

To whom it may concerned,

Please see my comment to Sampling Standard public input on '*Others: 5) Is there any other area where best practice examples could be useful for PPs and DOEs?*'

Regards

Michael

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*Others*

*5) Is there any other area where best practice examples could be useful for PPs and DOEs?*

I'd like to take this opportunity to address the below concern seriously to EB:

Ever before the sampling standard is issued by EB, for distribution project type, it is requested DOE to 'random check' the monitoring results in methodology AMS-III.R. Ver.01, which is for household biogas project.

For Verification, I strongly suggest revising '*... a DOE may apply a sampling approach (Section V of Sampling Standard V2)*' back to '*random check.*'

For distribution type project like household biogas or household solar cooker, to me it is really meaningless for DOE to perform OSV sampling.

Why? Let's give a household biogas project for example, the key monitored parameters including average pig numbers of each householder, average operating time of biogas stove, and total operational biogas digester.

- 1) To average pig numbers raised by each householder, the data is from sampling of targeted householder groups in the monitoring period by PP.

DOE's OSV sampling on this parameter is meaningless: the pig numbers are recorded monthly and averaged yearly by PP in the past monitoring period. By the time of DOE's OSV, the DOE can not actually see with their own eyes how many pigs raised by a householder in the past monitoring period. The observation can reflect the fact at the time DOE did the observation, but not the past. Even a householder does not raise any pigs at all by the time of DOE's OSV, it doesn't mean this household didn't raise them in the past monitoring period. The householder can possibly sell out the pigs before the DOE's perform the OSV sampling, right?

- 2) To average operating time of biogas stove, the data is also from sampling of targeted householder groups in the monitoring period by PP.

DOE's OSV sampling on this parameter is also meaningless: the biogas stove operating time is recorded daily, averaged monthly by PP in the past monitoring period. And remember, not all householders will do the recording, only those of the targeted householders in the sampling plan will do.

By the time of DOE's OSV, the DOE can not rely on what they checked during OSV on operating time of biogas stove. a) It is not practical for DOE to stay at a householder's room to observe and calculate the biogas stove operating time. b) even the DOE really do so, the recorded time is also meaningless as the biogas stove operating time can be different to that of past monitoring period due to (i) less family members, e.g. migration to city for work; (ii) raise more pigs if compared with past monitoring period;

- 3) To total operational biogas digester numbers, normally they are from all householders surveyed by PP yearly.

DOE's sampling on operational numbers is meaning less also. See discussion above, even a biogas stove is not in operation when DOE perform the OSV sample, it doesn't mean it is not in operation at the past monitoring period. It could be abandoned at a later time due to technical problems or householders migration to cities.

Please consider data to be monitored for household solar cooker project, gas leakage project, etc. Requesting DOE to perform OSV sampling for confirming the data collected for the past monitoring period is meaningless under the circumstances. And DOE's results from repeating sampling can not at all be used to cross check PP's results.

Also, I shall address the EB's attention of the following truths and suggestion:

- 1) If a distribution type project is registered by EB, it means (i) the EB has accepted the sampling number, sampling plan and sampling procedures proposed by PP and validated by DOE; (ii) the EB has accepted the monitored data shall come from householder's self-reporting and collecting by the PP.
- 2) The DOE's job on verification, in this case, shall be according to Para.21 of Sampling Standard, is to verify *'whether the project proponents have implemented the sampling effort and surveys according to the validated sampling plans'*
- 3) The DOE's job shall not repeat sampling that have been done by PP, and as my explanation above, even repeating the OSV sampling is meaningless for data already collected during the past monitoring period. What's more, it is practically impossible for DOE to perform random OSV sampling. Such household biogas project or solar cooker project is often related with poverty alleviation and is located in poor areas with a vast area that several towns, dozens of villages and thousands villagers involved. The PP spent one year and more than 100 staffs on the targeted sampling. It is impossible for the Verification Team to perform the same workload, with two or three team members, with limited verification fee, with limited time, to perform the OSV sampling. It is neither practically nor economically.
- 4) After discussion above, if you think requesting DOE still to perform a sampling, not for OSV checking, but for original document checking, I will tell you it is still not possible.

Due to distribution type project's character, its key parameter for calculating the emission

reductions, are from sampling of targeted householders. Given an example, there are household A and B in a biogas project and A is selected as sampled target in the past monitoring period, and B is not. Then A shall do the recording and reporting, B does not do any data recording. Hence the original data records are ONLY available from A, not from B. If the DOE sampled householders who are not in the PP's sampling pool in the monitoring period, the DOE can not get any document actually.

- 5) The DOE's job, shall focus on PP's monitoring system and implementation checking, e.g. through checking original documents, working protocols, data bases, interview different tier of data collectors and reporters, reviewing training records, original sampling working protocol, random checking.

One example of such random checking is like if a householder's digester is reported abandoned, then the DOE shall check the documented reason. If the reason is householder's migration, the DOE shall further scrutinize the time of the migration. If the reason is biogas digester's malfunction, the DOE shall further scrutinize the repairing records. If all the documented evidence all point to the output that this biogas digester is abandoned, the DOE can hold the opinion that the PP really do all documentation and reporting according to the sampling plan in the registered PDD

Another example of such random checking is randomly selecting a householder, who was in the sampled pool of the past monitoring period. The DOE shall interview this householder on all data documenting, reporting and collecting procedures based on the working documents reviewed by DOE.

The DOE shall base on the system checking results, to confirm if the monitoring plan has been implemented by PP according to the registered PDD or not. If DOE confirm the monitoring plan and sampling procedures have been implemented by PP according to the registered PDD, the DOE shall accept the monitoring results.

In summary, self-reporting and sampling is the key factor for implementation and existing of such projects. There is no meter to record everything like hydro or wind projects, which is neither reasonable nor practical for household as well. And it can be regarded as a 'natural born' feature of such project.

However, if EB still accept existence of such projects, the EB shall accept self-reporting by householders and data collecting by PP through a sampling plan in a registered PDD. Otherwise, it is not fair to millions of household in LDC country/area, as EB has already approved the MP by registered project.

For the past monitoring period, it is meaningless for DOE to check the recorded data by performing on-site sampling. However, this doesn't mean DOE does not need to perform OSV. The DOE shall still perform the OSV, but to check other items, such as biogas stove type, system design, code numbering on the biogas digester, data collecting and reporting system etc. But OSV is definitely not for purpose of sampling. Random checking, to my opinion, is more accurate and meaningful compared with sampling.

Thank you again for your attention and hope more practical clarifications in the upcoming Sampling Standard.