

A report on Workshop # 1
Exploring emerging technologies in forest carbon
accounting



Conducted by
WWF Thailand in conjunction with the Thailand Greenhouse
Gas Management Organization (TGO)
29-30 August 2012

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Introduction

Exploring Emerging Technologies in Forest Carbon Accounting was the first in a series of five workshops. The workshop aimed to provide participants with an overview of WWF's TREEMAPS project and additionally to introduce the project's approach to capacity building, with implementing partners in Thailand. TREEMAPS' capacity building activities focus on 'hands-on' involvement of the counterparts in all research design, data collection and analysis (training through "joint processing"). WWF proposes to establish a core technical group of collaborators to work with us on the implementation of the carbon assessment for the Dong Phrayayen Khao Yai (DPKY) Forest Complex in a joint processing training exercise. This workshop, which was implemented in collaboration with the Thailand Greenhouse Gas Management Organization(TGO) was the first step in that process.

Objectives

The specific objects of the workshop were to;

- 1) Introduce TREEMAPS project and its key objectives to government agencies, non-government organizations and academic institutions working in climate change issues in Thailand.
- 2) Identify potential collaborators for forest carbon accounting process.
- 3) Provide information on forest carbon accounting.
- 4) Provide hand-on introductory training on how to analyze LiDAR data.

Workshop

The workshop was attended by 27 participants from 11 government agencies and academic institutions (Refer to Annex 1).

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Agenda

Day 1; Wednesday 29 th August	
9:00 – 9:30	Registry
9:30 – 9:45	Welcome Remarks <i>by TGO</i>
9:45 – 10:00	Participant introduction
10:00 – 10:30	Presentation; TREEMAPS Project Introduction <i>by Justin Foster, Project Director, WWF TREEMAPS</i>
10:30 – 10:50	Coffee break (20 mins)
10:50 – 12:00	Presentation; Use of LIDAR in forest carbon assessment <i>by Dr. Anup Joshi, Forest Carbon Analyst, WWF TREEMAPS</i>
12:00 - 13:00	Lunch
13:00 – 13:45	Presentation on 4 different methods of extrapolating carbon distribution to the landscape level <i>by Dr. Anup Joshi, Forest Carbon Analyst, WWF TREEMAPS</i>
13:45 – 14:45	Presentation; CLASlite program <i>by Dr. Anup Joshi, Forest Carbon Analyst, WWF TREEMAPS</i>
14:45- 15:05	Coffee break
15:05 – 16:00	Summary discussion, next steps. <i>George Powell, TREEMAPS MRV Technical advisor.</i>
16:00	End of day 1

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Day 2; Thursday 30 th August	
9:30	Training – FUSION software <i>by Dr. Anup Joshi, Forest Carbon Analyst, WWF TREEMAPS</i>
9:30 – 10:00	Exercise 1; participants load FUSION software onto their own PCs
10:00 – 10:30	Exercise 2
10:30 – 10:50	<i>Coffee break</i>
10:50 – 12pm	FUSION Exercises 3 – 5
12:00 - 13:00	<i>Lunch</i>
13:00 – 14:00	FUSION Exercises 6 - 7
14:00-15:00	FUSION Exercise 8
15:00 – 15:20	Coffee break
15:20 – 15:50	Wrap up- feedback from participants
16:00	Closing Remarks <i>by TGO</i>

Activities

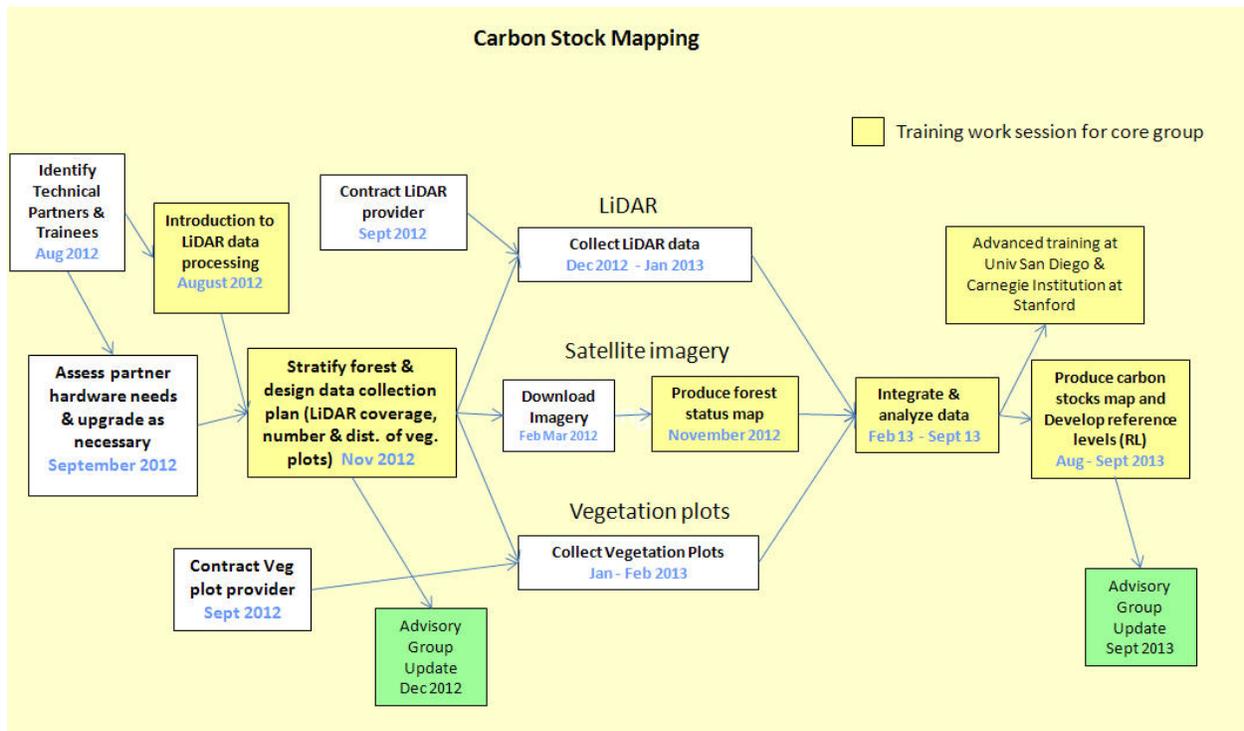
The first day of the workshop included an introductory presentation by Justin Foster, TREEMAPS director (Annex 2), followed by presentations by Dr. Joshi that provided a detailed overview of the modalities that will be used for the carbon assessment of the pilot area. Please see attached Presentations (Annex 3 and 4). Each presentation was followed by extended discussion.

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Lunch and coffee breaks provided additional opportunities to network with participants for future collaborations. During these discussions we received valuable information on other LiDAR projects in Thailand and resources that would be potential help to the TREEMAP's mission.

In the afternoon, Dr. Powell summarized the morning's results and then provided the following schematic of the 5 workshops that will make up the core of the capacity building for carbon assessment. There was an active discussion following Dr. Powell's presentation on what kind of time commitment does the project expects from the core group of collaborators. The participants also suggested that logistics and organizational arrangement should be done between the project and their organizations. Most of the participants told us that they need to check with their supervisors before committing their time.



The attendants were then divided into two groups to discuss the logistical questions for identifying the best venue for the workshops and which agencies and academic institutions should be represented in the core group.

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Group 1: Where should the training site be situated?

- suggested considerations
 - a. space and IT support for hardware
 - b. staff in core team
 - c. other considerations

Group 2: Suggest membership in the core group?

- suggested skill set for core group
 - a. Some GIS capacity
 - b. Familiarity with statistics
 - c. Others

The two sub-groups met and discussed their respective themes and then got back together in plenary where each group presented the results of their discussions and solicit the reactions of the entire group.



The second day of the workshop focused around learning the FUSON, LiDAR analysis and visualization toolkit, an open source software, produced by the Forest Service of the United States (Please see Annex 5). Participants were divided into working groups of 2 to 4 persons, each group with a laptop computer, and given a FUSON installation disk which contains the software installation and a small LiDAR database, and a set of

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self-teaching exercises. Dr Joshi briefly went over the use of the FUSION tool kit and the self training exercises. Then he and Utai Dachyosdee of WWF Thailand circulated among the pairs working on their computers and assisted them in working through the exercises.

There were lots of questions from the participants while working through the exercises. Participants gained confidence in using the Fusion software. The accompanying user guide has very good explanation on every step of the process. They promise to continue remaining exercise on their own. Dr. Joshi provided his email address and asked to email him with any questions they have. He also offer to them to conference call if they need addition help while practicing the exercises in their own.

Wrap up and feed back

We had a concluding discussion how to move forward with the project. The participants appreciated TREEMAPS effort to reach out to different stakeholders. They were happy to learn that all data will be processed in the country and Thai counter parts will be involved in every step of the forest carbon accounting process.

