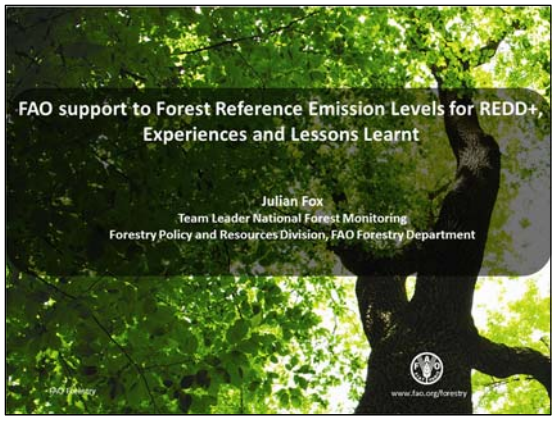
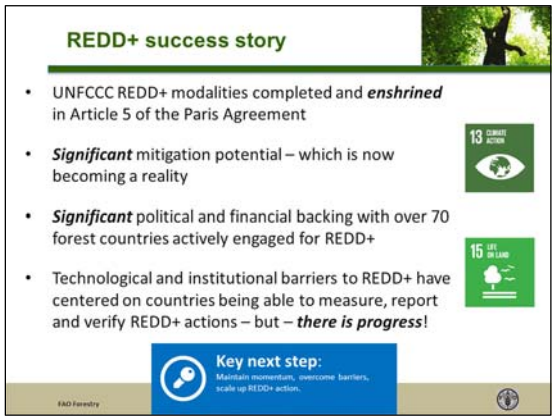
FAO Support to Forest Reference Emission Levels for REDD+: Experiences and Lessons Learned

Julian Fox (The Food and Agriculture Organization (FAO))



Good morning distinguished guests, ladies, and gentlemen. First, I would like to acknowledge the invitation and kind support from the REDD Research and Development Center, and the Forestry and Forest Products Research Institute of Japan. Thank you for inviting and supporting FAO contribution to this important workshop. Today, I will try and present FAO's experience on supporting developing country partners on developing the reference emission levels and submitting them to the UNFCCC for REDD+.

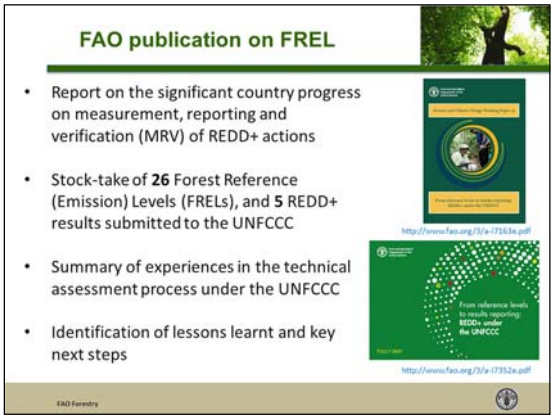


I do not need to dwell on this slide because I think many of us in this room are REDD practitioners, and we collectively can acknowledge that REDD+ is a success story, both under the convention with the Warsaw Framework agreeing on the modalities amongst all UN member countries, and then this being enshrined in article five of the Paris Agreement. The reason why it is in the Paris Agreement is that it has significant mitigation potential. This I am happy to report and now present an FAO publication which

documents that this is becoming a reality. For example, we have five sets of REDD+ results submitted to the UNFCCC. In total, they represent over six billion tons of CO_2 emission reductions. To put this in perspective, this equates to 10% of annual global emissions as estimated under the IPCC Fifth Assessment Report[1], so a significant mitigation potential that is now becoming a reality under the UNFCCC.

There is much action both from FAO, from Japan, and from JICA to support this huge political and financial exercise of enabling developing country partners to participate in REDD+. There are about 70 countries that are actively engaged in this process. When REDD+ began, there was this technical and institutional barrier to REDD+, which centered on countries being able to measure, report, and verify REDD+ actions. This is really fundamental to making REDD+ a success. Countries need to be able to measure and report their actions in the forest sector to the convention. I am happy to report that there is significant progress on country level measurement reporting and verification.

I think a key next step to FAO, JICA, and all the cooperating partners supporting REDD+ is to really maintain this wonderful momentum that we see in countries, keep overcoming these technical and institutional barriers, and scale up REDD+ action because it is going to be a key climate action to achieve the Paris Agreement.

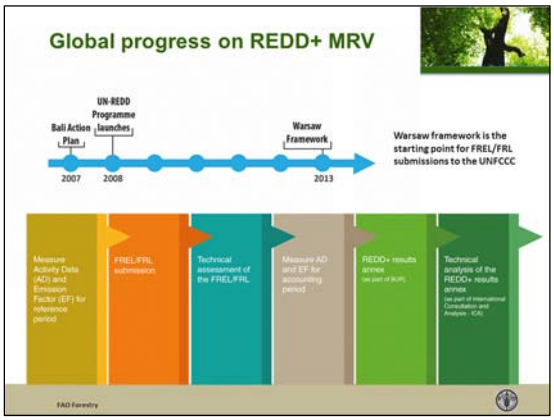


The FAO created two publications that I recommend that you download and read them. The first is a 2017 publication called *Forests and Climate Change Working Paper 15*[2] where we did a stock-take of all the REDD+ reference emission levels and REDD+ results reports submitted to the UNFCCC. As of 2017, there were 26 forest reference emission Levels. In fact, as of now, there are 38. Therefore, FAO is in the process of updating this publication to have a new annual stock take of this huge progress on measurement, reporting, and verification. The second publication is a policy brief called *From Reference Levels to Results Reporting: REDD+ Under the UNFCCC*[3], which includes five sets of REDD+ results submitted to the UNFCCC. This publication gives a summary of experiences in the technical assessment process under the convention, and this is all transparent and available in the REDD+ hub of the UNFCCC. The 38

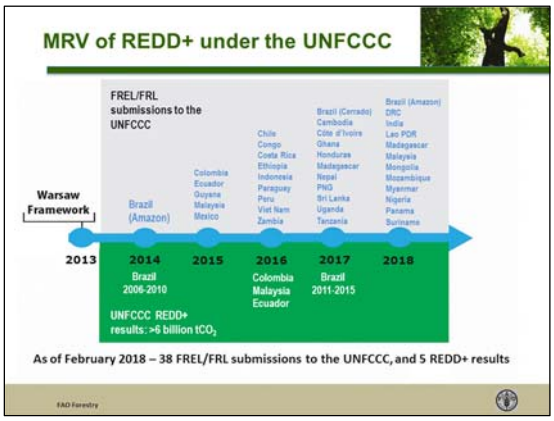
[1] https://www.ipcc.ch/report/ar5/
[2] http://www.fao.org/3/a-i7163e.pdf
[3] http://www.fao.org/3/a-i7352e.pdf

reference emission level submissions as of today, and the technical assessment reports of the land use, land-use change and forestry (LULUCF) experts of the convention are all published, is transparent, and freely available. One of the key outcomes from this publication was to bring together the lessons learned and some key next steps.

REDD+ MRV



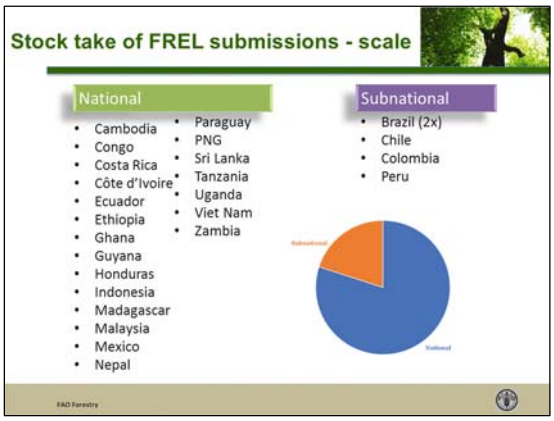
I think we all remember the huge excitement about REDD+ in the Bali Action Plan[4] of 2007. Basically, it took to 2013 for the real breakthrough in the Warsaw Framework, the actual REDD+ modalities that countries could follow in order to implement REDD+. Although it is described in more detail in the publication, this figure describes the process of MRV: countries collecting their activity data; their emission factors; creating a reference emission level submission; submitting it to the convention; it undergoing technical assessment; using exactly the same consistent methodology measuring the activity and emission factors for the REDD+ accounting period; and submitting REDD+ results in a biennial update Report Technical Annex. These then undergo technical analysis of the REDD+ results in the annex following the international consultation and analysis (ICA) process of the convention.



[4] http://unfccc.int/key_steps/bali_road_map/items/6072.php

I am very excited by this graphic because FAO and wonderful cooperation we have with bilateral partners such as JICA and many others, we have seen huge progress since the Warsaw Framework of 2013. On the top of the graphic, we see the countries that are submitting reference emission levels. We should not underestimate the significance of this. Many of these developing country partners, it is the first time they have submitted solid quantitative information on their forest sector to an international body for a transparent review process. I am very happy to acknowledge the collaboration with JICA that has supported and enabled many of these countries to submit this information to the convention, notably the Democratic Republic of the Congo (DRC). I am very happy that Kei-san will present that wonderful example of a huge concentrated collaborative effort to enable a country to participate in REDD+ like the DRC, a complicated country. On the top axis, we have the reference emission levels now totaling 38 from 34 countries. On the bottom, we have the five sets of REDD+ results. We expect with the results-based payments pilot program under the GCF that there will be more submissions of REDD+ results in the near future.

Scale of Forest Reference Emission Levels (FREL)



I encourage you to refer to the publication because there is a lot more detail in this global 2017 stock take of reference emission levels, but a few notable observations are that most of the submissions are at the national level. I think this is a very positive sign because it shows that countries are taking this opportunity to work on MRV at the national level, which aligns closely to their national policies, their national forest management, and their national processes. The sub-national submissions to the convention have mainly been associated with biome factors. This means the Latin American countries with large pieces of the Amazon biome within their territory have submitted a particular reference emission level for that particular biome.

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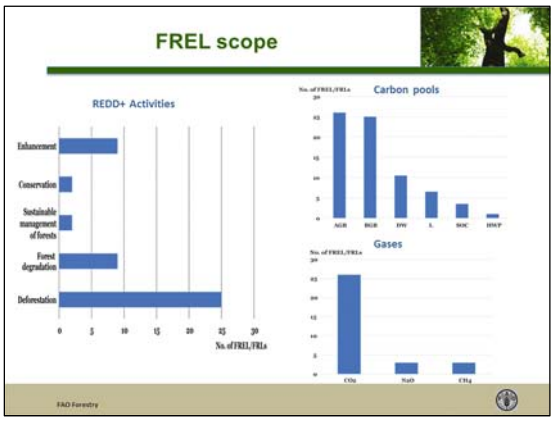
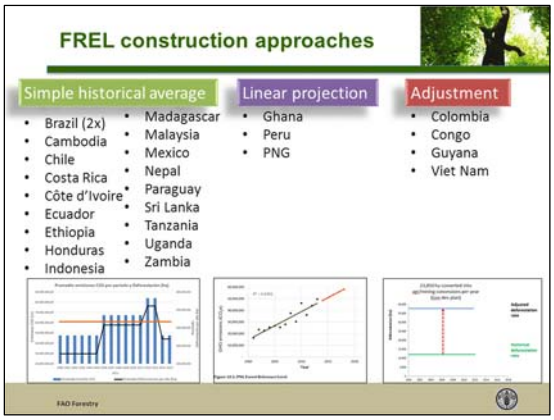
Session 1



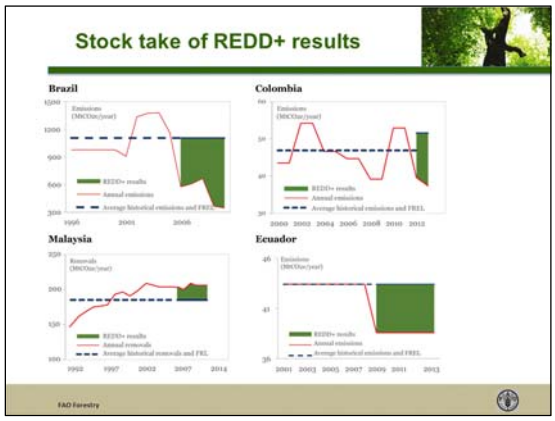
With regard to scope, this is regarding which REDD+ activities the country includes in its submission, the carbon pools and the gases. We can see that as of 2017, 25 out of the 26 countries included deforestation. This to some extent is an indication that countries are comfortable with the technological measurement of deforestation. Therefore, fewer countries have included forest degradation because this is still quite a technical challenge for countries to overcome going forward. I would also like to acknowledge the significant efforts of Vietnam and the presentation of Dr. Hung to follow. They managed to include all five REDD+ activities in their reference emission level. It is a significant technological achievement. A few countries have included the other REDD+ activities such as conservation, sustainable management of forests, and enhancement, but we are seeing with a new round of submissions that countries are increasingly trying to include all five activities in their REDD+ submissions to the convention, and FAO will collate and report on this. In terms of carbon pools, most countries included the significant carbon pools such as above-ground and below-ground biomass. Then the lesser forest carbon pools such as dead wood, litter, and soil organic carbon, countries are including those when they have that information in their national forest inventories. I think countries will include more and more carbon pools as they complete national forest inventories and collect country-specific information. For gases, most countries have focused on carbon dioxide. Countries have included the other gases like nitrous oxide when activities like fire are significant, but the real focus has been on the carbon dioxide.



In terms of the construction approaches, I am quite happy to report that most countries are using a very simple historical average. This is a very elegant simple approach because you end up with one number that is your reference emission level, and that is an average across an accounting period. That is a consistent approach to the GCF REDD+ pilot program results-based payments scorecard, and also the Forest Carbon Partnership Facility[5] FCPF Carbon Fund Methodological Framework[6]. Therefore, this is great that the countries are using this simple and agreed approach to creating a reference emission level. On the bottom, there is the example of Paraguay, and it just shows how it is a very simple approach. Brazil was the first country to do this and many countries have followed this approach in their reference emission level.

Fewer countries have used a linear projection. This example on the bottom is for Papua New Guinea, who have quite strong annual data coming from Collect Earth[7] and the JICA base map that allowed them to create a linear projection. Other countries have adjusted their reference emission level based on their national circumstance. These countries either have a significant program like in Vietnam with a 661 planting program, or their post-conflict countries that are emerging from the conflict situation, and expect more development and more encroachment in their forest area, and have therefore adjusted their low historical deforestation rates to reflect this.

Stock Take of REDD+ Results



A quick stock take of REDD+ results: we see Brazil, Columbia and Ecuador submitted reference emission levels for deforestation, and then reported REDD+ results on these reductions in deforestation. The green area is the reduction in emissions. Malaysia's reference emission level is focused on sustainable management of forests, so they are actually enhancing the carbon stocks in their forest estate, and the green is a removal of CO_2 from the atmosphere. As I mentioned before, the result is dominated by Brazil, but these four results represent over 10% of annual global emissions, so a really significant demonstration of the potential of REDD+ becoming a reality.

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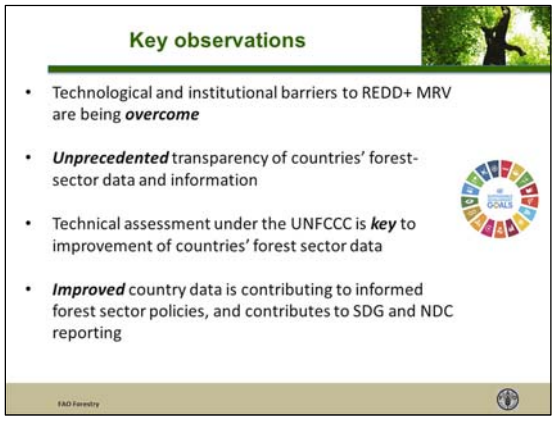
5 https://www.forestcarbonpartnership.org/
6 https://www.forestcarbonpartnership.org/carbon-fund-methodological-framework
7 http://www.openforis.org/tools/collect-earth.html

Key Observations and Challenges

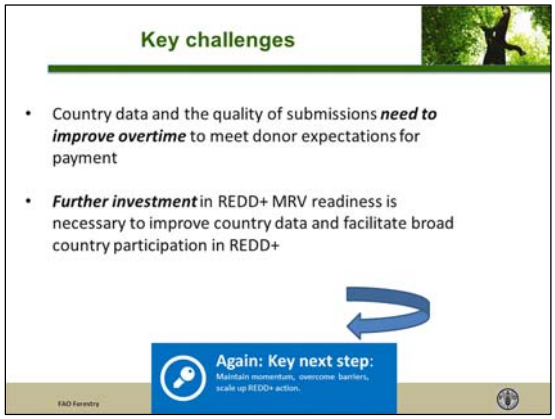


We will again undertake the stock-take. We are undertaking it right now. Our technical team is in room. The key observation from our publication of 2017 is that the technical and institutional barriers to REDD+ MRV are being overcome. There is a huge progress in the quality of the forest sector data that is coming to the convention for a transparent review process. I think for the first time we can say that there is really unprecedented transparency of countries' forest-sector data and information. Historically, the forest sector has not been good at submitting accurate information to processes like forest resources assessments (FRA), but now with 38 submissions, they are very detailed submissions on forest sector data submitted to the UNFCCC that are undergoing a transparent technical assessment process. It is really quite unprecedented.

This technical assessment process under the convention where LULUCF greenhouse gas experts review in a very facilitative way with the country, this submission is key to improving their submissions in their forest sector data. We have seen many examples of this. One example was the submission of Malaysia. Their first submission included only sustainable management of forests. The technical assessment process in a nonintrusive way encouraged them to include deforestation, and they have. I am very happy to report that, as of now, they have submitted a revised reference emission level that takes on that feedback from the technical assessment process, and they have included deforestation in a new reference emission level submission.

I would say that this data goes well beyond REDD+. It is contributing to inform forest sector policies and contributes to many sustainable development goals, and of course their nationally determined contribution reporting under the Paris Agreement.

Session 1

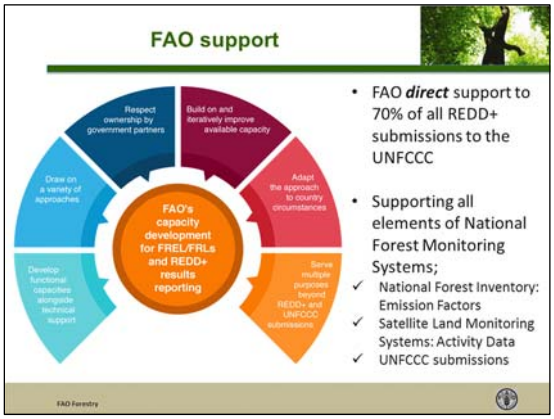


Some of the key challenges: this huge momentum needs to continue. The quality of the data, the accuracy, and the comparability needs to improve over time. FAO, in close cooperation with bilateral organization like JICA, I am very confident that we can keep supporting developing partner countries to keep improving their data and their submissions so that we end up with very comparable REDD+ MRV reports to the convention that are also accurate.

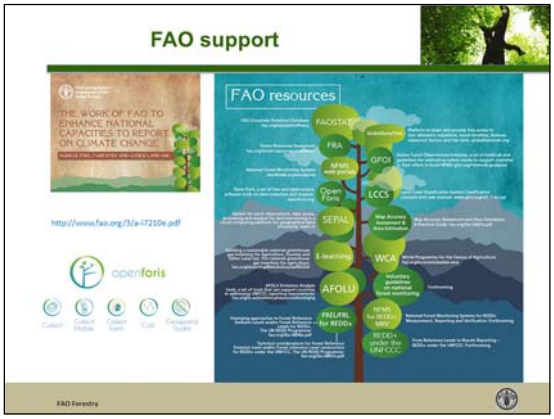
This, of course, needs further investment. Particularly, we do not want developing country partners to not have the opportunity to participate in REDD+. It is a real opportunity for many of our member countries to improve their forest sector data and participate in this under the convention. Therefore, I would say now we have quite clear clarity on how results-based payments will look with the GCF decision (the pilot program for results-based payments). Now, many of the countries with support from many cooperating partners and supporting them on improving their data and their submissions to meet the donor expectations for payment.

This is particularly important as we move to the enhanced transparency framework of the Paris Agreement, and particularly under Article 6 where mitigation obligations are tradable. I would say in the post-2020 forest mitigation environment, we would need these submissions to be comparable, accurate, and tradable so that countries are able to move emission reductions between themselves to meet their nationally determined contributions (NDC) obligations.

FAO Support



FAO and many cooperating partners like JICA I am sure are very proud to have supported countries on this process of submitting good information to the convention many times for the first time. As FAO, we take a very country-driven approach. We support them on the technical work, but always it is the country that writes the reference emission level, responds to the technical assessment, and undergoes the full process with FAO support. Often, the FAO support comes in the form of national forest inventory to create emission factors, remote sensing or satellite land monitoring systems to create activity data, and then, of course, reviewing and refining submissions so that countries are confident and comfortable to submit them to the convention.



FAO does this with a number of resources and tools that are very nicely displayed on this tree. This is another publication that I encourage you to download, but it just shows the breadth of resources and tools that FAO has to try and match that national circumstance, which is different in every single country that we land in. We do not prescribe a single tool to all countries because we want to build on a sustainable MRV system, and build on the systems that are already in the countries.

Thank you very much. I would like to acknowledge a new project that FAO has started in cooperation

with the Ministry of Agriculture, Forestry and Fisheries[8] (MAFF) of Japan, which is really scaling up efforts for carbon enhancement as a real climate action for the Paris Agreement. I am very happy to acknowledge that new support from the MAFF Japan. Thank you very much.

[8] http://www.maff.go.jp/e/