

Developing a Carbon Accounting System for Agroecosystems. (S05-rice131000-Oral)

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Abstract:

An effective C accounting system for a C sequestration program must be inexpensive, verifiable and transparent for acceptance; however, the accounting system must be scientifically sound. Computer models and worksheets will be important tools to scale up from plots/fields/farms to regional, national, and international levels. Before regionalization, it is important to develop a scientifically sound monitoring and verification procedure at the local level. Factors to consider are variability in space and time, detectable change, and costs. Existing research data should be used for assessing changes in C stocks resulting from changing land management, but data gaps will need to be filled. Accurate assessment must include bulk density, plant residues, and depth of sampling and the uncertainties associated with each of these. Benchmark sites provide a tool to measure C changes over time, and verify research data on C changes as a result of land management.

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