SSC Call for Inputs on Alternative Methods for Calculating Emission Reductions for Small-Scale Project Activities that propose the Switch from Non-Renewable to Renewable Biomass.

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Dear Secretariat:

In response to the call for submissions below, please find attached my suggested methodology.

Method for calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass or renewable energy

Ø The ratio of availability to demand gives the percentage of non-renewable biomass in a region.
Ø Biomass availability is analysed in a cost and time effective way with the help of spatial and temporal tools such as GIS, Remote sensing data and collateral data. Hierarchical classification techniques should be used to analyse remote sensing data about land use and the area under each vegetation (at species level) for the region. Based on randomly selected quadrant in all types of land use, the productivity range in tonne/hectare/year is computed.
Ø Biomass demand estimation should be done for randomly selected sample households covering different community and category of people (stratified random sampling). On the basis of the sample data collected, the average energy consumption per person is estimated, which gives an average demand value. The population in the region is established and total demand is calculated.
Ø Based on the computed availability and demand, the ratio of availability to demand for the region is computed. A ratio greater than one indicates that the region has surplus biomass, while values less then one indicate biomass scarcity.
Ø The total biomass consumption per year in the baseline case is multiplied by the non-renewable percentage derived from the ratio to get the net consumption of non-renewable biomass in the baseline case per year. The emissions should be calculated by multiplying the tonnes of non-renewable biomass consumed by the emission factor for biomass, using IPCC default values.
Ø The emission reduction achieved by the project activity is the emissions in the baseline case minus the emissions, if any, in the project case.
Ø Monitoring of the biomass availability ratio should be undertaken every year. Though the baseline need not be adjusted every year, an improvement in the biomass availabilty ratio should be observed. If the biomass availability ratio shows a declining trend, suitable measures should be implemented to deal with the causes. The project participants should propose suitable measures for dealing with this eventuality in their monitoring plan.

Warm regards and thanks for your efforts,

Anandi SHARAN