DRC Forest Reference Emission Level Methodological Framework

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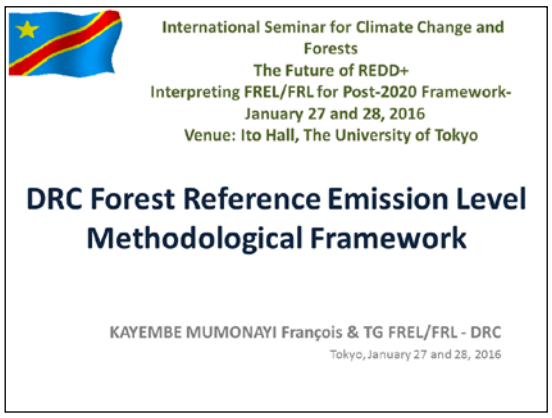
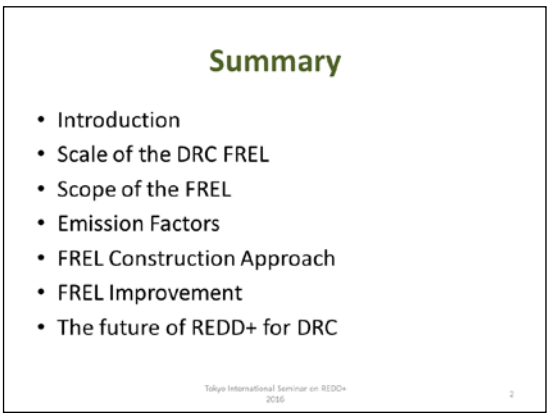


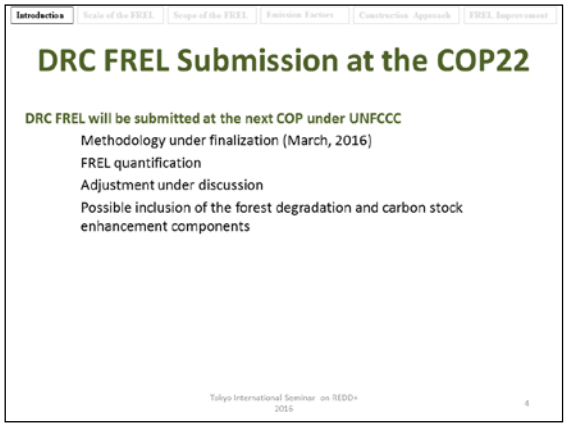


That is a photo of our working group. We are doing this work with NGOs and our partner; JICA, FAO, Japan Forest Technology Association[1] (JAFTA), and some experts of FFPRI REDD.

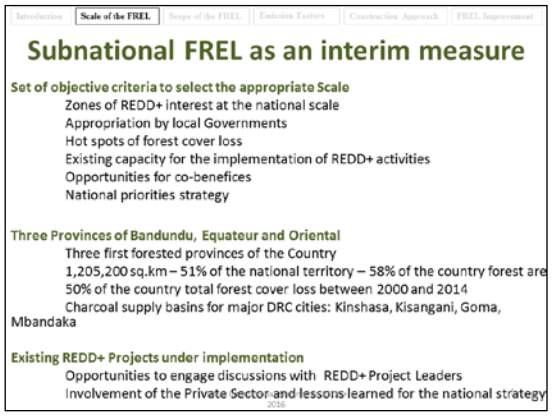
Scale of FREL

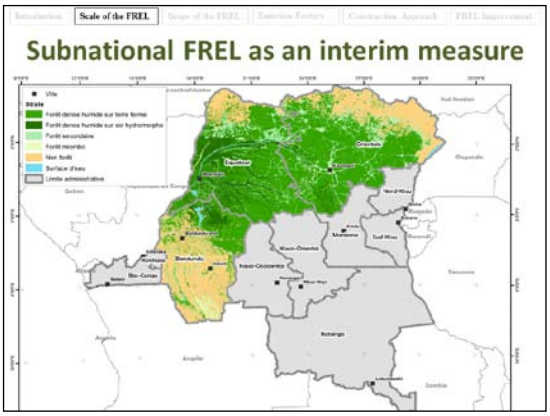
Major milestones of the REDD+: six years roll-out in DRC. In the national forest monitoring system is where we put national forest monitoring system in the place. First step towards a national forest inventory was achieved for some provinces. A national inventory of greenhouse gas emission, some work is done. Satellite-based forest monitoring system: national capacity is building. National REDD+ strategy framework is in place. Appropriation at the highest political level: wide consultation at the national scale, local people, gender, civil society, and research centers and universities are involved in this strategy. REDD+ projects implementation: identification of REDD+ interest zones across the country, involvement of the private sector, and lessons learned for the national REDD+ strategy.

[1] http://www.jafta.or.jp/index-e.html



DRC forest reference emission level submission at the COP22: DRC forest reference emission level will be submitted at the next COP under UNFCCC. We have the methodology under finalization possibly in March of this year, but it is really challenging for it because some work is in the field for national forest inventory doing some work in the field at this moment to be in four provinces. FREL quantification adjustment is under discussion, possible inclusion of the forest degradation and carbon stock enhancement components.

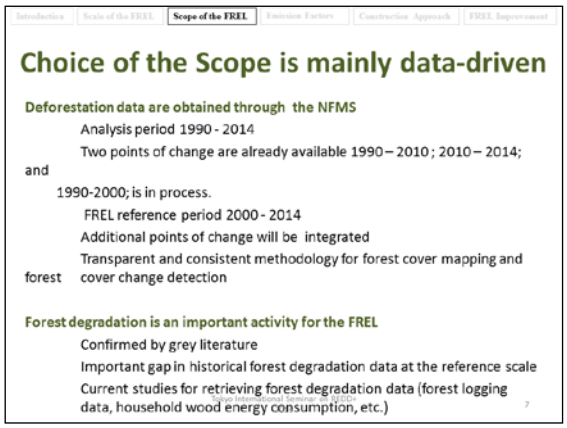




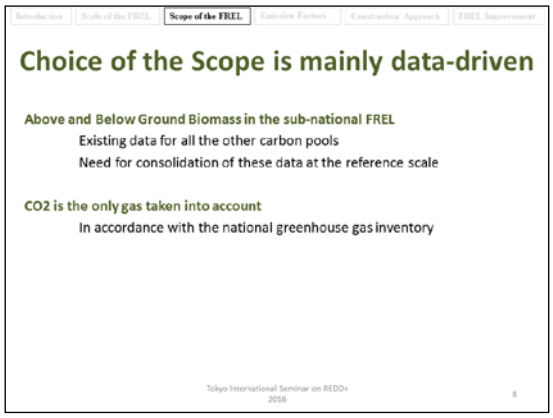
Sub-national for forest reference emission level as an interim measure: set of objective criteria to select the appropriate scale, the zones of REDD+ interest at the national scale, appropriation by local governments, hot spots of forest cover loss, existing capacity for the implementation of REDD+ activities, the opportunities for co-benefices, and national priorities strategy. There are three provinces of Bandundu, Equateur, and Orientale. These are our choice to submit our forest reference emission level because it is 1,205,200 square kilometers. It is 51% of the national territory. For the country forest, it is 58% of the country forest area, and 50% of country total forest cover loss between 2000 and 2014. Charcoal supply basins are for major DRC cities like Kinshasa, Kisangani, Goma, and Mbandaka. Exciting REDD+ projects are under implementation. The opportunities to engage discussions with REDD+ project leaders, involvement of the private sector, and lessons learned for the national strategy.

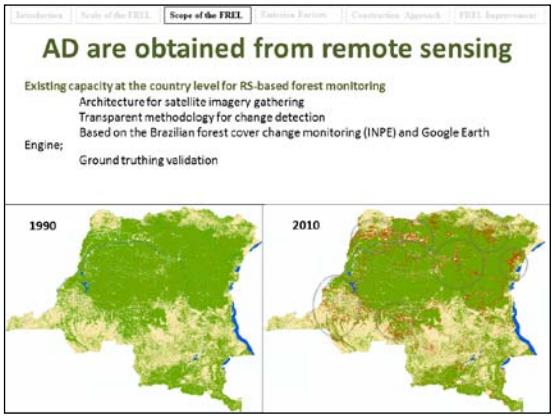
This is the map for this part. We have three provinces. You see green is forest. This one is non-forest. When we did this map, there were only two classes of forest and non-forest, but now we think to do for four classes. The first is a combination of primary forest and secondary forest. That forest is secondary. This one is the swamp called forest. These categories are a clear secondary forest, and so on. This one is a clear or dry forest, so there are non-forests, and surface of water body.

Scope of the FREL



The choice of the scope is mainly data-driven, and deforestation data are obtained through the national forest monitoring system. The analysis period is 1990 to 2014. Two points of change are already available, 1990 to 2010 and 2010 to 2014. These are down, but there is something to improve our result or statistic. Now we are in process for 1990 to 2000. This period is a big problem because of I do not know what is open or what is remaining in this period. When we try to run with the Google engine to use our methodology it is not working well, but we are going to search a methodology that can be used for this period. FREL reference period followed for DRC is 2000 to 2014. Additional points of change will be integrated. I think that, after this the analysis of 1990, we can add another period to see how we can see our emission. The transparent and the consistent methodology for forest cover mapping and forest cover change detection. As for transparency, as for the national forest monitoring system, it is online. Everybody can see it. It is very robust. That is why we say the transparent and consistent methodology. Forest degradation is an important activity for the FREL, but now we search which methodology we can use to do it. We are only now just for deforestation. Degradation is our second task confirmed by grey literature. An important gap is in historical forest degradation data at the reference scale, current studies for retrieving forest degradation data, forest logging data, household wood energy consumption, and etcetera.

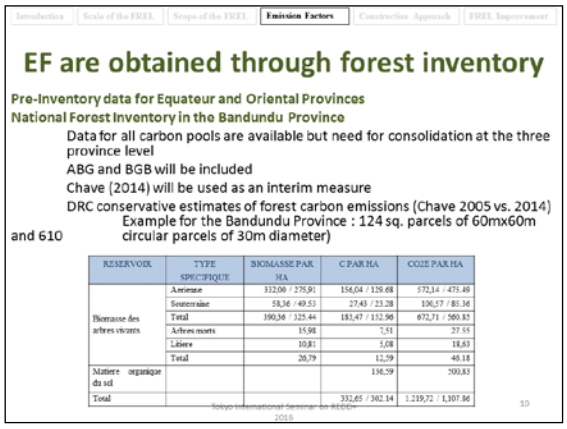




The choice of scope for our FREL is mainly data-driven. Above and below ground biomass in the sub-national forest reference level: existing data for all the other carbon pools and a need for consolidation of these data at the reference scale. Carbon is the only gas taken into account in accordance with the national greenhouse gas inventory for the moment.

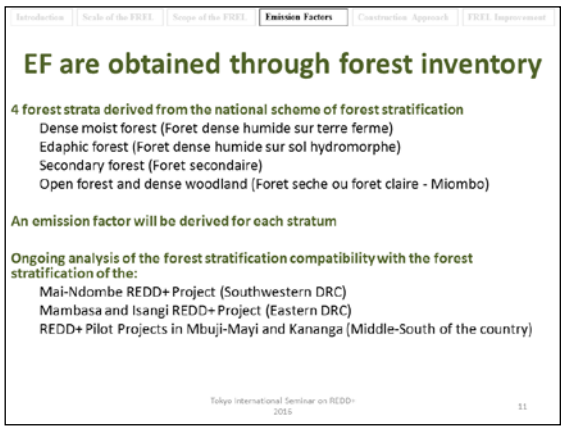
This is a map analysis to detect change. Activity data are obtained from remote sensing. That is shown in these two maps. Existing capacity at the country level for remote sensing based forest monitoring, that is our task. Architecture for satellite imagery gathering, transparent methodology for change detection, based on the Brazilian forest cover monitoring of INPE, that is the TerrAmazon software and the Google Earth Engine, and ground-truthing validation. Sometime we are going to set a draft for ground for validation. This map is the photo of three years ago to produce this map. I want to show some more hot spots. Deforestation is very large.

Emission Factors

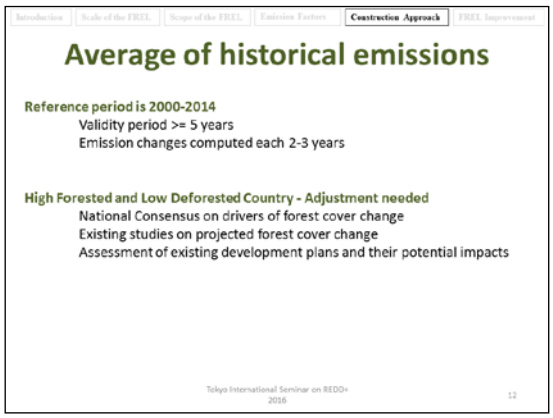


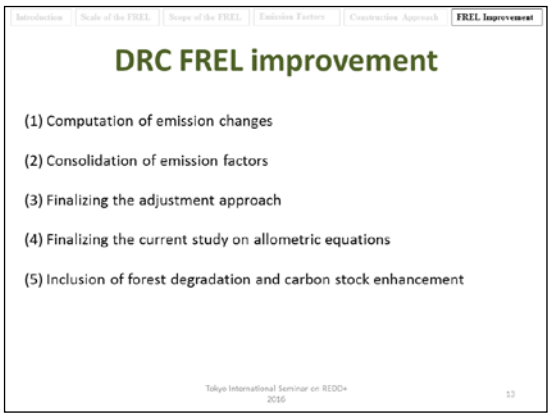
Emission factors are obtained through forest inventory. In this part, I can say our country is very big. The wood is not enough. I can say the project of JICA for JAFTA, they did three years going in one province, but it is not finished to inventory this province of Bandundu. It is showed that to cover our country is a big problem. Pre-inventory data for Equateur and Oriental Provinces, this one is down. National forest inventory in the Bandundu Province, what I say the Bandundu, the project

of JAFTA and JICA is focused on the Bandundu Province for now. There is some work in the national inventory. Data for all of the carbon pools are available, but there is a need for consolidation at the three provinces level. Above biomass ground and biomass will be included. We use the Chave 2014 as an interim measure of DRC conservation estimates of forest carbon emission. In this one, we try to use the Chave 2005. If possible, we want to decide for use the Chave 2014. For example, in Bandundu, 124 square parcels of 60-meter by 60-meter circular parcels of 30-meter diameters and 610, that is some result for these pools. This one is above biomass for living wood and this one is ground, and the result is the litter and the dead trees. You can see it now on the paper.



Emission factors are obtained for forest inventory. That is the same. Four forest strata derived from the national scheme of forest stratification: that is what I have shown on the map for this stratum, dense, moist, edaphic forest, secondary forest, open forest, and dense woodland.





Average of historical emission, reference period is 2000.

FREL Improvement

The future of REDD-plus for DRC: DRC ask a general mobilization of the world states to fight against climate change. There is great importance to adaptation actions and mitigation that takes into account the principle of differentiation in relation to the historical responsibility of developed countries. The DRC submitted its intended national determined contributions (INDC) on August 18, 2015. Despite its status as a weak transmitter, it has thus committed itself to reducing its emissions of greenhouse gases by 17% between 2020 and 2030. The priorities for the DRC are on adaptation, on technology transfer, on capacity building, funding, and resilience to climate change, as well on reducing greenhouse gas emissions by developing renewable energy sources. That is a big challenge for DRC because it asks funding. Our resources are limited to do this. INDC is very challenging. Thank you for your attention.