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# REDD+ Countries FRELs/FRLs

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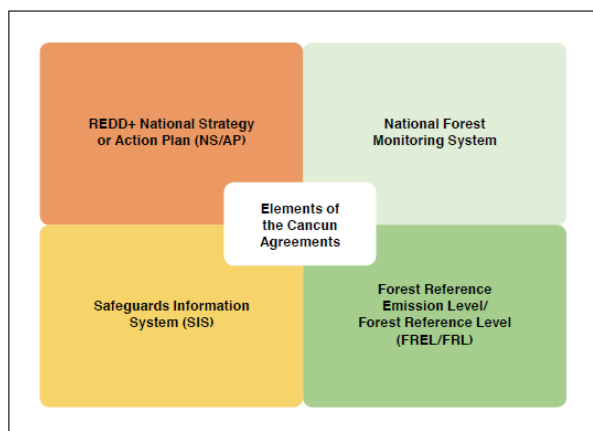
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## Outline

- The process: Submissions /Technical Assessment
- Submissions
  - Activities / Scope
  - Reference Periods
  - Pools
  - Approach for construction
- Some lessons and reflections

# The UNFCCC context to Access RBP for REDD+



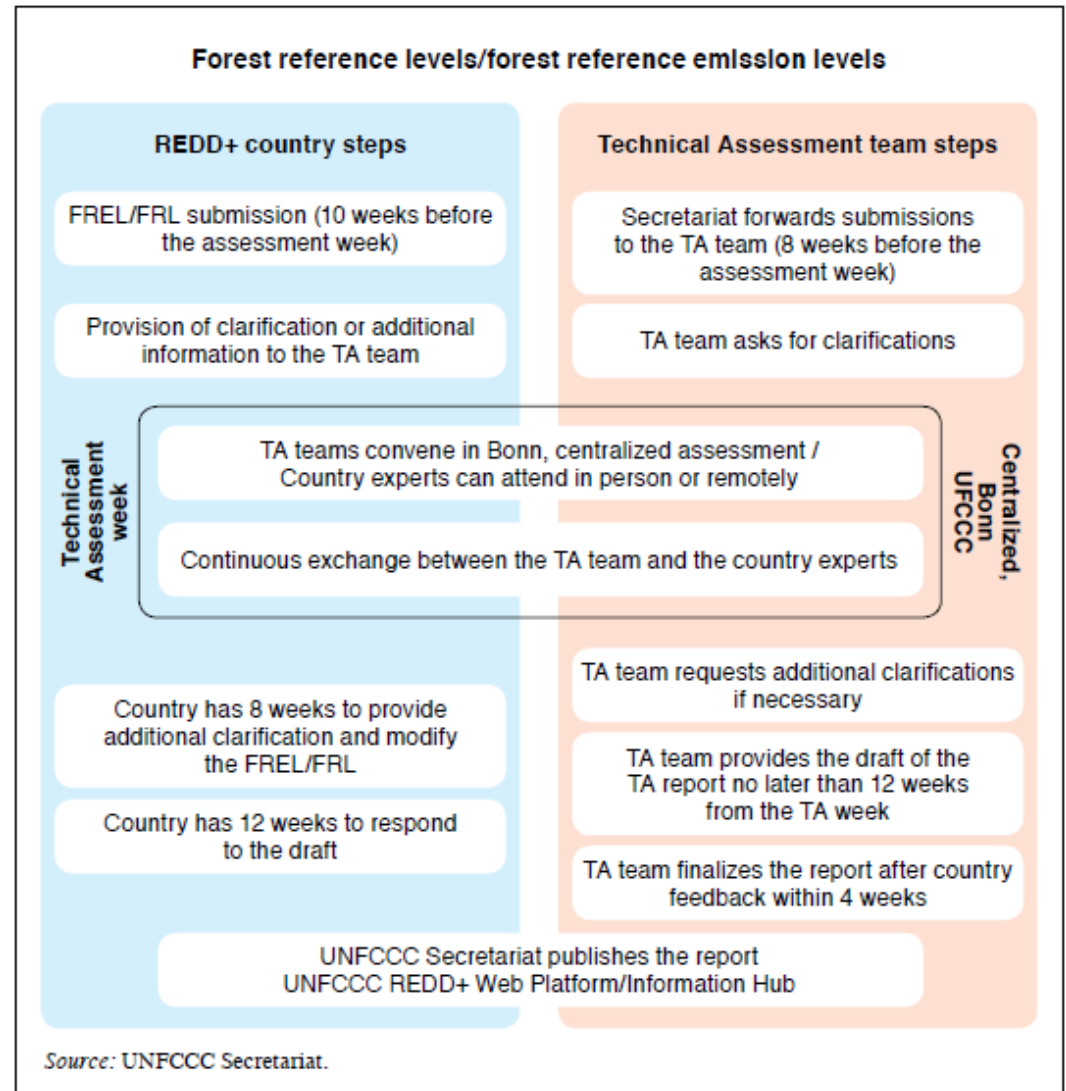
## Summary of information requirements under the Warsaw Framework to be able to access results-based payments

Information on the Cancun safeguards is to be reported through the country National Communication (NC). Results of REDD+ activities in tonnes of CO<sub>2</sub> equivalent will be reported through a technical annex of the BUR. Submission of a national forest reference emissions level/national forest reference level (FREL/FRL) is done through its own communication channel to the UNFCCC, rather than via a NC or Biennial Update Report (BUR).

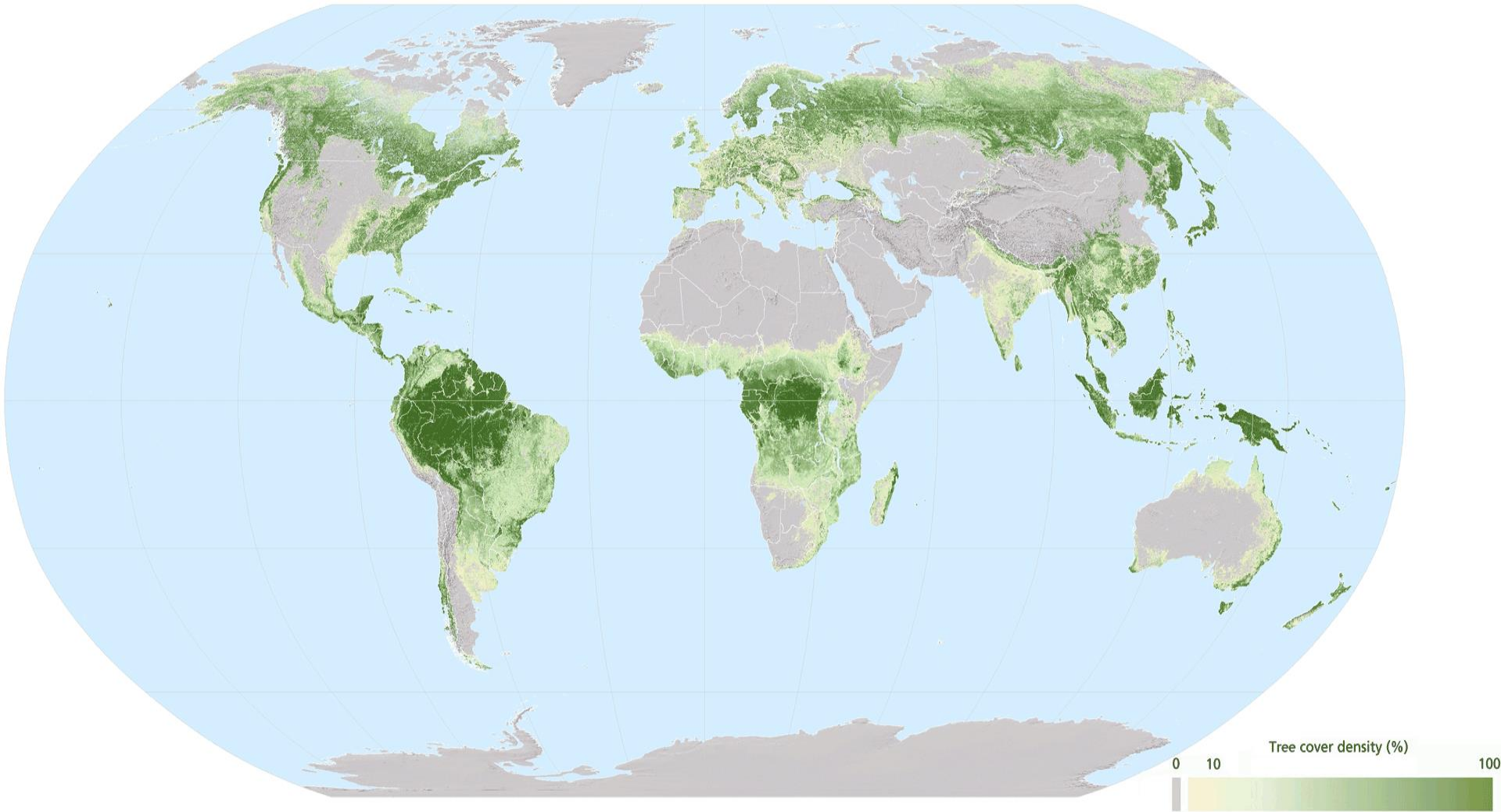
What countries need to have or provide	How to communicate to UNFCCC	Process associated under UNFCCC	Timing	Information Hub on the UNFCCC REDD+ Platform	Decision
REDD+ National Strategy or Action Plan	No need	None	In place when seeking results-based payments (RBP)	As appropriate, link to the documents	1/CP.16 para 71(a), 9/CP.19 paras 3 & 11
National Forest Monitoring System	No need	None	In place when seeking RBPs	As appropriate, link to the documents	1/CP.16 para 71(c), 4/CP.15, 11/CP.19 & Annex
National FREL/FRL	FREL/FRL submission	Technical Assessment in the context of RBPs	When ready (especially when seeking RBPs)	FREL/FRL submission and Technical Assessment Report	1/CP.16 para 71(b), 12/CP.17 (II), Annex 13/CP.19
Results in tonnes of CO <sub>2</sub> equivalent per year	Technical REDD+ Annex to the BUR	Technical Assessment of the Annex	After the FREL/FRL is assessed, same regularity of the BUR (2 yrs)	Technical Assessment Report of the Annex	9/CP.19 paras 3 & 11(a), (e) 14/CP.19 & Annex
Safeguards Information System (SIS)	National Communication UNFCCC Web Platform	None	Summary of safeguards available when seeking RBPs	When available or updated	1/CP.16 para 71(d), 12/CP.17 (I), 12/CP.19, 17/CP.21

# FRELS/FRLs

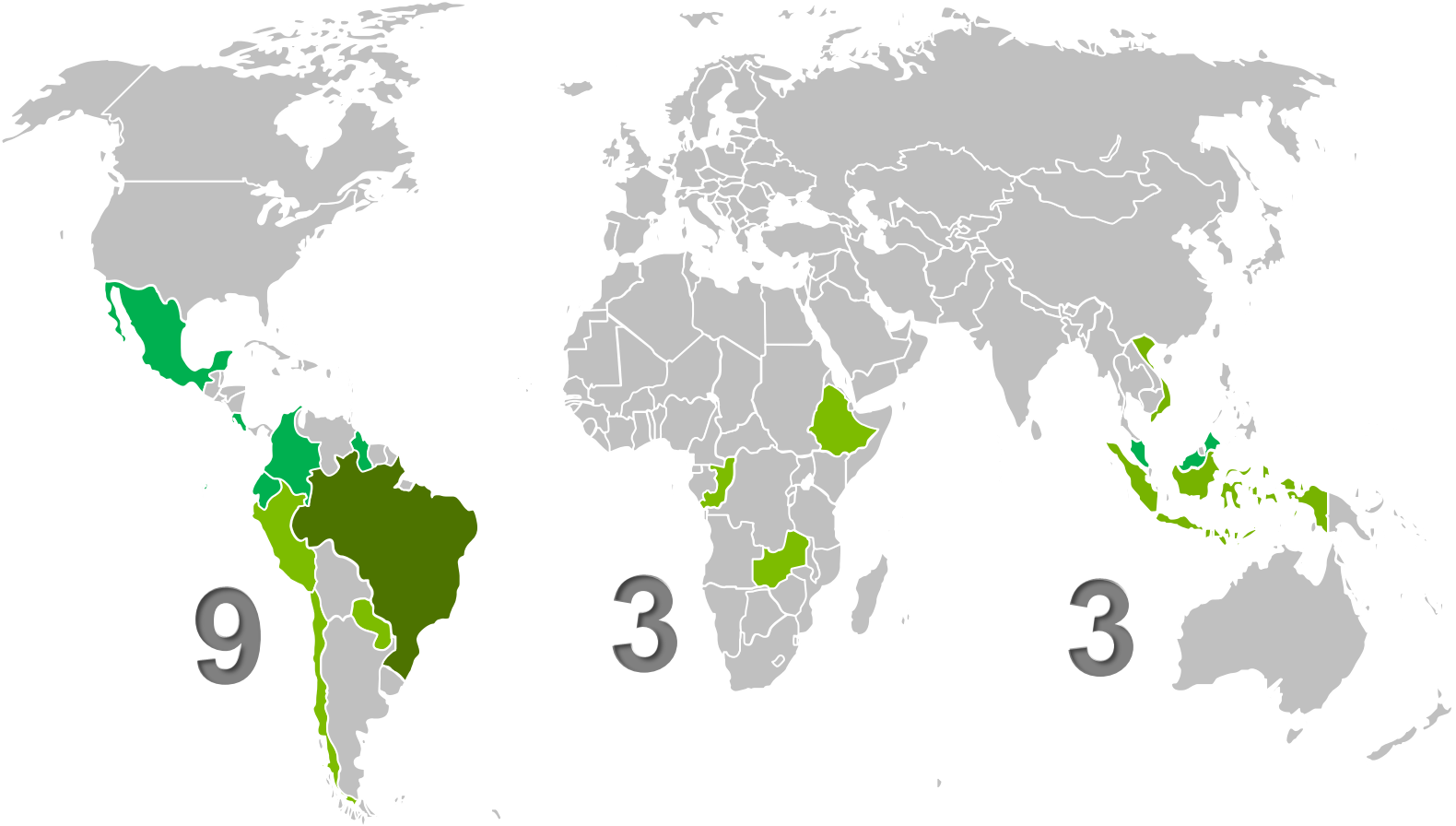
## UNFCCC Submission and Assessment process



# World Forest

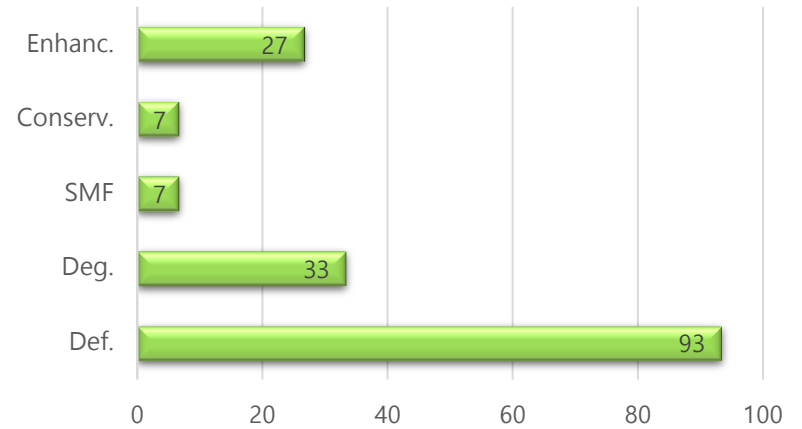


# Submissions to UNFCCC – country coverage



15 countries assessed (1:2014, 5:2015, 9:2016) by 15 TAs composed of two experts each

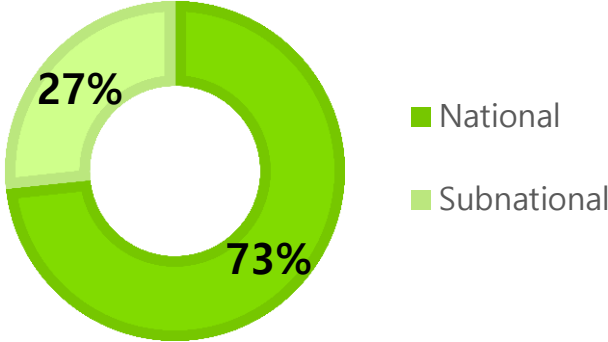
# SCOPE (15 Submissions)



	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
Deforestation	1	2	3	4	5	6	7	8		9	10	11	12	13	14
Degradation		1					2	3					4	5	
Sustainable Mang. Forest									1						
Conservation		1													
Enhancement of Carbon Stocks		1		2		3								4	



# SCALE (15 Submissions)



	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
National				1	2	3	4	5	6*	7	8		9	10	11
Subnational (administrative)		1 (22%)													
Subnational (biome)	1 (49%)		2 (40%)									3 (61%)			

\* National scale, but only includes production forest areas gazetted as permanent reserve forest



# GHGs included (15 Submissions)

	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
CO <sub>2</sub>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
N <sub>2</sub> O		1		2**						*					
CH <sub>4</sub>		1		2**						*					

\* Mexico excluded non-CO<sub>2</sub> GHG in the modified FREL/FRL since the technical assessment noted that fires could be associated with events not related to deforestation (the only activity included in Mexico's FREL) and therefore using such estimates may overestimate the value of the FREL

\*\* Non-CO<sub>2</sub> GHG emissions from biomass burning were included for pre-1996 conversions of forest land to cropland and grassland. From 1997 onwards they were not included since slash-and-burn became illegal from that date and therefore the use of fire in forest conversion was drastically reduced

# Pools included (15 Submissions)

	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
AGB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BGB	1	2	3	4	5	6	7		8	9	10	11	12**	13	14
LIT				1						*					
DW		1**		2		3	4**			*			5**		6
SOC		1**					2**	3**							
HWP				1											

\* Mexico included deadwood and litter associated with fire in its initial submission but as the assessment team noted that fires could be associated with events not related to deforestation they raised the concern that inclusion could lead to over-estimation. Mexico therefore omitted deadwood and litter in the modified FREL/FRL submission.

\*\* Carbon pool is only partially covered; for example, more carbon pools may be covered for estimates of emissions from deforestation, but not for degradation.

# Forest Definition

	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
Crown cover (%)	10	10/25*	30	30	30	20	30	30	30	10	10/30*	10	30	10	10
Tree height (m)	5		5	5	5	2	5	5	5	4	3/5 <sup>++</sup>	5	3	1.5/3/5 <sup>++</sup>	5
Area (ha)	0.5 <sup>**</sup>	0.5	1	1	1	0.5	1	0.25 <sup>**</sup>	0.5	50	1	0.5 <sup>+</sup>	0.5	0.5	0.5

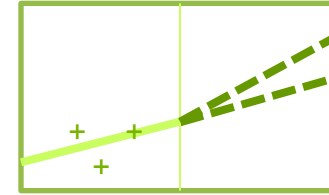
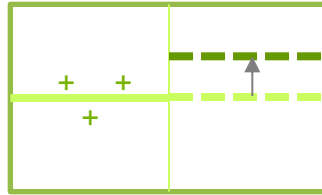
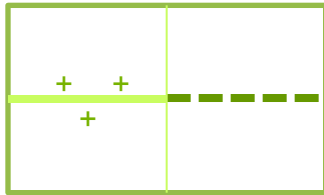
\* Chile uses a 10% threshold canopy cover for arid and semi-arid conditions, but “25% in more favourable conditions”; in a similar manner Paraguay uses a lower cover threshold for the West region, and a higher threshold for the East region.

\*\* Indonesia specified in its submission that, as a formal right, the definition of forest used by the country specifies “land spanning more than 0.25 ha”; however, as a practical matter, a “working definition” of forest was used to produce land-cover maps through visual interpretation of satellite images, where the minimum area for polygon delineation was 6.25 ha; in a similar manner Brazil uses a 0.5ha minimal area in its definition but applies a minimal mapping unit of 6.25 ha for consistency with its historical time series.

+Peru’s NFI defines the minimum area for forest to be 0.5 ha; however, activity data to construct the FREL/FRL applied a minimum mapping unit of 1 Landsat pixel, or 0.09 ha

++Vietnam applies an exception on minimum height for new forest plantations of 1.5m for slow-growing species and 3m for fast-growing species and a density of at least 1,000 trees per hectare; Paraguay applies a 3m threshold in the Eastern region and a 5m threshold in the Western region

# Broad approaches for construction (15 Submissions)

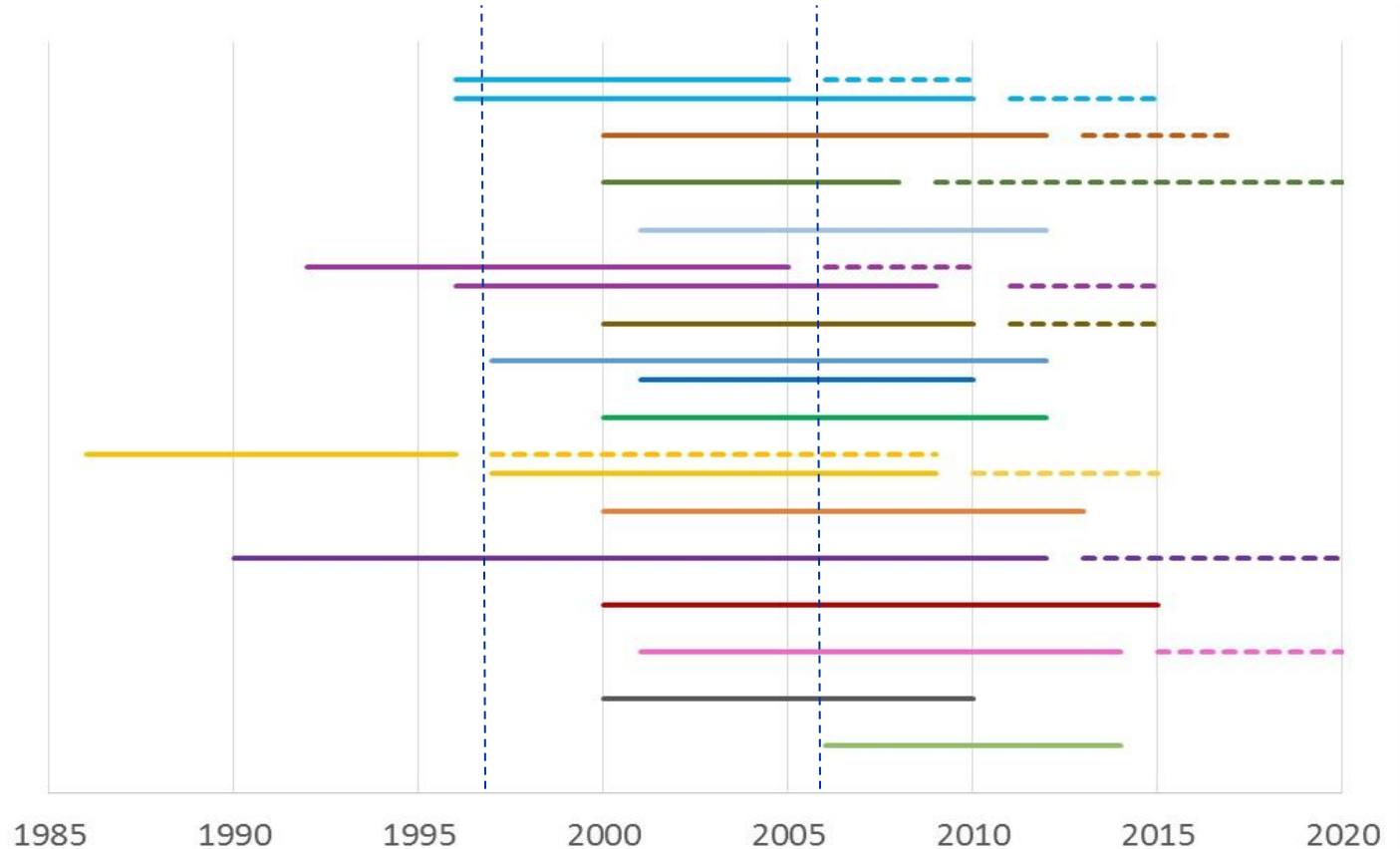


	BRAZIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	ETHIOPIA	GUYANA	INDONESIA	MALAYSIA	MEXICO	PARAGUAY	PERU	REP. CONGO	VIETNAM	ZAMBIA
Simple historical average	1	2		3	4	5		6	7	8	9			10	11
Historical average with adjustment			1				2						3	4	
Linear regression												5			

Many indicate revision will be done. Different ideas for revision:  
 Every 5 years (6), in 2020 (2), based on when policy revisions steps (1)

# Periods (15 Submissions)

- Brazil
- Colombia
- Ecuador
- Guyana
- Malaysia
- Mexico
- Chile-deforestation
- Chile-degradation
- Congo
- Costa Rica
- Ethiopia
- Indonesia
- Paraguay
- Peru
- Viet Nam
- Zambia



# Technical Assessment

**The extent to which the FREL/FRL value is consistent with the supporting information and descriptions provided by the Party**

**How historical data have been considered during the establishment of the FREL/FRLs.**

**The extent to which the information provided is transparent, complete, consistent and accurate, including methodological information and whether the FREL/FRLs are national or cover less than an entire national territory of forest area.**

**Carbon pools and GHGs, and REDD+ activities included in the FREL/FRLs, and justification of why excluded carbon pools and/or REDD+ activities were not deemed significant**

**Whether the definition of forest is provided and, if different from the one used for the national GHG inventory or reported to other international organizations, why and how the definition was chosen.**

**The extent to which the FREL/FRLs maintain consistency with the corresponding anthropogenic forest-related GHG emissions by sources and removals contained in the national GHG inventory.**

**Whether a description of relevant policies or plans has been provided, as appropriate.**

**Whether assumptions about future changes expected to domestic policies have been included in the construction of the FREL/FRLs.**

**If applicable, whether a description of changes made from previous FREL/FRL submissions has been provided (if countries modify their FREL/FRLs over time).**

## Uncertainties

- Decision 4/CP.15, paragraph 1(d)(ii) requests Parties to provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities.
- **Some countries** have included **information on the estimated error of activity data and emission factors in the FREL/FRL submissions**, and a **few countries** aggregated these to an **overall estimate of uncertainty** on emission estimates



## Some emerging lessons on... Transparency

- The success of the technical assessment (TA) process and the international credibility of the FRL/FREL itself is critically dependent upon the degree of transparency in the FRL/FREL submission.
- In the TA process, REDD+ countries should be prepared to explain the procedures they used to eliminate bias from the various components of the FRL/FREL estimate, to provide the necessary information for the reconstruction of the FRL/FREL and to react modifying the FRL/FREL according to the findings of the TA team.

## Some emerging lessons on... focus on the right issues (I)

- In FRL/FREL submissions, countries should address sources of systematic bias. This helps to enable the assessment of methods and results, facilitating constructive suggestions for improvement.
- Rather than strive for a specific target level of uncertainty, REDD+ countries should focus on transparently estimating and reporting the level of uncertainty itself.
- A smart stratification approach is one way that REDD+ countries can develop an efficient process of identifying sources of uncertainty and minimize their effect on the FRL/FREL estimate.

## Some emerging lessons on... focus on the right issues (II)

- Since completeness may be useful in the longer term to gain experience with additional categories and pools, REDD+ countries may benefit from using the tools and approaches that are available to help them achieve a greater degree of completeness (as applies to inventories) in their FRLs/FRELs.
- There is a potential for leakage of emissions to non-included categories and areas within a country.

## Some emerging lessons on... focus on the right issues (III)

- As countries determine the scope of their reference levels, in terms of the included activities and/or pools, they may need to use data for these activities/pools that vary in quality.
- Using different categories, definitions, or stratification schemes for the FRL/FREL, the GHG Inventory, and forest monitoring systems can create inconsistencies that will cause challenges for monitoring, reporting, and verification of REDD+ activities.

## Some emerging lessons on...Comparability?

- Parties did not require FRL/FREs to be assessed for comparability, but they could potentially achieve many benefits by working toward greater comparability over time at to extend possible respecting they different circumstances.
- For example, Countries see challenges in defining forests and it will be very difficult or impossible to harmonize them across countries, since there are based on countries' national circumstances and not only for REDD+ purposes (as well as the NFMS).

## Overall reflections

- Effort to maintain consistent assessments across countries should be a priority for the TAs, countries should learn from existing assessments on what are the issues raised that may apply to them prior their submissions.
- Additional capacities and resources may be necessary to sustain and improve the quality of the TA process given the increasing demand.
- Overreliance on consultants and other partners could be detrimental to REDD+ countries in the long term, although it may help in the initial steps of capacity building.
- FRLs/FRELS and measuring, reporting and verification (MRV) are interconnected. REDD+ MRV teams and GHGs compilers have to communicate and ensure consistency in the overall country estimates.
- It is important to bolster the credibility of REDD+ and its contribution to the overall climate regime.

# Thank you!

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