## **December 2010**

#### In this Issue:

- Feed the Future
- Overview
- Impacts on SANREM
- Program Director's Message
- Incoming Program Director
- Research Spotlight: North Carolina A&T
- LTRA-11 Principal Investigator Change
- New SANREM employees
- SWAT-SEA Conference
- Vietnam Book Release
- ASA Conference poster
- Graduate Research Assistant Sought
- Editor's Note

# Virginia Tech Invent the Future



## **SANREM CRSP Newsletter**



Sustainable Agriculture and Natural Resource Management

### Collaborative Research Support Program

### Feed the Future: a new way of doing development

Food price spikes in 2008 left the over 1 billion chronically hungry in worse shape than ever while adding to their number. The U.S. government's new global hunger and food security initiative, Feed the Future (FTF), is unique in its approach. Instead of merely providing money in an emergency-like response, FTF will address barriers to food security with two objectives: increase agricultural growth and improve nutrition. After identifying and removing political, financial, and capacity-wise barriers, the program will develop a realistic food security plan for each country. SANREM CRSP and the other CRSPs are in the process of being transferred to the new USAID Bureau of Food Security, which will oversee FTF, and are viewed as integral components of the FTF strategy.

Feed the Future will focus on developing and implementing country-led and country-owned plans for 20 specific countries. The initiative plans to

directly reach 40 million people, including 25 million children. However, USAID Administrator Rajiv Shah says the impacts will be greater due to the accompanying gains in agricultural research since food security is closely linked to gains in health care, education, and economics.

Feed the Future is a three year, \$3.5 billion program with a two-phased approach. The first phase will focus on

"The food crisis, the global financial crisis, have all contributed to the rise in chronic hunger. But let's be honest: so did years of drift and lack of attention from the global community and from the donor community, including the United States of America."
-USAID Administrator Rajiv Shah

foundational investments, such as technical, political, and financial support to help countries develop individual food security improvement strategies. Assisting policy reform and increasing a country's capacity to implement food security programs is essential – a country must be financially and politically stable enough to enact food security plans.

When a country shows it has a secure foundation, FTF will transfer to more core investments. In the second phase, countries will produce an actual sound food security strategy. The country's government has to prove that is can coordinate its agencies with non-governmental organizations, private investors, researchers, and other stakeholders.

Shah said the high involvement of the FTF countries is the program's biggest strength. Much of the success in achieving food security will be dependent on the countries' initiative and dedication to their plans.

#### Feed the Future's Impact on CRPSs

The SANREM CRSP is currently working in 8 of the FTF's 20 focus countries, highlighted below:



Administrator Shah wants to align CRSP research with Feed the Future goals, and said "We are asking our land-grant university partners to push the frontiers of productivity through greater focus. Our current eight CRSP programs cover over 115 research activities and we seek to focus this work on a smaller set of core Feed the Future research priorities even as we significantly increase our investment to these partners."

Since SANREM was renewed for Phase IV before Feed the Future was announced, SANREM was able to work in countries outside of the program's focus countries. However, CRSPs applying for renewal in the near future will be expected to align their research with Feed the Future goals and limit activities to those focus countries.

#### Announcements

The SANREM Annual Meeting will take place from May 16-19, 2011 in Washington, DC.

The due date for the research strategy and experimental design and methods description (Form 20) for each LTRA and cross-cutting research activity is February 15, 2011.

## Program Director's Message



The past 12 months have been extremely productive for the SANREM CRSP. We completed the first year of our new 5-year program on Conservation Agriculture Production Systems (CAPS) and now have active research programs in place in 13 countries and partnership with 9 U.S. universities, 12 host country universities, and 29 other host country and international

NGOs and other organizations. SANREM CAPS research in Cambodia is highlighted in this newsletter.

The new U.S. Feed the Future initiative, featured in the lead newsletter article is having a significant impact on CRSPs. Due to a USAID reorganization in support of FTF, SANREM and other CRSPs are being moved from the USAID/EGAT/AG office to the new Bureau of Food Security. SANREM and 6 other CRSPs will be under the new Office of Agricultural Research and Technology.

Another area of change for SANREM involves personnel. I will be leaving as the program director effective Dec. 31 and will be replaced by Mike Kelly, who will serve as interim program director until a new program director is recruited. Mike Kelly is introduced in the following article. The search for a permanent program director will begin immediately and the position announcement will be available on the SANREM CRSP and Virginia Tech Human Resource website (http://www.hr.vt.edu/employment/). We also welcome two new staff members. Jane Lee, our program coordination assistant has been replaced by Cristina Brannan, and our communications coordinator/editor position has been filled by Lindsey Sutphin. Both are introduced later in the newsletter. Jane Lee has taken a position with the Virginia Tech Office of Sponsored Programs and is graciously helping us with the transition. We also have a new SANREM webmaster. Amado Ohland, who will be unveiling a new SANREM CRSP website shortly.

I would like to thank SANREM for a great six years. I've had the opportunity to travel the world, learned more than I imagined and I hopefully contributed to some of SANREM's many successes. I enjoyed my position with SANREM but I missed teaching and direct involvement in research and that is what I am returning to do. I wish you all the best in the future.

## Kelly named interim SANREM program director



Following Theo Dillaha's departure as program director at the end of this year, Dr. J Michael Kelly will begin as SANREM's interim program director effective January 1.

Kelly was the dean of the College of Natural Resources (now College of Natural Resources

and Environment) at Virginia Tech from 2004-2009, and continues to work with the college as dean emeritus. During his time as dean, the number of new students in the college doubled and external research funds increased by over 60 percent.

Prior to working at Virginia Tech, Kelly taught and served as chair for the newly-formed Natural Resource and Ecology Management Department and previously as chair for the Department of Forestry at Iowa State University. He also spent 20 years with the Tennessee Valley Authority and worked as a Senior Environmental Scientist/Team Leader in their Atmospheric Sciences Division.

Kelly holds a PhD in Forest Ecology/Forest Soils and a MS in Plant and Soil Science, both from the University of Tennessee. His BS in Biology is from East Tennessee State University. He is a member of the American Association for the Advancement of Science, the American Society of Agronomy, the Society of American Foresters, and the Soil Science Society of America.

His international activities have most recently involved developing research relationships with universities in Chile. As a strong advocate for international education for undergraduates, he and his wife funded an endowment to provide annual scholarships to students studying abroad.

Kelly enjoys sport aviation and the construction of experimental aircraft and is a certified pilot. He also enjoys woodworking and crafting furniture for his family and friends.

## Research Spotlight: North Carolina A&T

#### **Training and Research**

In addition to setting up researcher farm sites, 24 farmers are testing different conservation agriculture production systems (CAPS) in Battambang, Cambodia. The LTRA-12 research team has collected baseline data for each of their objectives. They have also engaged stakeholders who can benefit from CAPS adoption by getting them involved with identifying successful CAPS technologies. They completed a plan to create a contract between farmer organizations adopting CAPS, the agricultural industry market, and financial institutions. SANREM CRSP

sponsored training for 100 Cambodian farmers and will support a Cambodian Ph.D student at North Carolina A&T State University.



#### **Gender Impact**

Initial research found that women are primarily dominant in weeding and sowing activities. With CAPS implementation, machinery will be used for sowing and herbicides and mulch will be used for weeding. Since women are not generally responsible for machine operation or chemical spraying in Cambodia, CAPS adoption may decrease women's labor burden.

#### **Economic Impact**

In order to analyze CAPS profitability, cooperating farmers have started recordkeeping to quantify the costs for labor, seeds, fuel, machinery, fertilizer, and herbicide use along with yield and market prices.

#### **Solutions**

The director of the Provincial Department of Agriculture in Pailin said CAPS is the only realistic way to reverse the current soil-damaging farming methods – In his province, thousands of acres have been abandoned due to low productivity from degraded soils. Local maize production and processing companies also share the director's views.

# Chan-Halbrendt is new PI for University of Hawaii project in India & Nepal



A change in the principal investigator for the University of Hawaii lead LTRA in India and Nepal has been approved. Catherine Chan-Halbrendt, who was a member of the LTRA's research team, is now the principal investigator for the project. Travis Idol, the outgoing PI, will remain a

co-PI. "The project team wishes to thank Dr. Travis Idol for graciously serving as PI for one year in which he did a yeoman's job of working tirelessly to obtain the award and working with our U.S. and local partners to lay a strong foundation for project success. His continued role as a co-PI will be crucial for project implementation," says Chan-Halbrendt.

## SANREM welcomes new employees



In August, Lindsey Sutphin began work as SANREM's new communications coordinator. Prior to this position, she worked as a reporter in Washington, DC. She holds a BA in English with a minor in natural resource recreation from Virginia Tech.

In November, Christina Brannan replaced Jane Lee as the new SANREM Program Coordination Assistant. Her prior work has been as an accountant for various municipal governments within Virginia. She holds a BS in Accounting from Liberty University



and a Master's Degree in Public Administration with a concentration on public and non-profit management from James Madison University.

## Second International SWAT-Southeast Asia Workshop and Conference

January 4-8, 2011 Ho Chi Minh City, Vietnam

The Soil and Water Assessment Tool (SWAT) is a leading water quality watershed model used worldwide to

quantify the impact of land management in large, complex watersheds.

An estimated 300 people from Southeast Asia and around the world, universities, government agencies, non-governmental organizations, and private industries are expected to attend the 2nd International SWAT-Southeast Asia Workshop and Conference, which is cosponsored by SANREM and NCA&T.

The first two days will consist of SWAT workshops, and include introductory and advanced level training in using SWAT software. There will also be training in using SWAT for stream restoration and in using the open source MapWindows software, taught by MapWindows developer Dr. Daniel Ames of Idaho State University.

Following the workshops, the conference will have sessions on potential SWAT uses and impacts, including:

- Large scale applications
- Climate change applications
- Sensitivity calibration and uncertainty
- Plant growth
- Environmental applications
- Hydrology
- Sediment, nutrients, and carbon
- Pesticides, bacteria, metals, and pharmaceuticals
- Database and GIS application and development
- Urban processes and management
- Landscape processes and landscape/river continuum
- InStream sediment and pollutant transport

Registration information and fees can be found at: http://ssc.hcmuaf.edu.vn/data/SWATSEA%20Brochure.pdf Additional information: http://ssc.hcmuaf.edu.vn

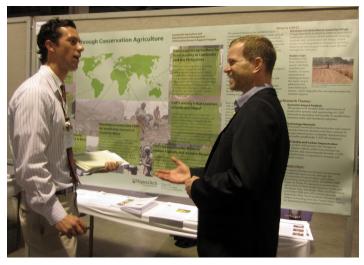
## LTRA-5 Vietnam book launch planned

A SANREM-sponsored book, "Vegetable Agroforestry and Cashew-Cacao Systems in Vietnam," will be launched during the SWAT-Southeast Asia Conference in January 2011.

The book is published by the World Association of Soil and Water Conservation, and is part of a four book set from NCA&T's SANREM Phase III led research program. The other books, detailing research in Indonesia and the Philippines, will be released in early 2011. The entire set with summary is expected to be released in April 2011. The book citation is: Danf Thanh Ha, Le Van Du, Le Thanh Loan, Nguyen Kim Loi, Nguyen Duc Thanh,

Pham Hong Duc Phuoc, David Midmore, Manuel Reyes, Rebecca Cajilig, Karika Kunta, and Samran Sombatpanit. 2011. Vegetable Agroforestry and Cashew-Cacao Systems in Vietnam. World Association of Soil and Water Conservation: Special Publication 6a and World Agroforestry Center.

## Mulvaney presents at ASA conference



Mike Mulvaney (right) speaks to a conference participant in front of a SANREM poster, "Sustainability through Conservation Agriculture," at the American Society of Agronomy conference, Long Beach California, October 21-November 2. His poster described the SANREM conservation agriculture production systems research program.

## **Graduate Research Assistantship: Soil Science**

A Graduate Research Assistant (GRA) is being sought to conduct research in soil and crop management for conservation agriculture farming systems, soil-based carbon sequestration, and climate change. Responsibilities will include:

- Conducting research on soil organic carbon from 13 developing countries to determine if smallholder conservation agricultural systems can sequester soil carbon and improve soil quality; and if so, by how much;
- Conducting laboratory analyses for peer-reviewed publications;
- Travel to developing countries to gather data; and
- Writing, reviewing, and editing SANREM publications.

The GRA will conduct research and provide technical information needed to develop conservation agriculture production systems for smallholders in food insecure

developing countries. These systems have been shown to enhance soil quality, land productivity, and carbon sequestration on larger mechanized farms around the world, but their adoptability and sustainability by small-holders is less certain. The successful applicant will work toward a graduate degree within the Department of Crop and Soil Environmental Sciences (CSES) at Virginia Tech, and is contingent upon acceptance by the Virginia Tech Graduate School and CSES.

Contact Dr. Michael J. Mulvaney at mulvamj@vt.edu or +1-540-231-1218 for more information and questions. Please send Dr. Mulvaney a CV and cover letter explaining your career interests, qualifications, and GRE and TOEFL scores, if applicable.

Review of candidates will begin on November 15, 2010 and continue until a suitable candidate is appointed. The application deadline is January 1, 2011 for international students or April 1, 2011 for US students for the Summer I semester, which begins on May 23, 2011. (Note: review of candidates will continue at least to February 1, 2011.)

#### For more information:

http://www.oired.vt.edu/sanremcrsp/menu\_aboutus/ SANREMCRSP-GRA-Soil-Science-JobListing.php

#### Editor's Note

As the new communications coordinator for the SANREM CRSP, I encourage everyone to contact me with any content you would like to see in the newsletter or on the website at lindsey.sutphin@vt.edu





Check us out on Facebook and Twitter! Followers and fans get news about our projects, publications, events, and updates to our website. Read this newsletter online: http://www.oired.vt.edu/sanremcrsp/documents/newsletters/December2010.pdf

This newsletter is published by the SANREM CRSP Management Entity and Virginia Tech's Office of International Research, Education, and Development, 526 Prices Fork Road (0378), Blacksburg, VA 24061. Online: http://www.oired.vt.edu/sanremcrsp/. Email: sanrem@vt.edu.

Phone: 540-231-1230

The SANREM CRSP is made possible by the United States Agency for International Development (USAID) and the generous support of the American people through USAID Cooperative Agreement No. EPPA-00-04-00013-00.