



The Mexico Forest Project Protocol Workgroup

Meeting 7 Meeting Notes March 07, 2011	Meeting was held at the office of CONAFOR in Coyoacan, DF- Mexico
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The meeting was held on March 7th, 2011 at CONAFOR's offices in Coyoacan, Mexico. The meeting started at approximately 9:30 am and concluded at 4:00 pm.

In attendance: John Nickerson (Climate Action Reserve), Cecilia Simon (Climate Action Reserve), Ruben de la Sierra (ASERCA), Danae Azuara (Environmental Defense Fund), Christoph Neitzel (Academic, UNAM), Christina McCain (Environmental Defense Fund), Juan Carlos Carrillo (CEMDA), Yougha Von Laer (South Pole Carbon), Claudia Mendez (Rainforest Alliance), Rafael Flores Hernandez (Conafor)

Remote: Robert Youngs (Climate Action Reserve), Pablo Quiroga (Natura Proyectos Ambientales), MaryKate Hanlon (New Forests), Brian Shillinglaw (New Forests), Rosario Peyrot-Gonzalez (Profepa), Michelle Passero (The Nature Conservancy), Cesar Moreno-G (Conafor), Chemo Michel (Conafor), Raúl Espinoza (Conafor)

Meeting Summary:

The meeting consisted of updates from the various subcommittees since the last workgroup meeting in November and discussions of next steps. There was a presentation from Rafael Flores of Conafor regarding Conafor's national forest inventory work. Presentations were also provided from the following subcommittees:

- Jurisdictional accounting/Nested Projects (Yves Paiz, Michelle Passero, Naomi Swickard, Julie Teel, Brian Shillinglaw, Danae Azuara, Cheri Sugal, Rosa Maria Vidal, Pablo Quiroga)
- Baselines and Leakage (Alfredo Cisneros, Kjell Kuhne, Cheri Sugal, Steven de Gryze, Yves Paiz)
- Permanence (Yougha Von Laer, Christoph Neitzel, Carmen Jimenez, Alejandra Cors, Juan Carlos Carrillo)
- Aggregation (Cecilia Simon, David Ross, Pablo Quiroga, Leticia Espinosa)
- Environmental and Social Safeguards (Ivan Hernandez, Gmelina Ramirez, Elsa Esquivel, Kjell Kuhne, Claudia Mendez)

The meeting began with introductions from participants, and an overview the workgroup process. John, Cecilia and other discussed the Mexico forest carbon sector in general and other groups and organizations involved in the sphere. There have been many meetings about REDD in Mexico and about funding. There was a discussion of the recent CTC REDD group meeting, and the breaking out of the 5 key groups addressing the 5 key objectives. CAR will be looking to be involved in these processes as well. There was a discussion of the USAID Request for Application (RFA) grant, and potential funds for different Mexico forest carbon work. Proposals will be presented by The Nature Conservancy (TNC), the World Wildlife Fund (WWF) and Winrock International, all three of which are working with Mexican NGOs as well. CAR will be soliciting interest to these groups. Danae spoke briefly about the Environmental Defense Fund's (EDF) involvement in the process.

While much of the focus in the CAR workgroup to date has been on developing a high-quality, regulatory grade protocol for California markets, there may be value in expanding the scope for potential use in internal markets in Mexico, or other markets. It is important not to develop any rules that would fundamentally preclude the potential for involvement in an internal Mexico market, or other potential markets down the road. The USAID grant was discussed in further detail, and the work being done by different organizations. Grant proposals are due in March, with deliberation in August and the funds potentially first available in September. A statement of qualification, and accompanying budget, was developed by the CAR workgroup for the USAID RFA. The proposal outlines the role that CAR may play in the greater goals outlined by USAID.

There was a general discussion of the workgroup timeline and deliverables to the CAR staff for review. The aggregation draft is one of the first pieces that is to be delivered to CAR, and a final draft is nearly complete and ready for review. Other staff at CAR will review the draft and return it to the workgroup with comments.

The environmental and social safeguards draft is scheduled to be delivered to CAR for review in one month, so developing this piece is currently a high priority.

Aggregation Subcommittee

Cecilia Simon gave a presentation to the workgroup regarding the key points of the aggregation draft. It is available on the Mexico Forest page on the Climate Action Reserve website. Some of the general ideas covered were: all project types would be eligible (reforestation, avoided deforestation, improved forest management); there is no size limit for aggregation participation; that each project must address environmental and social safeguards, additionality and permanence *on a project level*; and that projects must have their own inventories that are harmonized with jurisdictional inventories. The ways in which aggregation can lower costs and remove barriers to participation were discussed, as well as how this can facilitate fewer sample plots (across an aggregated inventory) and less frequent verification schedules at the project level for aggregation participants. Projects must be in the same jurisdiction in order to be in an aggregate. It was noted that costs can be eased when aggregated projects are located in the same forest community type. Any private landowner can participate in an aggregate, but each landowner must have a separate account on CAR. Credits must be transferred from the forest owner's account to the aggregator account for transactions with other buyers. Aggregators may be a corporation, a non-governmental organization or other legally

constituted entity, city, county, state agency, etc. but each aggregator must maintain their own CAR account. Before a project can be verified, the project's aggregator must demonstrate they are qualified to cover losses associated with reversals. Aggregators must be accredited with the Centro Mexicano para la Filantropia (CEMEFI) which is designed to ensure that only institutions with financial stability and a favorable track record can serve as aggregators. This is intended for NGOs, but the workgroup will investigate if CEMEFI has standards for traditional private companies as well. They have standards for Empresas Socialmente Responsables; the subcommittee will do more research here and see if there is a potential to engage directly with CEMFI. There is a list of ten indicators in the draft aggregation document.

The roles and responsibilities of aggregators were discussed. Aggregators must select verifiers and coordinate verifications. Aggregators may also engage in project development, manage monitoring and inventories, and provide other services. The scope of services is up to negotiation between each Forest Owner and Aggregator. Contracts between Aggregators and forest owners are confidential between the two parties, but must be on file at CAR and are subject to verification. There are some specific requirements for these contracts, namely: no transfer of possession of land or trees, inclusion of fees for services and agreement for payment of credits, clearly stated responsibilities for avoidable reversals, clearly outlined process for handling conflicts or grievances, and demonstration that the community/ejido agrees with the contract and its terms, and that is fully aware of the project. These requirements are in place to protect the community/ejidos.

Aggregators assume project liability by signing the Project Implementation Agreement (PIA) with CAR. Community/ejidos can sign contracts for a maximum of 30 years under Mexican law, however, the contracts can be renewed at the end of the 30-year period.

There was a discussion of what possible steps or recourse there would be in the case that an aggregator disbands/dissolves and one or more of the projects cuts its timber below the baseline level (avoidable reversal). Some potential mechanisms to deal with these reversals could be: a foundation, a larger NGO, Mexico's CAR Office, or insurance. There have been discussions with insurance companies about the concept of avoidable reversal as compared with natural disturbances. There was a discussion of a bond or collateral between an aggregator and an insurance provider. Ideas around shared liability among projects that are in an aggregate together, and associated "self-policing" were discussed. Rating projects based on reversal risk, with associated deductions, was discussed. Liability resting with the buyer of the offsets was discussed, but there are potentially problems with forest offsets not being able to compete, or be on a level playing field with other offset types, which is problematic, particularly in a compliance market (similar to problems associated with proposed ideas of "temporary credits"). The issue of aggregator dissolution and subsequent project-level reversal was highlighted as an issue that does not need to be fully agreed upon right now for this draft; it can be flagged for review by CAR and discussed in greater detail later through the CAR review process.

There was a discussion of Target Sampling Error (TSE) and a sliding scale for projects participating in an aggregate (higher TSE with more participants). This way, aggregation can lower project costs, with fewer plots overall, and higher confidence levels. This methodology is based on assumptions and modeling that was developed for the aggregation methodology for the US Forest protocol.

Verification requirements under an aggregation were discussed along with the timeline and requirements for site visits, highlighting the lowered verification costs across an aggregate as site-visit verification frequency can be lowered on the individual project level.

Next Steps

- Last thoughts on draft before it is sent to CAR
- Submit aggregation draft to CAR
- Continuing work on the outlying issues identified (particularly aggregator dissolution).
- Receiving comments from associates at CAR.
- Continued refinement of aggregation draft.
- Translate draft to Spanish
- Investigate with Cemefi and other entities about indicators for corporations
- Revise PIA

Permanence

John Nickerson gave a presentation on work done in the permanence subcommittee; it is available on the Mexico Forest page of the Climate Action Reserve website. The thinking and concepts around permanence were discussed in relation to 100-year permanence and the limits of the 30-year contract limit for community/ejidos. The general thinking around trust-funds (or fideicomisos) was discussed. Previous thinking was that advantages of the trust would be that money from credits deposited in the trust (and paid out later) would accrue at a better rate than inflation (or simply credits left in a permanence buffer pool). This idea was examined in the context of the economic model that was developed and presented at the previous workgroup meeting. The current thinking is that a trust may not be as valuable in this context due to the costs associated with the trust potentially outweighing the better accrual rate.

Ideas around reconciling the 30-year contract limit with the proposed 100-year permanence requirements were discussed. A concept was proposed that is based on a simplified idea around the half-life of carbon, and the time-value of carbon kept out of the atmosphere. In this general concept, keeping in mind the 30-year maximum contract, projects will earn 1% of the verified reductions per year (time-valued). The example discussed was a project that has 1,000 verified reductions. That is, they held 1000 tonnes out of the atmosphere, but in each year they would earn just 10 credits (1%). However, in order to make this a real economic incentive, for projects in an aggregation the credits can be 'frontloaded' for the first 30 years, and distributed in year one (in this example resulting in 290 credits). The landowner would still be held to the 30-year contract that was signed. After the 30 years is up, the project can choose to not continue, or it can renew its contract and get another 30 years of pro-rated credits with the time-valued discount, but again 'frontloaded' to be issued in the first year of the new contract. This is an illustrative concept, and more research needs to be done relative to carbon storage in the atmosphere, temporary carbon storage and any potential around a time-valued atmospheric discount.

The project level economics of such a crediting system were discussed, particularly if a 30-year, frontloaded credit in year 1 (e.g. 290 in the example above) is enough to offset

the opportunity cost for different types of forest management (e.g. forest clearing). The numbers still need to be reviewed in the financial model. One economic advantage of a system like this is that after the first 30 years (and a new generation is managing the forest decisions that potentially was not involved in the original carbon contract), there is an immediate economic incentive for them to renew the contract because they would get payments for years 30-60 upfront (i.e. in year 31, right after the previous 30-year contract expired).

There was a general discussion of liability for reversal before the 100 year period, and where liability could potentially fall. The idea of governments providing some financial security was discussed, but the political will is likely low.

Next Steps

- Take into account workgroup comments on the model and incorporate them
- Review TNC's economic model
- Test out the 30-year, 1% per year option using the beta economic model
- Further research on time-value of carbon in the atmosphere, temporary storage, radiative forcing, etc.

Jurisdictional Accounting and Nested Projects

Michelle Passero gave a presentation on jurisdictional accounting and different approaches to nesting and MRV. There was some discussion of work being done at Stanford by Greg Asner with LiDar, changes to forest cover and carbon stock and the technical feasibility of monitoring and tracking at sub-national scales. Issues around the differences between reforestation, avoided deforestation and improvement forest management were discussed, and the potential complexity for nesting these different project types. The subcommittee is in the process of developing a paper, and further issues need to be discussed before it is ready to share with the workgroup. Reference levels for avoided deforestation were discussed along with the option of using historic data and trends (potentially landsat and ground-truthed).

Julie Teel is developing a matrix comparing different papers and concepts around project nesting. There was a discussion of determining what types of information need to be looked at in a comparison matrix.

Next Steps

- Develop nesting and MRV paper and analysis
- Develop matrix comparing different nested options
- Submit to workgroup for review and discussion

Conafor National Forest and Soils Inventory

Rafael Flores from Conafor gave a presentation on national inventories and forestry data. The presentation is available on the Mexico Forest page of the Climate Action Reserve website. The Inventario Nacional Forestal y de Suelos (INFyS) takes into account many different variables and components of forest carbon, above and below ground biomass, lying deadwood, soil carbon, fire and insect risk, species types, etc.

The general objective of the national forest inventory is the development of statistical data on forest cover, change dynamics, vegetation types, sampling, etc. to support national policies of sustainable forest management and drive activities in the sector with high-quality data. The different levels of resolution for the inventories at different scales (e.g. national, state, local, etc.) were discussed. The four main national inventories that have taken place (from 1961 through 2000, and one currently on-going) were outlined, including the resolution, scale and methodologies employed. Large sweeping comparisons of the different national inventories performed are difficult to achieve, as previous national inventories were not able to capture all regions. Changes in forest cover were shown with a map showing primary vegetation and changes from 1985 – 2007 with large changes seen in areas along the gulf coast, and areas that have seen significant demographic and agricultural expansion. There was a discussion of the different vegetation types and classification, and some of the debate around those types (e.g. savanna, chaparral, California Chaparral). There was an extended discussion of sampling design, and how to do inventories, techniques in Mexico, the U.S. and Europe, and different techniques for different regions and vegetation types. The rules and approaches around different sampling techniques in different vegetation zones were discussed at length. Sampling plots every 2.5 kilometers were discussed in the context of the national inventory.

There was a discussion of problems with accessibility for ground sampling in different regions, and issues related to political problems, security, drug trafficking, and inaccessibility of remote areas due to lack of infrastructure. All these factors resulted in about 10% of plots that were unable to gather on-the-ground sampling data during the 2004-2007 period.

There was an extended discussion of the sampling manual and the different variables measured (both quantitative and qualitative), indicating forest cover, health, etc. Impacts of human and natural (wind, fire, insect) disturbances were discussed.

The ongoing plan for re-sampling over the 2009-2013 period was discussed. Each year approximately 5,000 conglomerate samples are taken, covering about 20% of the total targeted national area. The following year covers an additional 20% (5,000 plots). The effective result being that every 5 years 100% is covered. Data on unavoidable reversals (e.g. forest fire, insect) and risk rating maps and geographic data based on lying dead wood, combustible biomass and vulnerable species is available and can be very helpful in forest carbon risk accounting. Geographic information about species is available due to research done by UNAM that can also be very useful, particularly for insect risks.

Biomass equations, estimations and allometric equations for common species in Mexico were discussed. There was a discussion on calibrating geographic information as more allometric equations get added, and how to maintain a steady system when using data for REDD MRV over protracted time periods. There was an extended discussion of ground truthing, and developing confidence and uncertainty levels by comparing different data sets. Ongoing and future work with other organizations in Mexico was outlined, as well as the goals of developing data with particular levels of certainty, that can be reconciled at state and national levels.

Baseline and Leakage

John Nickerson gave a presentation on deforestation driver analysis and work from the baseline and leakage subcommittee. The presentation is available on the Mexico Forest page of the Climate Action Reserve website. There was general discussion of work being done by Alfredo Cisneros with INE's deforestation model and calibration against the on-the-ground data from the Monarch Reserve in Michoacan. The work being done by Steven Degryze and in Guatemala was discussed, along with the accompanying deforestation driver methodology. The first step of the methodology is to identify all potential drivers in Mexico as well as their relationships to each other (e.g. a road is built, which is accompanied by an agricultural expansion, etc.). This step also requires the development of a survey methodology to outline how these drivers can be identified within defined geographic areas. The second step is to define the geographic boundary in which the project operates, which is key to defining a project's baseline and leakage monitoring. For simplicity, this could be coincident with state boundaries due to jurisdictional issues. However, it may be combined states where ecosystems, economies, forest policies, and high-risk of leakage are shared. The third step is to find, within that jurisdiction, which drivers are dominant. Step 4 is to identify/develop data to quantify the relative contribution of each of the potential drivers within the jurisdiction. Once these data are identified, the relative contributions can be quantified for each jurisdiction. The next step is to analyze the spatial restrictions and mobility of each of the drivers. That is at what scale do they occur, by which actors (large corporations, small communities, etc.) and what is the associated mitigation potential (e.g cannot be addressed, can be completely eliminated, etc.). The next step is to identify how the project actually addresses the drivers that are present. In this way a leakage risk can be assigned for each project within a given jurisdiction. With spatial drivers identified, local variables can be used to calibrate INE's deforestation risk within the geographic boundary and extrapolated to the project level as a predictor of deforestation rates into the future.

Regarding leakage, identification of the mitigation potential for each driver is key. If larger drivers cannot be mitigated then the leakage risk will be high.

There was a discussion of what happens after the fact, if deforestation occurs on a jurisdictional level but there was performance on a project level. That is, can you determine if the deforestation that occurred at the jurisdictional level was actually due to leakage at the project level? Were the drivers that caused the deforestation at the jurisdiction the same drivers that were mitigated at the project level? Or were they different drivers all together and therefore unrelated to the project-level avoided deforestation?

It is important to assess what can and cannot be mitigated at a project level, and what drivers are so wide-reaching that they cannot be mitigated at the larger scale. There was a discussion of potential for eligibility requirements at a project level based on mitigation potential of the pertinent drivers. That is, you may be able to overcome an illegal-logging driver at a project level with carbon revenue, but the demand for the wood products still exists in the region. A process to mitigate this would have to be a larger policy (e.g. improved forest enforcement by the government). That is, is there a policy at the jurisdiction level that would allow your project to be viable? Regarding implications for the CAR protocol, there was a discussion of an outright eligibility requirement for driver mitigation potential versus the concept of a progressively higher leakage discount rate for drivers with low potential for mitigation. Progressive leakage discounts were identified as the current preferred option, which puts the decision with the project developers of

whether a project is worth it in high-risk areas with associated high leakage discounts. There was discussion of the larger REDD vision in Mexico and top-down enforcement versus bottom up incentivizing. Ideas around laws that are on the books as opposed to what is actually enforced were discussed in the context of illegal logging and baseline determinations.

Next Steps

- Evaluate, after Alfredo has adapted the model to a local level, if it will be a good model to use.
- Obtain the variables used in INEs model
- Other possible socio-cultural variables need to be identified in order to generate a baseline.
- Find definitions for each deforestation driver. It would be good to translate them to Spanish.
- Follow up with Subcommittees ideas and Terra Global's presentation.
- Further work will consider how the deforestation drivers might be linked directly to the deforestation risk model so that standardized estimates of leakage could be established for projects. Explore alternative mechanisms for leakage assessments and leakage values. It is necessary to amplify the leakage sources available, evaluate its mitigation potential, evaluate standardized data available and reevaluate the leakage factor.
- Re-assessment of the activity shifting leakage deduction factor (CAR Protocol)
- Identify available data to develop standardized solutions to baseline development if possible and explore other alternatives if not.

Environmental and Social Safeguards

Cecilia led a discussion on progress from the environmental and social safeguards subcommittee. The subcommittee is talking with FSC to get basic range of costs for the monitoring and evaluation of safeguards across different scales. This will help with developing potential aggregation costs. There was discussion of identifying regions where aggregation is less necessary as well as regions where aggregation may face many challenges. The ultimate responsibility is on aggregators to decide what areas are viable or risky. There was a discussion of evaluation of safeguards at a project versus a jurisdictional level. The general thinking in California is that safeguard monitoring must take place at the project level. Some other schools of thought focus on the jurisdiction level, which would potentially lower costs. A lot of these decisions depend on the cost of FSC certification and if there is a potential for grant money being available for environmental social safeguard monitoring.

Next Steps

- Talk directly with FSC to align verification processes.
- Evaluate costs
- The group will also explore environmental and social safeguards at the jurisdictional level for potential crediting at the jurisdiction level.
- Have a draft soon

The next workgroup meeting is tentatively planned for April 7, 2011.