



Sustainable Agriculture and Natural Resource Management Innovation Lab

Feed the Future SANREM Innovation Lab
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Trip Report

Participation in 4th conservation agriculture conference in South-East Asia,

December 9-13, 2013

Battambang, Cambodia

Natural Resources and Environment Management (NREM)

University of Hawaii at Manoa (UHM)

Travelers Names:

Dr. Catherine Chan-Halbrecht, Professor and Chair, NREM

Dr. Travis Idol, Associate Professor, NREM

Dr. Keshab Raj Pande, Associate Professor, Institute of Agriculture and Animal Sciences, Nepal

Dr. P.K. Roul, Professor, Orissa University of Agriculture and Technology, India

Prof. M. Kar, Vice Chancellor, Orissa University of Agriculture and Technology, India

Mr. Bikash Paudel, Graduate Students, NREM, UHM

Ms. Aliza Pradhan, Graduate Students, NREM, UHM

Purpose of the visit:

- To attend and present papers at the 4th International Conference on Conservation Agriculture in South-East Asia
- To build the capacity of students and researchers by providing opportunities for networking and knowledge sharing via participation and presentations at the conference
- To organize a project team meeting for assessing the project progress and plan for future activities

Sites/programs visited:

1. The 4th International Conference on Conservation Agriculture in South-East Asia, December 9-13, Battambang, Cambodia
2. Project team meeting, 9 December, Battambang, Cambodia

Description of Activities:

A. The 4th International Conference on Conservation Agriculture in South-East Asia

Date: December 9-13, 2013

Location: University of Battambang, Battambang, Cambodia



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The 4th International CA conference was used as a platform for showcasing the outputs of the Sustainable Management of Agro-ecological Resources in Tribal Societies of India and Nepal project to a wider audience in conservation agriculture. Altogether, five oral papers and one poster, built upon the output of SMARTS, were presented in the conference. Students presented three papers and one poster from their research from the SMARTS project. There were more than 125 papers presented in different sessions for three days. There were about 20 posters posted in the venue for all conference days. Moreover, there were special sessions for interactions between the farmers who had experience implementing CA and researchers, extension agents, and students. Students and host country researchers also took this opportunity to network with like-minded researchers and discuss ideas for future collaborations. The fourth and fifth day of the conference included visits to the farm sites where CA has been implemented in plots as well as on a larger scale. The field visit of December 12 was nearby Battambang, where we visited the SANREM-supported CA research and demonstration plots in two villages. There was a demonstration of a four-row no-till seed planter and a two-row no-till seed planter in the field. The positive effects of the CA on the soil quality was demonstrated using a method of looking at water-stable aggregates.

B. Project team meeting

Date: December 10, 2013

Location: SengHout Hotel, Battambang, Cambodia

The main agenda for the meeting was to discuss,

- Updates on project
- Updates on budget
- Update on final project meeting
- Key points on project evaluation from USAID and SANREM and plan to correct shortcomings
- Future plans for a meaningful move in the last year to complete the whole project

Dr. Catherine Chan-Halbrendt, Dr. Keshab Pande, Dr. Travis Idol, Dr. P.K. Roul, Dr. Rajesh Jha, Ms. Aliza Pradhan, and Mr. Bikash Paudel attended the meeting.

Each project partner provided updates on their ongoing and completed project activities, as outlined in the 2012-13 work plans. All the partners mentioned that the activities have been carried out as intended and that there were no obstacles so far.

Dr. Chan updated the group on the project budget for the current year and the next (2013-14). She also provided updates regarding the final project meeting to be held in Washington D.C. in May 2014. She mentioned that participation in the meeting is essential and also urged all the partners to work hard to showcase visible outputs at the meeting.

The team discussed the key points of the project evaluations done by USAID and SANREM. The team cherished the evaluation team's reports and discussed in detail the comments made in the reports. The team felt that the timing of the SANREM evaluator team visit to Nepal was less than desirable to see the real effect of CA. As drought had occurred in the field, the results of the CA trials were not visible at that time. The meeting discussed each of the evaluator's comments and planned to correct shortcomings.

The team decided that annual reports and semi-annual reports should be written more carefully and comprehensively. It was felt that previous reports had not highlighted some of important impacts, which would have further clarified the project results to the evaluators. For the next report, the PI and co-PIs

from the host countries will consult with each other and develop a plan for writing a more revealing report.

The team members were hopeful that the visit of Dr. Adrian Ares, the Director of SANREM, to the India sites would be successful and highlight the positive progress of the SMARTS project.

To address the key shortcomings in Nepal, Dr. Chan and Dr. Raj Pande proposed a plan, which was accepted by the IAAS team and Dr. Ares. The plan was to implement more CA trials in villages by IAAS. The new CA treatments were identified with the combination of strip tillage vs. conventional tillage, mixed cropping vs. sole cropping, and the use of dead mulch vs. no mulch. The trials will be implemented for two seasons, starting from spring o 2014. To do these trials, the team decided to request additional funding and a no-cost extension of the project duration. The design of the new CA trials is as follows:

Location: Thumka VDC, Gorkha district, Nepal

Starting date: February 2014

Ending date: October 2015

Treatments:

A) Tillage:

1) Conventional tillage

2) Strip tillage

B) Cropping system:

1) Sole crop (maize) – black gram

2) Mixed crop (Maize+cowpea) - black gram

C) Soil cover:

1) no mulch

2) mulching

Design: Randomized block design with three blocks without replication within block

Plot size: 5 x 4 m²

Altogether, there will be eight treatments in a block. The treatment with no mulch + conventional tillage + sole maize will be considered farmers' current practice in the design.

This new trial has certain components which were missing in previous CAPS evaluation trials beginning in 2011 in the three Chepang villages in Nepal. These new CA trials have mulching as an important component for soil cover, but there was no crop or mulch to cover the soil year-round in the trial started in 2011. New CA trial tried to incorporate mixed cropping practices in the first cropping season of the year (Mar-Jul). In the trial started in 2011, intercropping of millet+legume was investigated in the second growing season (Jul-Dec).

New CA trials will be managed by researchers. Therefore, there will be direct and better control and management of trial performance by the researchers. The trials started in 2011 were managed by farmers,

so there were some inconsistencies in the way the agriculture operations were carried out (e.g. weeding, FYM application etc.)

C. Meeting with Adrian Ares, Director, SANREM

Date: December 10, 2013

Location: SengHout Hotel, Battambang, Cambodia

Dr. Adrian Ares had a short meeting with the PIs and co-PIs of the SANREM projects. The main purpose of the meeting was to inform the PIs about the budget update, hold a final SANREM project meeting, discuss new opportunities for short term works within SANREM, and discuss the possibility of a no-cost extension.

List of Contacts Made:

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