



CDM: Recommendation Form for Small Scale Methodologies (version 01)
(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)

Date of SSC WG meeting:	16–19 February 2010, SSC WG 24
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Clarification regarding the consideration of biomass assessment and leakage under AMS-I.D
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.D. ver. 14
Name of the authors of the query:	Dr. R.K. Vishnoi Institution: Indus Technical and Financial Consultants Ltd. rajendravisnoi@yahoo.com

Summary of the query:

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

Original text from PP:

After going through the following clarifications, this request is submitted for further clarification in the matter.

F-CDM-SSCwg ver 01 SSC_353, 27–30 October 2009, SSC WG 23

F-CDM-SSCwg ver 01 SSC_328 13 August 2009

F-CDM-SSCwg ver 01 SSC_255 24–27 February 2009, SSC WG 19

Background for the requested clarification:

That as per the Attachment C to Appendix B of “Indicative simplified base line and monitoring methodologies for small-scale CDM project activity categories” under “General guidance on leakage in biomass project activities” ver-03 the biomass have been defined of the following three types

1. *Biomass from forest.*
2. *Biomass from croplands or grassland (woody or non-woody).*
3. *Biomass residues or waste*

AMS ID, Ver-14 has the following leakage criteria:

Leakage

“14. If the energy generating equipment is transferred from another activity, leakage is to be considered.”
 &

“and general guidance on leakage in biomass project activities (attachment C to appendix B) provided at <<http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>> mutatis mutandis.”

Which reads as under

C. Competing uses for the biomass

17. In some cases, the biomass used in the project activity could be used for other purposes in the absence of the project. For example, biomass residues from existing forests could have been used as fuel wood or agricultural biomass residues could have been used as fertilizers or for energy generation. Competing uses for biomass are not relevant, where the biomass is generated as part of the project activity (new forests or cultivations).
18. The project participant shall evaluate ex ante if there is a surplus of the biomass in the region of the project activity, which is not utilised. If it is demonstrated (e.g., using published literature, official reports, surveys etc.) at the beginning of each crediting period that the quantity of available biomass in the region (e.g., 50 km radius), is at least 25% larger than the quantity of biomass that is utilised including the project activity, then this source of leakage can be neglected **otherwise this leakage shall be estimated and deducted from the emission reductions.**

As per the above “The PP has to establish that there is at least 25% surplus biomass in the region including it’s own consumption”.

Whereas

- A]** “Biomass residue or waste” has “several kinds or Sub-types” of biomass like Rice Husk, Paddy Straw, wood Saw Dust, Poultry Litter, Lops and Tops, Other Crop residue such as: Wheat Straw, Mustered Straw, Coconut Shell, Hyacinth, and several other types of crop residues generated from the baseline agricultural stream.
- B]** The methodology requires to prove that the biomass “types” proposed to be used is in 25% surplus in the region after taking in to account all it’s present users. Other wise leakage has to be considered as per the above simplified procedure.
- C]** It is not clear whether the leakage is to be calculated for each kind/Sub-type of individual crop residue i.e. Rice Husk, Paddy Straw, Coconut Shell, Hyacinth, Poultry Litter, Lops and Tops, and other sub-types/kinds of crop residues or the surplus can be assessed by considering all of these together.
- D]** All these surplus biomass residues have no other use other than either being combusted in open field to clear the field for cultivation or allowed to be decayed in open.
- E]** It is also demonstrated that any use of these surplus biomass can not cause any leakage at the baseline source for the reasons explained in the Table below.
- F]** Kindly also clarify how to calculate the leakage for biomass which is not found in surplus.

The background situation of the project activity is as below:

- a) that, at the time of deciding to go for the project activity there was ample of surplus biomass residue of all kinds like Rice Husk, Paddy Straw, Poultry litter, Saw Wood Dust, Sal DOC, Lops and Tops etc. which could cater to the entire need of the biomass based power plant and even then left with more than 25% surplus. Now during the operation of the power plant the PP is likely to use some of such Kind/sub-types of surplus biomass (like SAL DOC) which are individually not in 25% surplus if calculated for the total quantity of Biomass requirement in the region; to make it more clear we give below the numerical example as below:

S.No.	Kind/Sub-type of Biomass Residue within Biomass waste type	Uses in baseline	Total Quantity available in baseline	Surplus qty in baseline	Estimated quantity to be used in the Project Activity	Possibility of leakage in baseline due to use of the surplus in the project Activity
1	Paddy	Emergency	770000	560000	10000	No possibility of leakage in

		Straw	Feed as Fodder/ Paper Mill Raw material Sock. Surplus is being Combusted or left open in the field for the decay at source i.e at Paddy fields				baseline, as the farmer will only sell the net surplus which is being combusted or left to decay. It is not possible for the Project activity to pay the price at which the Paper mill can purchase or the farmer can buy some better feed from it's realization.
2		Rice Husk	As Fuel in the source Rice Mills/ the surplus from the Rice Mills as fuel the CDM based Biomass Project activity to generate power/ the further surplus is left to Decay or combusted in open	334000	260000	20000	No possibility of leakage in baseline, as the Miller will only sell the net surplus which is being combusted or left to decay. It is not possible for the Project activity to pay the price at which the Rice mill can purchase alternate Fossil fuel which will be only available from the open market at much more higher rates than the Price he would realize from sell of Rice Husk. Because the Govt does not allocate Coal for the Rice mills at the linkage price at which it is available to the Power Plants
3		Sal DOC	As Fuel in the source Solvent extraction plants/ the surplus from the Solvent extraction plants as fuel in the CDM based Biomass Project activity to generate power/ the further surplus is left to Decay or combusted in open	21000	10000	10000	No possibility of leakage in baseline, as the Solvent Plant will only sell the net surplus which is being combusted or left to decay. It is not possible for the Project activity to pay the price at which the Solvent Plant can purchase alternate Fossil fuel which will be only available from the open market at much more higher rates than the Price he would realize from sell of SAL DOC. Because the Govt does not normally allocate Coal for the Solvent plants at the linkage price at which it is available to the Power Plants
4		Lops and Tops	As Fuel in the domestic use/ the surplus from the domestic use as fuel in the CDM based Biomass Project	500000	300000	10000	This may lead to leakage, if the suppliers of Lops and tops get better price from the Project Activity than to the domestic consumers. However in Rural sector the farmers will be selling only the surplus of it.

		activity to generate power/ the further surplus is left to Decay or combusted in open				
5	Poultry Litter	Not being used in baseline at present	2000	2000	2000	No possibility of leakage due to absence of any alternate use in the region
6	other types of crop residues such as Wheat straw, Soybean Stalks/Straw Arhar Stalk (Pigeon pea_Pulse Crop), W	Some of these are Fed as Fodder/ /Surplus is being Combusted or left open in the field for the decay at source i.e at Crop fields. These are not even used in the CDM based power plants	90000	30000	10000	No possibility of leakage in baseline, as the farmer will only sell the net surplus which is being combusted or left to decay. It is not possible for the Project activity to pay the price at which the farmer can purchase buy some better feed from it's sales realization.
7	Wood saw Dust	Not having any use at the moment	6500	6500	6000	No possibility of leakage due to absence of any alternate use in the region
		Total:	1683500	1168500	68000	

It will be evident with the above that the total 1683500 tonnes/annum Biomass Residues or waste type is available against which the baseline consumption is only 515000 tonnes per annum and therefore the surplus availability is about 1168500 tonnes per annum, against which the Project Activity will be using only 68000 tonnes of the above different sub-types of biomass under the "Biomass residues or waste" type. Since it is proposed to use almost 100% of the surplus wood saw dust, Poultry litter and Sal DOC therefore it is requested to clarify that will this use of available surplus will be considered as Leakage from the Project activity, even though there remains more than 25% overall surplus of Biomass residue or waste in the 50 KMs radius of the project activity after taking into account all the present competing users.

If any project activity is using different type of biomass residue or waste within which there are several sub-types/Kinds of Biomass residue or waste then in the above circumstances we request you to kindly clarify as below:

- 1) If assessment of each "type" is required individually then can all the "subtypes/kinds" of biomass residue available within the "type" can be considered together or i.e. biomass residue or waste of different subtypes/kinds under this "types" needs to be individually demonstrated surplus, if yes, then the following clarification is required:
 - a. Whether it can be demonstrated based on ex-post use of different "Sub-type/kind" of biomass under "biomass residue /waste type" biomass. Because project activity may have to use different "sub type/kind" of biomass residue as per availability, such as it may have to switch over from the Poultry litter to Rice straw or to any other sub-type.
 - b. If PP have to demonstrate each individual "sub-type/kinds" in surplus ex-ante then it is practically difficult to fix project activity biomass uses ratio because it's availability differs from time to time. If entire biomass residue energy requirement have to be demonstrated 25% for each individual sub-type/kind of Biomass residue then the problem is in case of considering Five sub-types/kinds this will require to prove 125% surplus in total, in the region by considering each

For example the defined requirement and sample calculation is given as follows:

1	The study area consumption including the Project Activity requires	150000 tonnes of biomass per annum
2	Project activity uses	5 kinds/ Sub_types of biomass residues

Then while demonstrating all the 5 kinds/Sub-types within one type i.e. Biomass Residue/Waste, the PP have to demonstrate 25% excess on each 150000 tonnes i.e. 37500 tonnes surplus for each kind biomass, this works out to demonstrate total availability 937500 tonnes and total surplus 787500 tonnes (937500 tonnes- 150000 tonnes) against a total consumption of 150000 tonnes per annum of “biomass residue or waste type” which is almost 525% against 150000 tonnes biomass of one type required for project activity, this is found not practicable.

1. In case if the above uses of individual subtype of Biomass residue/waste is considered as leakage then how to quantify and determine the leakage due to the Project Activity.
2. It is also requested to clarify that; is it essential to carry out the Biomass study within 50 km radius or can this be varied.
3. Kindly also clarify if the radius has to be considered strictly as an aerial distance or can the Road distance be considered for the assessment.
4. The methodology requires to demonstrate 25% surplus of Biomass proposed to be used as on the date of commencement of the Crediting period whereas in practice it is taking enough time to get the project activity registered, in such case can the Biomass assessment done at the time of decision making context be used or a fresh study has to be carried out after the Project gets registered and before the first verification. If so kindly clarify what is the allowed time gap between the date of registration and the Biomass assessment study.
5. Or is it essential to get the revised biomass assessment study done first at the time of requesting registration i.e. prior to submission of request for registration or the request for the registration can be submitted with the available study with a disclosure that the Biomass assessment will be immediately done and got verified at the first verification.

Recommendation by the SSC WG:

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 15 of the meeting report of the SSC WG 24 (http://cdm.unfccc.int/Panels/ssc_wg).

Answer to authors of query by the SSC WG:

Please use the space below to provide answer to the authors of the above query.

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG agreed to clarify that:

- During the biomass surplus assessment, all sub-types of biomass involved can be considered together and assessed as a whole;
- For calculations of leakage, the project proponent can use the equation 47, available in ACM0006 version 10. Possible leakages from alternative use as fertilizer can be calculated considering the emissions resulting from fossil fuel combustion due to the production of the fertilizer;
- The boundary for biomass assessment can be extended up to 200 km (road distance can be considered);
- As per the latest “General Guidance on Leakage in biomass project activities”, the project proponent is

required to demonstrate the availability of biomass once at the time of the registration (*ex ante* basis); it can be recent data that are available at the time of the investment decision or it can be compiled during the time of validation but it should be completed before requesting for registration.



Signature of SSC WG Chair

(Peer Stiansen)

Date: 19/02/2010



Signature of SSC WG Vice-Chair

(Hugh Sealy)

Date: 19/02/2010

Information to be completed by the secretariat

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