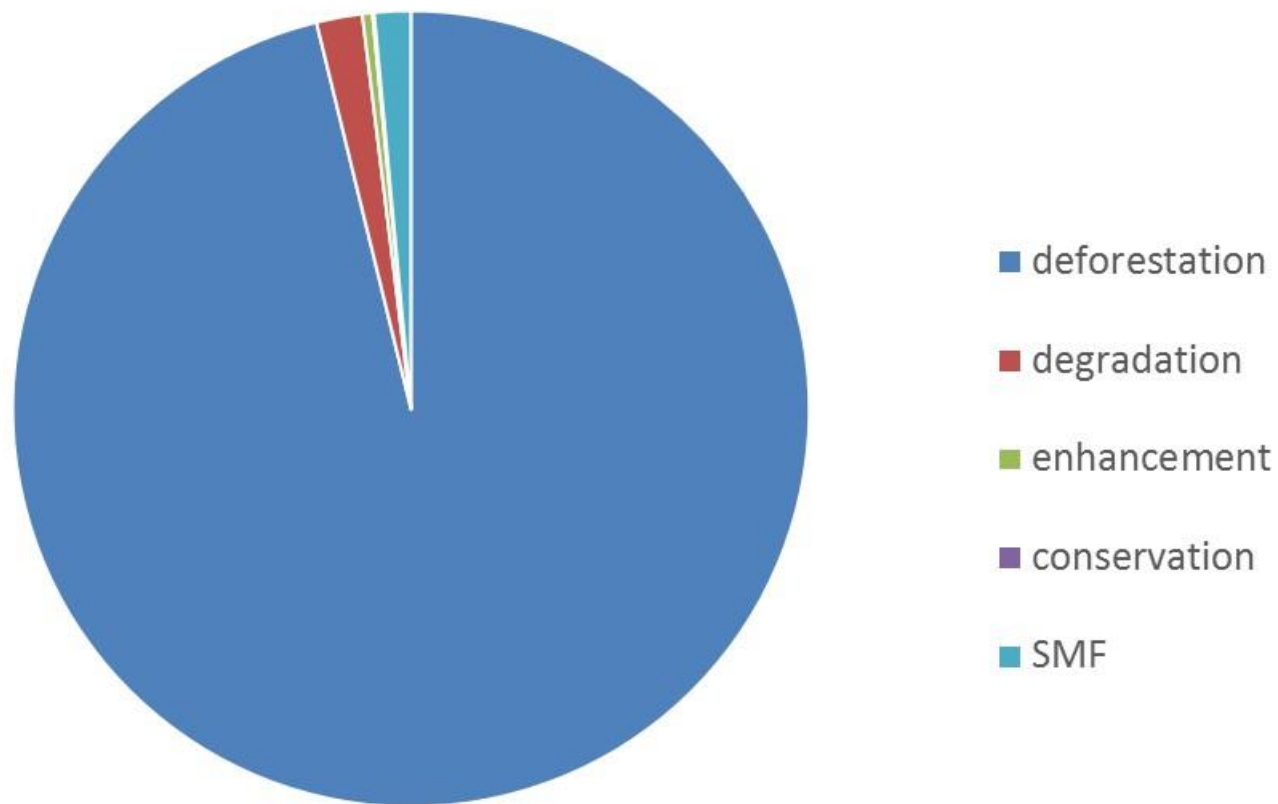
1.58 bln tCO₂ ERs (2014-2018)



GREEN
CLIMATE
FUND

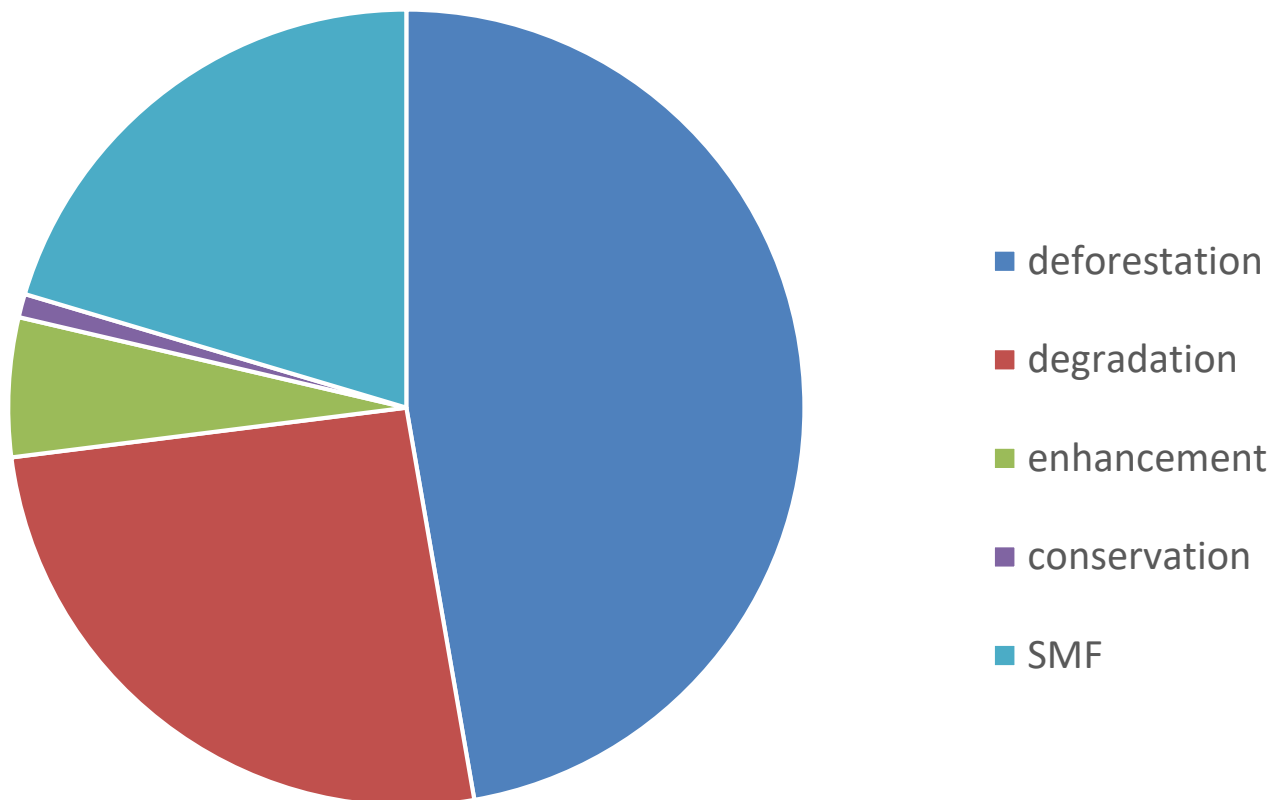
Currently contains \$\$ for
100,000 tCO₂ ERs

REDD+ activities contributing to ERs



REMOVING BRAZIL

REDD+ activities contributing to ERs



How do FRLs and NDCs relate?

| | REDD+ | NDC |
|-----------------------------------|--|---|
| Results/target expressed against: | Reference level (usually historical average) | <ul style="list-style-type: none"> ➤ Business-as-usual projection GHG inventory ➤ Base year ➤ Absolute targets e.g. “plant 1 million ha by 2030” |
| Results period | Usually next 5 years | Mostly the year 2030 |
| | Mostly conditional | Conditional and unconditional |

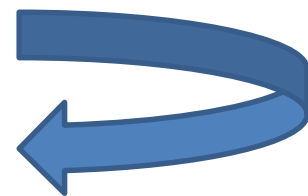
Key challenges

- Country data and the quality of submissions ***need to improve overtime*** to meet donor expectations for payment
- ***Further investment*** in REDD+ MRV readiness is necessary to improve country data, cover additional activities and facilitate broad country participation in REDD+
- The link between results reported and ***REDD+ implementation*** needs to be clear

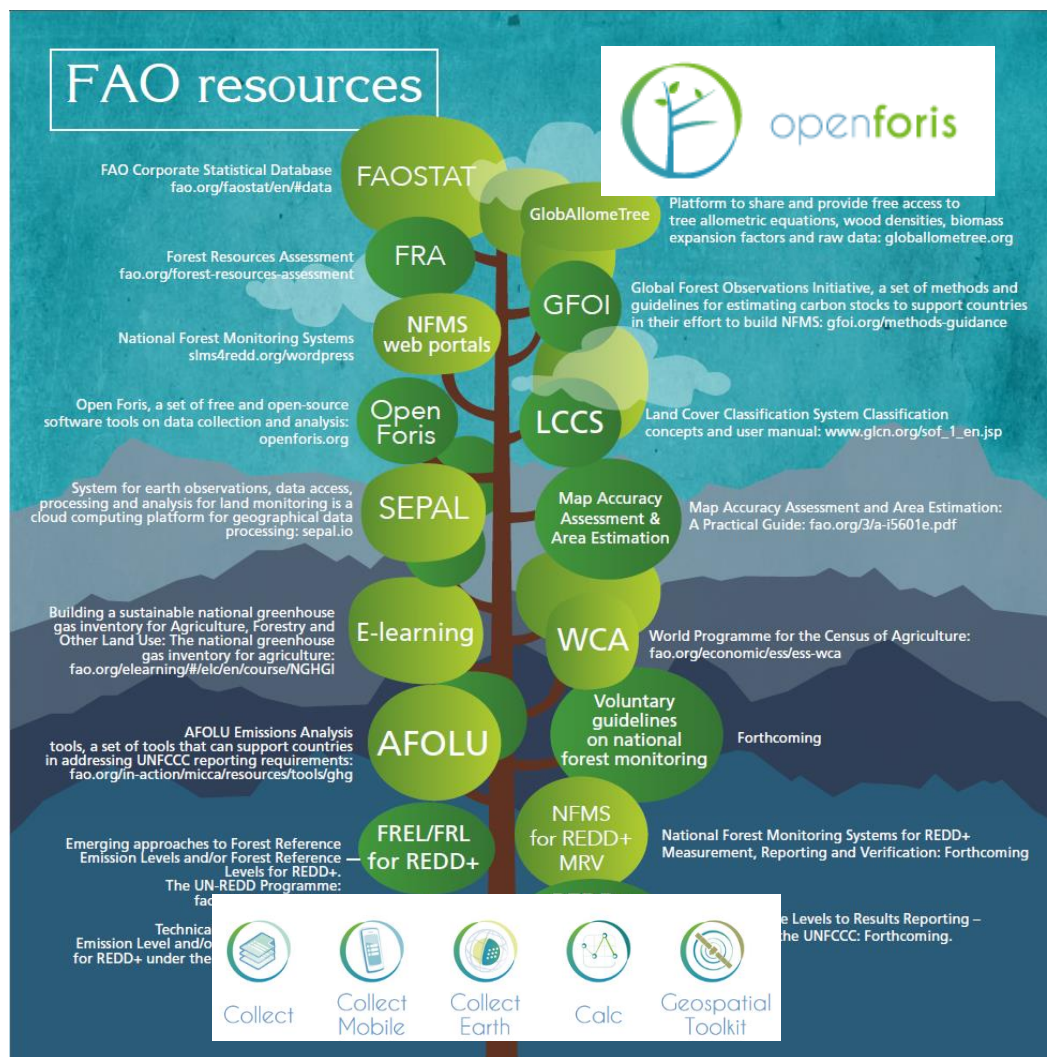
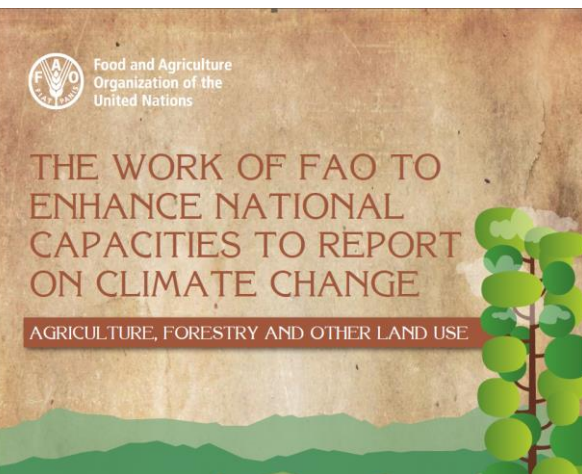


Key next step:

Maintain momentum, overcome barriers, scale up REDD+ action.



Thank you!



Useful publications!

**From reference levels to results reporting:
reference levels under the UNFCCC 2018 update**

<http://www.fao.org/3/CA0176EN/ca0176en.pdf>

**Challenges with measurement and accounting of
the Plus in REDD+**

<http://www.climateandlandusealliance.org/wp-content/uploads/2018/10/Challenges-with-measuring-and-accounting-of-the-Plus-in-REDD-1.pdf>

