Session 3 – Multipurpose of SFM and REDD+ Activities: Importance of Data/Information Collection to Support Them – Q&A Session

(Q1: IUFRO-GFEP, Dr. Ian Thompson) My question is both to Dr. Robledo and Dr. Hirata. I never see any error terms. We always hear about forest type, 63 tons per hectare above ground and 10 tons per hectare below ground and we multiply that by the area, we got this much carbon, but I never see an error term. I would really like to know whether in either of your calculations there are error terms and how much error there is in these kinds of calculations.

(FFPRI, Dr. Yasumasa Hirata) Theoretically, we can calculate carbon stock using the IPCC method, but there are many uncertainties, particularly now, using a remote sensing. Not only remote sensing, but also many people, in some areas, they have never been there. The actual condition is quite difficult to estimate, but instead of calculating the carbon stock, we can identify the area change. Using the area change, we can estimate the carbon stock change using a multi-temporal or historical data. I think that this is only one way to estimate the carbon stock accurately. Of course, we need to develop some other methodologies for calculation of carbon stock.

(Ecoexistence - Robledo Abad Althaus, Dr. Carmenza Robledo) In the case of the calculation I showed with sCreen, we used the mean values and documented the sources. That provides values that one can track. We could have introduced the value ranges, but that would make more difficult to read the scenarios. The tool is not aimed at making measurements, but at modeling expected potential scenarios and using the available data. As the uncertainty if the data is available, the potential errors are visible. We use the existing data. The error terms are embedded in these data, but it is completely differently according to the data we would use. For example, when we work at the field level in Colombia where they have a fairly good inventory for the area where they were working with and they were having a monitoring, the error was rather low. If we use default values e.g. from tier 1 of the IPCC, the margin can be bigger. This is an embedded problem in any type of model that you have. It is not related to any specific model, but any basic data we have available. The better the basic data that we have, the more accurate the results are.

(FAO, Dr. Maria Jose Sanz-Sanchez) Although Dr. Thompson did not ask me about that I would like to answer him. It is possible to estimate the uncertainties. It is a long debate about if we want to be precise or we want to be accurate. I guess the issue is also about if we want to be consistent over time, because what we are pursuing is to change the trends. What is very important is to make sure that our data is consistent over time, that our time series are consistent, the past ones with the future ones and so on. There are distinctions in between if you go for minimizing the errors and go for low uncertainties

and be very precise and very accurate, or if we choose what could be more cost-effective.

I will give you an example. In a country map for a remote sensing, we managed to go down to 10% uncertainty in the data. In the area of activity data, you can now, with the tools you have, if you are lucky in a country that has no major problems with clouds and things like that, you can go for reasonable cost to very low uncertainties. If you have a forest inventory which is well designed statistically you can also reduce quite a lot the uncertainty in your emission factors or through your allometric questions.

Let us say that we can and we are addressing those issues now but I guess the question is how far we want to go to start with. Are we willing to have countries with perfect systems that are very precise at non-possible cost to move them to change behavior? I think we have to reflect about what is the purpose of what we are doing. The purpose is changing behaviors. REDD+ and the performance payments are incentives to do that. My personal challenge in this whole debate has been, if we focus too much on how to get the data for the incentive, we may lose the perspective. I think in this context of the sustainable forest management debate, these sorts of reflections are quite appropriate. This has been also the goal of former ideas. I am going to vie, Dr. Durst, to your picture with all these evolving hot issues. It has always been the same goal.

I hope that we do not lose our perspective here. I hope that we can incorporate the best science which is evolving. We can incorporate the best technology, but we do that at reasonable cost for the countries. I am not saying only a reasonable economic cost, but the reasonable burden in terms of how they can address the problems.

(Q2: CIFOR, Dr. Louis V. Verchot) I have one quick point on that last point, and then a question to the folks who develop these calculations. If we are going to see this thing evolve into market mechanisms, in order to be competitive, in order to get these things accepted by markets, we are actually going to have to do a better job at quantifying this uncertainty. There are techniques to jackknifing and bootstrapping to estimate errors. I think these models are going to need to start building this in. This is perhaps something that is really where research needs to go to support; moving these out of national mitigation mechanisms into something that is going to be competitive in market mechanisms with emissions reductions in other areas where it is much easier to quantify the uncertainty around the estimates.

My question is, to what extent do some of these models that you folks are developing integrate non-CO_2 greenhouse gases into your baselines? If you are going from agricultural land into plantations or reforestation efforts and things like that, do your calculations integrate nitrous oxide from fertilizer that would be stopped, manure, or methane emissions from livestock and things like that?

(Ecoexistence - Robledo Abad Althaus, Dr. Carmenza Robledo) In the case of sCreen, we did not,

because the model only includes living biomass. There is a list of requirements to clarify when it makes sense to use sCreen If you expect high emissions from the soil, then this is not the proper tool. The tool sCreen provides a good overview about the potential and it allows you to compare among different forestry activity options. Nevertheless it has been developed as a first approximation, as a tool to be used during the planning phase. More accurate calculations will be needed once the stakeholders have clarity about what exactly they want to do in the forest. There are other tools considering soil emissions, e.g. EX-ACT.

(Q3: FAO, Dr. Patrick Durst) Earlier, probably not so long ago in discussions and debate about monitoring and measurements related to REDD+, there was a lot of discussion about the potential for local communities to do measurement of carbon stocks. I did not really hear any of the three of you mentioning anything about this today. Is this a dead issue? Is it decided that this is not feasible? What can you comment about this?

(FAO, Dr. Maria Jose Sanz-Sanchez) I did not elaborate, but I mentioned briefly in the monitoring function of the National Forest Monitoring System. The challenge with incorporating data gathered by local communities or indigenous people is how you better make use of that knowledge to do so. In my own perspective, they have been a lot of misunderstandings about what the role of the communities could be on the gathering of the data for the monitoring.

In some cases, expectations were held that they will be the ones producing the carbon data that will be reported for the performance-based payments. I think that led to some sort of back and forth and misunderstandings. I think every country will develop their own approach about how it is best to include the community data. In some cases they will figure out that the traditional knowledge produced data are not exactly carbon data that are very relevant for the monitoring and very useful for improving the management decisions at the community level and maybe even evolve. In other cases, they may engage the local communities into the sampling design of the inventory. For example, in Panama now, in the areas where indigenous people are living, the plots of the National Forest Inventory, the measurements are done together with them. They are the ones that are providing the support for that.

I think every single country will find the best way to do that, and the best way to use the information that the local communities can provide. That will be the way, but just assuming that there will be one standard approach where they will be the ones providing the carbon estimates, it may be not good for them, because it will not allow them to provide much richer information they may be able to gather, and it may create expectations on the distribution of benefits that may be unrealistic. I think we have to be taking these two things into account, but I think it is very important. They really can contribute through quality data which does not necessarily need to be carbon estimates.

(FFPRI, Dr. Yssumasa Hirata) My colleague from Kyushu University tested the measurements by a local community in Cambodia. We found that the result has much error. In the context of REDD+ monitoring, we have to consider the cost of training for local community. In addition, we need many experts for training the local community. We have to consider this point.

(Ecoexistence - Robledo Abad Althaus, Dr. Carmenza Robledo) The tool sCreen is not a monitoring tool. However there are two moments when you should consult with stakeholders First, when you define what is currently going on in the forest, for example, how much firewood gathering is needed per family? How many families are gathering firewood,? This information has been obtained asking the community and is relevant for the baseline/reference level. The other moment where it is very important is when you decide future management activities. I mean, people are used to say, "Yes, we are going to reduce deforestation by 20%." What does that mean in the forest? That you cut 20% of the trees? What exactly does that mean? You can clarify that only if you jointly decide with the stakeholders. Again, what we try to do with this tool is to provide carbon accounting and development of scenarios in order to facilitate dialogue and joint decision-making

(Q4: FAO, Dr. Eduardo Mansur) I have two quick questions for the ladies. For Dr. Sanz-Sanchez, I think you partially addressed my doubts, but could you help illustrate if you have any concrete example from where the REDD+ Readiness has helped SFM implementation? Probably, in one of the countries where you are moving from phase I to phase II where you have concrete example could illustrate this process coming up.

For Dr. Robledo, I was a bit puzzled when you presented the model, because you compared the optimal situation of maximum carbon with the plan B and the plan A, but you did not compare with the current business as usual if no action is being done, which I think is also interesting at the level that you are doing, which is at the national or territorial level. I was wondering why you opted not to have the business as usual option in the model.

I understood that one the development plans consider SFM, and the other not, or the optimal question considers SFM. What is the context that you use SFM in this plan that does not include SFM? What does it mean?

(FAO, Dr. Maria Jose Sanz-Sanchez) My area of work is very restricted at the moment. I am only supporting countries to better collect information. I am not yet making lot of experience on how to use information. What I can say is that what we have been observing in some countries is that they are by themselves through this process of putting together this National Forest Monitoring System, realizing that the information they could potentially collect is going to be very relevant for improvement

of what they want to do on the ground to make the goal. I can say that there are several countries, and one of the countries which is really reflecting about that, they will present tomorrow, which is Zambia. I think Mr. Kasaro will tell us more about that, but they are really thinking on what needs to be done when they are collecting the information. Also, the way they are collecting is, for example, in their case, decentralized.

I think this is a big step forward, because when we started with REDD+, the only focus was this MRV acronym that nobody really knows what it means. Everyone would say, "No, we need to construct MRV systems. We need to do MRV." "I do not know what MRV is." I think at the moment, through really using the concept which is a requirement, which is your National Forest Monitoring System is where you can really decide what information you need in addition to what is going to be required for your MRV, and how this could help you to improve your management practices. That is where you can liaise these monitoring with sustainable management. Indirectly, your liaising REDD+ with sustainable forest management. Through information may be an easy way to do that.

(Ecoexistence - Robledo Abad Althaus, Dr. Carmenza Robledo) The next time I present sCreen, I will show the baseline scenario, what you have seen is the evolution of the net carbon benefits. Yes, that is a good point to compare it with the baseline. I did not bring it, and I am sorry.

About comparing SFM and conservation, in the scenarios I present, both activities were included; conservation and SFM, but in different places. When they have the deforestation of 90%, they have in one scenario, conservation, and in another scenario, sustainable forest management, that allows comparison among scenarios (different management options). What decision-makers want to understand is the differences in potential carbon benefits between full conservation (without any intervention) and having another activities e.g. ecotourism with or without SFM. An important concern here is the future activities of different stakeholders, not only communities, but also e.g. private sector that is today participating in the use of the forest. The information provided by sCreen provides a good basis for further discussions including potential payments or other expected benefits. Forest stakeholders are trying to define the optimum option. The comparison between different potential management activities is an input for this discussion.

(JICA, Mr. Hiroki Miyazono) JICA is assisting the project for the readiness in different countries, how it will relate to SFM, and how it contributes to SFM. One of the case studies that JICA is engaged in is the PNG. JICA, over the past 3 years, using the national forest resource information system, we have been assisting building the system. The purpose of this is not just REDD+, but also SFM. We are aiming at both. What sort of information do we need and what sort of systems do we need to maintain? JICA has been assisting this project. The project is going to compete next month.

That system was built three years ago but that is still a prototype; that is still in the pilot phase.

However, with the system the PNG, the Papua New Guinea counterparts, how are they going to use those many different ideas? We are going to include those ideas in the next phase. One of the ideas is they have their own forest management system, for logging, and maybe timber production. It is such an important project for Papua New Guinea, and therefore there are a lot of logging concessions granted in different forms. Once that is harvested, they log, and of course the trees grow, and then the carbon stock will restore. The re-growth model has not been built into the conventional system. In the next JICA project, we will build in the re-growth system to manage the forests sustainably. That will be the next step.

I am not promoting JICA, but that is part of the readiness assistance that JICA is providing. What next steps are we going to aim at? It may be difficult to identify at this point, but if we do learn, and through trials maybe we can identify what sort of applications we can use depending on the needs of the local communities to improve the systems. We are still in the development phase.