CCBA Monitoring Report
for
TIST Program in India
CCB-001

for verification under

The Climate, Community and Biodiversity Standard

Second Edition

08 February, 2013

Table of Contents

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Project Overview

The International Small Group and Tree Planting Program (TIST) empowers Small Groups of subsistence farmers in India, Uganda, Tanzania and Kenya to combat the devastating effects of deforestation, poverty and drought. Combining sustainable development with carbon sequestration, TIST already supports the reforestation and biodiversity efforts of over 65,000 subsistence farmers. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, nutritional and fuel challenges. As TIST expands to more groups and more areas, it ensures more trees, more biodiversity, more climate change benefit and more income for more people.

Since its inception in 1999, TIST participants organized into over 9,000 TIST Small Groups have planted over 11 million trees on their own and community lands. GhG sequestration is creating a potential long-term income stream and developing sustainable environments and livelihoods. TIST in India began in 2004 and has grown to nearly 52,000 TIST participants in over 7,000 Small Groups.

As a grass roots initiative, Small Groups are provided a structural network of training and communications that allows them to build on their own internal strengths and develop best practices. Small Groups benefit from a new income source; the sale of carbon credits that result from the sequestration of carbon from the atmosphere in the biomass of the trees and soil. These credits are expected to be approved under the Voluntary Carbon Standard and/or CDM and, because they are tied to tree growth, will be sustainable. The carbon credits create a new 'virtual' cash crop for the participants who gain all the direct benefits of growing trees and also receive quarterly cash stipends based on the GhG benefits created by their efforts. The maturing trees and conservation farming will provide additional sustainable benefits that far exceed the carbon payments. These include improved crop yield, improved environment, and marketable commodities such as fruits, nuts, and honey. TIST utilizes a high-tech approach to quantify the benefits and report the results in a method transparent to the whole world, which includes palm computers, GPS, and a dynamic "real time" internet based database.

This project description is for a subset of the TIST India program and corresponds to TIST VCS project description VCS-001. It applies to 452 Small Groups, 2,599 members, 924 project areas and 671.8 ha.

General

TIST has met the challenge of obtaining accurate information from a multitude of small discrete project areas in remote areas, where roads are poor and infrastructure is minimal, by combining high-tech equipment and low-tech transportation within its administrative structure. The TIST Data System is an integrated monitoring and evaluation system currently deployed in India and TIST projects around the globe. On the front end is a handheld computer-based platform supported by GPS technology that is utilized by field personnel (quantifiers, auditors, trainers and host country staff) to collect project information. This includes data relating to registration, accounting, tree planting, baseline data, conservation farming, stoves, GPS plots, and photographs. The data is transferred to TIST's main database server via the internet and a synchronization process where it is incorporated with historical project data. The server provides information about each tree grove on a publicly available website, www.tist.org. In addition, the other data is available to TIST staff through a password-protected portal.

The handheld computers have been programmed with a series of custom databases that can temporarily store GPS data, photographs, and project data. The interface is designed to be a simple to use, checklist format, that insures collection of all of the necessary data. It is simple enough for those unskilled in computers and high tech equipment to be able to operate after a short period of training. The interface can also be programmed for data collection not specific to the project. The handhelds are "off the shelf," keeping their costs relatively low.

The synchronization process takes place using a computer internet connection. While office computers are used where available, field personnel commonly use cyber cafes, reducing travel time and improving data flow. Where available, cell phones using GPRS technology are now allowing synchronization from remote tree groves and project areas, providing near real-time data.

The TIST Data Server consists of a public side, accessible by anyone over the internet and a private side only accessible through a password-protected portal. On the public side, a dynamic database is used to constantly update the displayed data. Changes can be seen daily as new synchronizations come in. By mapping the project data with photos and GPS data, the results of each Small Group can be seen on a single page. The GPS data has been programmed with Google Maps to locate project activities anywhere in the world on satellite imagery.

On the private side, confidential accounting data, archive data and data not currently displayed is available. This is the source data for the custom reports and tables necessary for project managers. It is also the source of much of the date used in the CCB monitoring reports.

The TIST database is off-site and has an off-site backup. The information collected and used for this monitoring program will be archived for at least two years, following the last crediting period of the carbon credits associated with this CCB project.

Climate Impacts Monitoring Report

TIST was designed as a climate change project and has been operational since 2003. It is made up of thousands of individual discrete project areas spread over thousands of square kilometers, over many districts and near many villages. Each project area is owned and managed by a different group of people, which TIST calls Small Groups. The Small Groups select the species of trees, the number of trees to plant and the planting schedule. They also own and maintain the trees and the tree products. While TIST works with the groups to develop best practices that can be shared and adopted by everyone in the organization, the fact remains that each project area is different. The difference is such that the monitoring system required is different than typical forest monitoring protocols.

The following summarizes the climate impact results measured and reported for the TIST India CCB Small Groups. The climate impact monitoring was done as part of verification under the Voluntary Carbon Standard 3.3. As such, the actual monitoring data and analysis was conducted separately for the VCS project areas that make up CCB-001. Reference will be made below to the VCS Monitoring Data. The data was extracted from the TIST Database on 08 February, 2013 and are found in the worksheets of the following Excel spreadsheets:

- TIST IN PD-VCS-001i App08 Monitoring Data 130208 Group.xlsx

1) **Total hectares of the project and each project area.** 671.8 total hectares. See "PA Summary" worksheets for area of each PA.
2) **Number of discrete project areas.** 924 total project areas. See "PA Summary" worksheets.
3) **Location and boundary of project areas:**
   a) See Appendix 01, Landsat 4/5 image for single point location of each PA.
   b) See Appendix 02, Landsat 7 image for single point location of each PA.
   c) See Appendix 03, track files of each PA in KML format (Google Earth).
   d) See "PA Summary" worksheet, "Latitude" and "Longitude" columns.
4) **List of PAs including administrative and monitoring data.** See "PA Grove Summary" worksheets.
5) **Circumference data.** See "Circ" worksheets.
6) **Tree data including count and species.** Tree count is 671.8. See "Ex-post Strata" worksheets for species detail. See "Misc Calc" worksheet for details of allometric strata.
7) **Carbon sequestration data by project area and strata.** See "Ex-post Strata" worksheets. See "Misc Calc" worksheets for details of allometric strata.
8) **Total carbon sequestered.** 16,961 tonnes. See "Ex-post Strata" worksheets for calculation.

Community Impact Monitoring Report

The following are the results of the Community Impact Monitoring. Data specific to the PDD was taken from the VCS verification report. Program-wide data was extracted from the TIST database on 08 February, 2013.

1. **Number of Small Group members in PD (male and female).** 2,599 people; 1,053; 1,546 men.
2. **Number of Small Groups in PD.** 452.
3. **Number of community members in TIST India (male and female).** 3,888 people; 1,569 women; 2,319 men.
4. **Number of Small Groups in TIST India.** 770.
5. **Number of community members adopting natural resource management practices.** 3,128 people; 1,276 women; 1,852 men.
6. **Number of community members with greenhouse gas agreements with TIST.** 3,125 people; 1,276; 1,849 men.
7. **Total payments to community.** US $65,239.
8. **Number of TIST tree groves planted by community members.** 1,232 groves.
9. **Number of live trees planted by TIST Small Groups in India.** 658,377 trees.
10. **Number of fruit or nut trees in TIST PD.** 75,247 trees.
11. **Number of eucalyptus trees in TIST PD.** -0- trees.
12. **Number of people employed by TIST or under contract to deliver services.** 17 salaried employees.

Biodiversity Impact Monitoring Report

The plan uses TIST's strength in gathering, verifying, and analyzing field data to measure critical biodiversity metrics in the farms and groves where TIST farmers work and live. Trees are the main focus of biodiversity impact monitoring since they provide important habitat diversity and structural features for biodiversity. Tree biodiversity is expected to increase as a result of awareness raising, training and incentives.

TIST Quantification is a constant process. Trained Quantifiers will visit each discrete project area as part of their normal duties and collect the data required by this monitoring plan. Using the TIST Data System, key observations and measurements will be recorded in a digital format on hand held computers and sent to the TIST database. As new data comes in, it will populate the TIST.org website. Annual monitoring of each site is expected and a minimum of every five years will be achieved to conform with CCBA monitoring reports. Reports for CCBA will be at minimum every five years.

The following are the results of the Biodiversity Impact Monitoring. The data was extracted from the TIST database on 08 February, 2013.

1) **Total hectares of the project and each project area.** 671.8 total hectares. See "PA Summary" worksheets for area of each PA.
2) **The tree inventory of each project area.** Total tree count is 658,377. See "PA Summary" worksheets for count by project area. See "Misc Calc" worksheets for totals by strata. See "Ex-post Strata" worksheets for totals in each project area strata.
3) **Number of discrete project areas.** 924 total project areas ("PA Summary" worksheets)
4) **Location and boundary of project areas.**
   a) See Appendix 01, Landsat 4/5 image for single point location of each PA.
   b) See Appendix 02, Landsat 7 image for single point location of each PA.
   c) See Appendix 03, track files of each PA in KML format (Google Earth).
   d) See "PA Summary" worksheet, "Latitude" and "Longitude" columns.
5) **Hectares of indigenous trees.** 589.1 hectares. See "Misc Calc" worksheet for totals. See "Ex-post Strata" worksheet for species detail by strata.
6) **Number of indigenous trees by project area strata.** 600,154 total indigenous trees. See "Misc Calc" worksheet for totals. See "Ex-post Strata" worksheet for species detail by strata.