## Tool for Estimation of Changes in Soil Carbon Stocks associated with Management Changes in Croplands and Grazing Lands based on IPCC Default Data

## **System Requirements for this Tool**

Processor: Intel Pentium chip or later, or equivalent AMD processorMemory: 16MB RAM or moreOperating System: Windows 95, 98, ME, NT 3.51 or later, 2000, or XPHard Drive Space: 15MB minimum

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## <How to INSTALL>

- Create a directory on your hard drive where the IPCC tool will be installed. We suggest you use the directory "c:\temp". Copy the installation files named "setup.exe", "ipcc\_tool.cab", and "setup.lst" to that directory.
- 2. Run the installation program by either double-clicking on the file "**setup.exe**" in Windows Explorer or executing it from the "Run" option of the start button. Then follow the steps indicated by the program.
- 3. In the installation wizard for installing the IPCC tool, click on the icon as shown below:

圮 ipcc_tool Setup	×
Begin the installation by clicking the button below.	
Click this button to install ipcc_tool software to the specified destination directory.	
Dectory:	
C Program Files\ipcc_tool\ Change Directory	
Exit Setup	
Click here to install	

Then proceed with the installation as directed by the wizard.

If you have questions or problems with the installation, contact the Technical Support Unit of the IPCC National Greenhouse Gas Inventories Programme at

http://www.ipcc-nggip.iges.or.jp/mail/

## <How to USE>

- 1. To run the IPCC tool after it is installed, select the "**Programs**" option from the "**Start**" button, then click on the "**ipcc\_tool**" option.
- 2. Click the "Continue" button. (If you want to stop running the tool, click "Exit".)
- 3. Select the country of interest to you from the "**Country**" box. Then, you will find the list of potential climate regions in that particular country is automatically provided in the "**Climate Region**" box.
- 4. Select the climate region of interest to you from the "**Climate Region**" box. Even if you find only one entry in the box, you have to highlight it.
- 5. Select the soil type of interest to you from the "**Native Soil Type**" box. If you cannot find an appropriate entry in the box, you will be able to select from WRB soil classification or from USDA soil classification by clicking the relevant buttons.
- 6. When you have completed the selections #3 #5 above properly, you will find a default value for existing carbon stock is presented in terms of MgC/ha.
- 7. Specify the soil management system <u>at the beginning of</u> the period of your interest by selecting appropriate entries from "Land Use Type", "Mgmt System" and "Inputs" boxes in "FROM System" frame. Then, default values for "Management Factor", "Input Factor", and "Land Use Factor" will be automatically provided, based on which the carbon stock under those conditions will be predicted at the bottom of the "FROM System" frame.
- 8. Specify the soil management system <u>at the end of</u> the period of your interest by selecting appropriate entries from "Land Use Type", "Mgmt System" and "Inputs" boxes in "TO System" frame. Then, default values for "Management Factor", "Input Factor", and "Land Use Factor" will be automatically provided, based on which the carbon stock under those conditions will be predicted at the bottom of the "TO System" frame.
- 9. After all these processes, you will obtain the annual carbon stock change rate in terms of MgC/ha/yr calculated over 20 years. The resulted value is indicated in the "Annual Carbon Stock Change" box.

Please consult the "Help" menu in order to get assistance in utilising this tool.

For your reference, you can view the IPCC default settings of relevant parameters by clicking the buttons under the "Default Settings" frame, titled "Management Factors", "C\_Stocks", "Systems", and "Input Factors".

Click the "Exit" button in order to quit the tool.