While I find the tool a good guidance on VCS’s part which will likely given momentum to VCS JNR program, I found the accompanying modules less rigorous and are subject to flaws and needs improvement. My specific comments to tool and accompanying modules are provided here.

Thank you. –Benktesh Sharma.

**Tool:**

General:

The document has used word ‘degradation’. I would suggested using ‘forest degradation’ every time degradation is referred. It not only avoids any confusion, but also ensures that ‘degradation’ is not used incorrectly.

5.2.1. (2):

Significance is not really appropriate here, at least without a proper definition. Are we talking about significance in total GHG emissions from deforestation or about GHG emissions per year or something else. I was thinking may be ‘most important’ commodities in terms of yield value in $/ha associated with deforestation.

Proper use of word significance must be checked in the modules too.

5.3.1 (1) a, and c:

Without a proper definition of these terms, this tool can only by applied by people who have inside knowledge about the tool. The project verification and validation will not be as straightforward as it ought to be. I think a context specific definition of ‘Global commodities’ is needed. If I am to use the tool, I would be facilitated if the tools explains the commodities that qualify for ‘global commodities’.

Section 5.3.2, attempts to define the Global commodities to some extent by stating, ‘…includes …product that are linked to international markets. The ‘linkage’ to international market must be defined. I think it would be more appropriate to explicitly mention as products that jurisdiction either ‘imports from or exports to’ international markets.

I am not sure if there is a way to separate forest degradation that was not caused by JNR program. So it won’t be possible to estimate this without further guidance.

Table 1. value for row ‘b’ and “total global commodity row”: add ‘a and b’ instead of a or b for the ‘Total Global Commodity Leakage’ row.

**Leakage Module – Effective Area Approach**

Eq. 2:

The equation does not consider a situation where farming practices are in decline across the landscape due to rapid urbanization. The decline in farming practice cause decrease in both yield and area. Something due to the decline in area, and increase in yield, the yield could remain stable. Due to rapid urbanization and population growth in developing countries (where REDD+ programs are currently considered), crop lands are being converted to non-croplands even without a JNR. Without considering this important factor, the estimate coming out of Eq. 2 is least likely to give a reliable estimate of leakage. The decline in area and yield will also have major implication in Eq. 3. Therefore, these two equation needs to be constrained and modified as appropriate.

5.1.3:

The assumption that the crop types remains same over a period of time does not hold true (except for large scale biofuel plantations). If you analyze the cropping practices in tropical Asia, production of grain is declining while the production of cash crops are increasing. It is expected that this trend will continue as long as there is a value to change in cropping practice. The module does not look into this aspect of cropland-deforestation relationship.

5.1.4. – Eq. 6:

The assumption that agriculture as the baseline commodity is incorrect. In order for this assumption to hold true, it must first be stated that the jurisdiction where the avoided deforestation occurs has ‘open’ land clearing policy (or the jurisdiction should permit conversion of forest to crops in the baseline as in the case of avoided planned deforestation ) in which any forest areas can be converted to agriculture. Otherwise, the only commodity that is lost form avoided conversion is ‘forest products’.

Because of this assumption, it unnecessarily penalizes the jurisdiction that work hard to curb illegal logging/conversion activities by implementing JNR.

5.2.1

Use of phrase – ‘Tropical forest’ is not clear. Many countries in sub-tropical zones are still observing deforestation. I think ‘REDD+ eligible’ countries or something similar is more appropriate than ‘Tropical countries’.

The example of corn being grown in Iowa is not relevant. A relevant example would be less confusion. For example, I could not find a direct linkage between deforestation in Indonesia or Columbia with corn production in Iowa. Additionally, this section is about leakage in tropical forests outside of jurisdiction but within the same country and Iowa does not fit.

Use of word reference period is preferred over ‘reference level period’ on item number (1)

It does not matter who conducts the research it must be publicly available and published in relevant scientific publications. The use of Terrestrial Carbon Group, or Resources for Future is not appropriate.

Many different researches yield different estimate of rates of country specific and global deforestation (depending on applied methodologies and assumption). I think one source data must be provided (acceptable by default). FORESTAT of FAO can be one such a source (<http://faostat3.fao.org/home/index.html>).

Proper units of measurement must be present for all the parameters in Eq. 14.

**Leakage Module - Production Approach:**

Summary – 3rd paragraph – first line:

The assumption that ‘these commodities are traded as part of the international markets and production will shift elsewhere internationally to fulfill demand’ is correct approach to follow, in my opinion. On this, what would be the approach, if the products that would be produced in the baseline is fairly local and the production cannot shift elsewhere (like perishable vegetables in remote areas? Will it be allowed to claim ‘0’ leakage?

4. (3):

Should be excluded instead. JNR will have least effect on development of infrastructure development.

5

Use of word ‘tool’ is causing confusion. I think should be changed to ‘module’.

5.1.

The assumption ‘all avoided deforestation is conservatively assumed to be subject to market leakage’ is not valid. Not only it will give a wrong solution to this problem, the approach is flawed and cannot be accepted as it is materially incorrect.

5.3.

Third line – I have severe objection to the example on common pathway to deforestation. While the example may seem to be relevant for some jurisdiction, but it does not necessarily represent a ‘common’ example case of deforestation in developing countries. First and foremost, commercial logging is not the first step to deforestation. First step in many agrarian societies in the developing countries is shifting cultivation (that start with burning trees for land clearing). There are many pathways that are common and yet are different. Unless a case study type information is attached, this example does not really fit in this module.

Paragraph two – how to determine significance must be described. I think word, ‘important’ is more suitable.

5.4.

In many part of the world, post deforestation land-use is agroforestry – where short rotation tree crops are cultivated in conjugation with pasture or crops. Example includes poplar-mustard, sisso-crops, oil palm - cocoa etc. I think this aspect of cultivation practice must also be considered and detailed instruction must be provided as such practices have demonstrated to have significant impact on reducing tropical deforestation.

Third paragraph – about livestock: The value will be skewed if livestock graze in forest or there is not grazing at all (e.g. grain fed livestocks in India) (in many countries in tropics, pastureland do not exist) giving rise to a very high productivity for jurisdiction.

Fifth paragraph – I think this paragraph needs further explanation and revision. If something is not sensitive to ‘error’ then it is not possible that it can give correct results. Its like ‘garbage in’ and ‘garbage’ out.

5.9

Fourth paragraph – It would be better if the module specifies the titles of referred report. FAO and World Bank have many reports on global production, but with different scope, and context.

5.12

The example in the second paragraph is highly hypothetical and unlikely to bear any resemblance to how such processes occur in the reality.