

Meeting Minutes

USDA NIFA Climate Change Project

Meeting #2

Date: 08/03/2018

Location: Washington State University, Pullman, WA

In Attendance:

FAMU: Drs. Gang Chen, Aavudai Anandhi, Johnny Grace, Lucy Ngatia and Siment Li

WSU: Drs. Joan Wu, Jan Boll, Vicki McCracken, Ani Jayakaran, Zhazira Alisheva and Nannette Huber

Notice:

PI Meeting: The venue will be the Waterfront building in Washington, DC from December 6 to December 7, 2018. This year the Agroecosystem part of the Bioenergy, Natural Resources, and Environment (BNRE) and Climate Programs will be combined together.

- Meet program officers
- Dr. Gang Chen will forward the emails

Meeting Summary:

Today's meeting focused on the objectives, future plans and future meetings.

1) Discussion related to objectives

- **A representative active land-use or farming system should be chosen first**, in order to compare and analyze the impacts of climate change, tillage, etc.
- **Weights should be carefully defined and assigned** regarding the different land management and land ownership, as they are important for modeling and analyzing large systems.
- **Economic models:** Focus on InVEST model for now, targeting at regional/local scale. **Can start with case studies on representative areas to test and prove this approach will work.** How would different arrangement or selection of cropping systems compare to current systems in terms of total production? Could switching crop yield higher economic returns or nutritional values? What are the impacts of crop intensification on ecosystem services? If less land is used to produce equal amounts of food by increasing intensification, is the net result on ecosystem services production positive or negative? How can we evaluate different strategies for meeting increasing food demand while minimizing the impact on ecosystem? The results of the crop production module of InVEST can be used with crop price information for the next step of economic modeling. REMI model focus on measuring proposed legislative and policy economic impacts across the private and public sectors of the state and nation. Therefore, **REMI**

model is not the current priority.

- **Extension & Education:** **a)** Incorporate the project contents with course teaching; **b)** create a website for the project; **c)** develop a “elevator speech” to describe the project to general public and post the “elevator speech” on the project website; **d)** develop methods to self-evaluate the progress and outcomes for extension and education; **e)** create an extension program.

2) Future plans

Advisory committee: Each person nominates 1-2 persons, the nominees can be from federal/state government, private agencies, stakeholders, etc.

Student collaboration: Students should be more engaged in future meetings, and directory should be made for student collaboration (working together towards research goals). Students are encouraged to give short presentations (2-3 minutes) to update the work.

Evaluation: Use regular meetings for self-evaluation; and use advisory committee for external evaluation.

Work plans (to be done by December):

- To decide what are the most important indicators, we need to first understand what are the most important for farmers through surveys and literature reviews. Therefore, land use for agriculture and forestry will be reviewed, which also requires us to know better the areas of study.
- Identify the drivers of changes.
- Define variables for future modeling.

Upcoming meetings:

- *Phone meeting:* Wednesday, **December 19, 2018**
- *In-person meeting in Tallahassee, Florida:* **TBD** after the phone meeting