



4TH ANNUAL GLOBAL WORKSHOP
OCTOBER 28-30, 2013 | NEW YORK, NY

AGENDA

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International Fertilizer Development Center, USA
International Food Policy Research Institute, USA
International Livestock Research Institute, Kenya
International Maize and Wheat Improvement Center
International Potato Center, Peru
International Research Institute for Climate and Society, USA
International Rice Research Institute, the Philippines
International Water Management Institute
Macaulay Land Use Research Institute, UK
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University of Nebraska, USA
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Washington State University, USA
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AgMIP especially appreciates the contributions of the 250 workshop participants.





4th Annual AgMIP Global Workshop
October 28-30, 2013
Columbia University Faculty House
New York, USA

Workshop Goals

- 1. Review AgMIP progress to date and set activities for coming year**
- 2. Enable AgMIP groups to meet, report, interact, and plan**
- 3. Develop plans to address critical improvements for next-generation models, data, and decision support systems needed for assessing climate change impacts and adaptation and for sustainable intensification**
- 4. Advance strategy for coordinated regional and global assessments of food security**

Agenda

Day 1 – Monday, October 28th

7:30 am: Check-In, Registration, Coffee/Tea

Morning Plenary – Results from the AgMIP Research Community

8:30 am: Welcoming Remarks – Cynthia Rosenzweig, Moderator

8:35 am: Welcome from the Earth Institute – Jeffrey Sachs, Director, Columbia Earth Institute

8:50 am: Welcome, Introductions, Workshop Goals, and Goals for Day 1 – Jim Jones, Cynthia Rosenzweig, Jerry Hatfield, and John Antle

9:10 am: Climate change and global food security: a perspective on the AgMIP contribution to 20 years of study – Martin Parry

9:30 am: Global Framework for Climate Services: a Perspective on the AgMIP Contribution – Mannava Sivakumar

9:50 am: State of AgMIP – Cynthia Rosenzweig

10:15 am: Morning Break

10:45 am: AgMIP Work Group Introductions and Results: Speed Science Session – Peter Craufurd, Moderator

10:50 am: Crop Model Intercomparisons and Improvement

Wheat Team – Senthil Asseng and Frank Ewert

Maize Team – Simona Bassu, Jean-Louis Durand, and Jon Lizaso

Rice Team – Tao Li and Toshi Hasegawa

Sugarcane Team – Peter Thorburn, Abraham Singels, and Fabio Marin

Potato Team – Roberto Quiroz, Bruno Condori, and David Fleisher

Crop Model Improvement – Ken Boote and Matthijs Tollenaar

11:20 am: Global Assessments

Global Gridded Crop Model Intercomparisons – Joshua Elliott and Christoph Müller

Global Economic Model Intercomparisons – Jerry Nelson and Martin Von Lampe

11:35 am: Regional Integrated Assessments

Integrated Assessment Approach and Methods – John Antle

Sub-Saharan Africa Research – Job Kihara

South Asia – Dileepkumar Guntuku

11:55 am: Cross-Cutting Themes

Quantifying and Managing Uncertainty – Linda Mearns, Mike Rivington, and Daniel Wallach

Aggregation and Scaling Pilot – Frank Ewert and Lenny van Bussel

Representative Agricultural Pathways (RAPs) – John Antle and Roberto Valdivia

12:10 pm: Key Interactions

Soils and Crop Rotation Team – Bruno Basso

Water Resources – Jonathan Winter

12:20 pm: New Approaches for Climate-Crop Assessment

Near-Term Climate Change – Arthur Greene and Alex Ruane

Coordinated Climate-Crop Modeling Project – Alex Ruane and Sonali McDermid

AgGRID – Joshua Elliott, Cynthia Rosenzweig, and Jim Jones

12:35 pm: Data and Information Technology

Sentinel Sites – Ken Boote

Harmonizing AgMIP Site-based Data – Cheryl Porter and Chris Villalobos

Agricultural Data Journal – Sander Janssen

12:50 pm: Lunch

Afternoon Plenary: Opportunities for Model Improvement

2:00 pm: Key Processes to be integrated in Next-Generation Agricultural Models

Climate Variability and Extremes – **Jerry Hatfield**

Livestock and Pastures – **Mario Herrero** and Luis Tedeschi

Pests, Diseases, and Weeds – **Karen Garrett**

Ozone – **Denise Mauzerall**

3:00 pm: Discussion

3:20 pm: Charge to AgMIP Work Groups Breakout Session: Toward Next-Generation Model Improvements

- Summarize Work Group activities and discuss results
- Identify and prioritize key topics for model improvement and integration for impact and adaptation assessments – e.g., changes in climate extremes, crop/livestock systems, pest and disease pressures, ozone concentration; what others are important?
- Scope coming year of Work Group activities, including interactions with other groups

3:30pm: Afternoon break

Afternoon Breakouts: Toward Next-Generation Model Improvements

4:00 pm: AgMIP Work Group Breakouts

- A. Global Economics – Jerry Nelson and Dominique Van der Mensbrugge
- B. AgGRID – Joshua Elliott and Christoph Müller
- C. Coordinated Climate-Crop Modeling Project (C3MP) – Alex Ruane and Sonali McDermid
- D. Regional Integrated Assessments – John Antle and Roberto Valdivia
- E. Crop Model Intercomparison and Improvement – Ken Boote and Peter Thorburn
- F. Data, Decision Support Systems and IT – Cheryl Porter and Sander Janssen
- G. Livestock and Grasslands – Mario Herrero and Jean-Francois Soussana
- H. Pests/Diseases/Weeds/Ozone – Jim Jones and Karen Garrett
- I. Water Resources – Jonathan Winter
- J. Soils and Crop Rotation – Bruno Basso and Angela Kong

5:30 pm: Plenary Session – Report back from the breakout groups and discussion

6:30 pm: Adjourn Plenary Session

Earth Institute Reception, Low Rotunda, Columbia University

7:00 pm: Reception with AgMIP Poster Session (see also Appendix I)

- Sub-Saharan Africa and South Asia Regional Research & Coordination Team Posters
- Work Group Posters
- Partner Posters
- Others

Day 2 – Tuesday, October 29th

8:30 am: Day 2 Goals:

- Identify integration approaches for next-generation models, data, and decision support systems needed for assessing climate change impacts and adaptation and for sustainable intensification
- Lay the groundwork for coordinated regional and global assessments needed to improve

8:40 am: Opportunities for collaboration:

Speed Session on complimentary global and regional programs

CCAFS – Phillip Thornton

MACSUR – Martin Banse

USDA CAPs – Molly Jahn

Yield Gap Atlas – Lieven Claessens

CIMSANS – Dave Gustafson

FAO – Dominique van der Mensbrugghe

MODEXTREME – Ioannis Athanasiadis

Morning Breakouts – Opportunities for Model Integration

9:20 am: Charge to Integration Breakouts

- Identify approaches to address interactions across Work Groups for more comprehensive integrated biophysical and socioeconomic assessment
- Describe methods that will enable the next generation of agricultural model systems to improve assessment of adaptation and sustainable intensification

9:30 am: Model Integration Breakouts

- A. Crops, Pests and Diseases, and Economics – Jim Jones, Karen Garrett, and Jerry Nelson
- B. Carbon/Temperature/Water Responses, C3MP, and AgGRID – Jerry Hatfield, Ken Boote, Alex Ruane, and Joshua Elliott
- C. Livestock and Pastures and Regional Integrated Assessments – Mario Herrero, Jean-Francois Soussana, and Roberto Valdivia
- D. Aggregation / Scaling and Uncertainty – Frank Ewert, Linda Mearns, Daniel Wallach, and John Antle

10:30 am: Morning break and poster viewing

11:00 am: Model Integration Breakouts (continued)

12:45 pm: Lunch

- *Poster Viewing*
- *Self-organized Work Groups*

Afternoon Plenary

2:00 pm: Report back and discussion from morning breakouts

Toward Integration Across Scales

2:20 pm: Integrated Assessment across Scales – John Antle

2:45 pm: AgMIP Uncertainty Cascade – Linda Mearns

3:10 pm: Discussion

3:20 pm: Charge to Work Group: Planning and Addressing Scales

- Identify the major scaling issues in your Work Group and how they are being addressed
- Identify specific ways that your Work Group can contribute to consistent integrated assessment across scales
- Continue planning Work Group activities for the coming year

3:30 pm: Afternoon break and poster viewing

Afternoon Breakouts – Addressing Scales and Integration

3:45 pm: AgMIP Work Groups

- A. Global Economics/RAPs – Jerry Nelson, John Antle, and Hermann Lotze-Campen
- B. AgGRID – Joshua Elliott and Christoph Müller
- C. Coordinated Climate-Crop Modeling Project (C3MP) – Alex Ruane and Sonali McDermid
- D. Regional Integrated Assessments – Cynthia Rosenzweig, Patricia Masikati, and Geethalakshmi Vellingiri
- E. Crop Model Intercomparison and Improvement – Peter Thorburn and Senthold Asseng
- F. Data, Decision Support Systems and IT – Cheryl Porter, Sander Janssen, and Ioannis Athanasiadis
- G. Livestock and Grasslands – Mario Herrero and Jean-Francois Soussana
- H. Pests/Diseases/Weeds/Ozone – Jim Jones, Karen Garrett, Denise Mauzerall
- I. Water Resources – Jonathan Winter
- J. Soils and Crop Rotations – Bruno Basso and Angela Kong

5:30 pm: End-of-day plenary report back and discussion

6:15 pm: Adjourn

Steering Group check-in at Ivy Lounge

Day 3 – Wednesday, October 30th

Morning Plenary – Coordinating Regional to Global Integrated Assessments of Food Security

8:30 am: Day 3 Goal: Advance strategy for coordinated regional and global assessments with next-generation models, data, and decision support systems to address climate change and sustainability issues

8:40 am: The AgMIP Global Program – Cynthia Rosenzweig, Jim Jones, Jerry Hatfield, John Antle, Carolyn Mutter, Alex Ruane, and the AgMIP community

9:00 am: Evidence-based policymaking – Yvan Biot

9:30 am: Understanding future agricultural development: Adaptation and sustainable intensification – Stan Wood

Morning Breakouts – Linking Integrated Assessments Across Scales

10:00 am: Charge to Day 3 Breakouts on Integrated Assessment Across Scales

- How do global integrated assessment results compare with regional integrated assessment results?
- How can we design consistent and interactive regional and global assessments?
- Advance strategies for future assessments of food security and sustainable intensification

10:10 am: Mid-morning break and poster viewing

10:25 am: Breakouts by Region on Integrated Assessments

- A. Africa – Patricia Masikati and Samuel Adiku
- B. South Asia – Nataraja Subash and Ashfaq Chattha
- C. Latin America and Caribbean – Eduardo Assad and Maria Travasso
- D. East Asia and Australia – Fulu Tao and Peter Thorburn
- E. Europe – Frank Ewert and Reimund Rötter
- F. North America – Jerry Hatfield and Marca Weinberg

12:45 pm: Lunch

- *Self Organized Work Groups*
- *Donor Forum Lunch*

Afternoon Breakouts – Work Group Wrap-ups

2:00 pm: AgMIP Work Groups wrap-up sessions

- A. Global Economics – Jerry Nelson and Dominique Van der Mensbrugge

- B. AgGRID – Joshua Elliott and Christoph Müller
- C. Coordinated Climate-Crop Modeling Project (C3MP) – Alex Ruane and Sonali McDermid
- D. Regional Integrated Assessments – John Antle and Roberto Valdivia
- E. Crop Model Intercomparison and Improvement – Ken Boote and Peter Thorburn
- F. Data, Decision Support Systems and IT – Cheryl Porter and Sander Janssen
- G. Livestock and Grasslands – Mario Herrero and Jean-Francois Soussana
- H. Pests/Diseases/Weeds/Ozone – Jim Jones and Karen Garrett
- I. Water Resources – Jonathan Winter
- J. Soils and Crop Rotation – Bruno Basso and Angela Kong

3:00 pm: Report back from Regions and AgMIP Work Groups – Plans for coming year

3:30 pm: Afternoon break

Afternoon Plenary – The Way Forward

4:00 pm: What we've learned – AgMIP Next-Generation Models and Coordinated Integrated Assessments – Cynthia Rosenzweig, Jim Jones, John Antle, Jerry Hatfield, Alex Ruane, and Carolyn Mutter

4:30 pm: Feedback from Steering Group and Donor Forum – Martin Parry and Mannava Sivakumar

5:00 pm: Adjourn

Steering Group and Donor Forum check-in at Ivy Lounge