



# AgMIP6

GLOBAL WORKSHOP

JUNE 28-30, 2016 • MONTPELLIER, FRANCE

**The Agricultural Model Intercomparison and Improvement Project (AgMIP)** was created to understand how agriculture and food security will respond to climate change and other socio-economic drivers in the years ahead. These challenges defy analysis at a single scale, within a single discipline, or by only a single model. AgMIP therefore connects a community of experts and stakeholders to improve, models, computational systems, scenarios, adaptations and analysis to enable integrated assessment empowered by a collaborative community.

AgMIP is devoted to improving resilience and societal outcomes by providing state-of-the-art scientific information that informs stakeholder decisions. To date, AgMIP research has emphasized the development of new, cutting-edge models, tools, and methods; substantially advancing our understanding of model strengths, weaknesses, and uncertainty while also developing new approaches for data integration and transdisciplinary modeling frameworks. Emphasis now turns toward the application of these tools and frameworks to address one of the biggest challenges of our day: leading a sustainable agriculture transformation and ensuring that the agriculture sector and food security are resilient to climate change.

**AgMIP's 6th Global Workshop**, to be held June 28-30, 2016 in **Montpellier, France**, provides an excellent opportunity to organize agricultural modeling research and applications to support decision-makers addressing the key challenges we together face.

## WORKSHOP GOALS

1. Convene the agricultural systems modeling community and share latest findings, activities, and focus areas.
2. Establish next steps to advance three major focus areas – Next Generation Knowledge, Data and Tools; Coordinated Global and Regional Assessment; and Modeling Sustainable Farming Systems.
3. Plan activities and outputs for the years ahead.

## AgMIP FOCUS AREAS

- 1. Next Generation Knowledge, Data, and Tools** to accurately and efficiently simulate the systems, processes, and metrics needed to support effective decision making.
- 2. Coordinated Global and Regional Assessment** of climate change impacts on agriculture and food security to consistently project the future implications of current investment and policy decisions around the world.
- 3. Modeling Sustainable Farming Systems** to identify and prioritize transformations toward more sustainable agricultural systems while recognizing the potential for unforeseen socio-economic consequences.

## WORKSHOP ACTIVITIES

**Engagement with the Community** – Presentations of current state-of-the-art science, cutting-edge research topics, and applied assessments by participants around the world will make the 6th AgMIP Global Workshop a prime destination for top researchers in the field to share their work and learn from others.

### Development of AgMIP Focus Areas:

- **Next Generation Knowledge, Data and Tools**  
– Consider how open, discoverable, and harmonized data enable model improvement, and online tools to improve accessibility to research results.
- **Coordinated Global and Regional Assessment**  
– Assessment protocols, future scenarios, and implementation plan, cross-scale and cross-discipline linkages as well as connection to food security and nutrition metrics.
- **Modeling Sustainable Farming Systems**  
– Methodological package to evaluate climate-smart agriculture and sustainable solutions and implement this approach in conjunction with national adaptation plans. Livestock systems modeling will also be discussed in partnership with the Livestock Innovations Lab.

**Planning the next phase of Research and Applications** – including further contributions to each of the Core Themes above to ensure that theoretical advances are making their way into applications that improve the information base for stakeholder decisions.

## BENEFITS OF ATTENDANCE

**Funders:** Propose research agenda that address challenges and topics of interest; hear from leading scientists about advances and decision support; inform the types of scenarios that will be of greatest interest; support research into accurate, multi-model, multi-scale, multi-disciplinary information.

**Stakeholders:** Attract top agricultural minds and models for application to challenges; help shape AgMIP research priorities; identify leading partners and methods; better understand the strengths and limitations of agricultural models; help shape scenarios of future agricultural systems.

**Steering Group Member:** Guide AgMIP leaders in setting the agenda for future activities that connect research with stakeholders' needs.

**AgMIP Activity Leaders:** Share major results with the broader community; convene participating researchers (and prospective participants) to set research activity agenda for coming year(s); help shape major themes and solidify roles in climate and sustainability assessments.

**Senior researchers:** Disseminate research findings; join in the planning and execution of AgMIP activities and major assessments; propose new initiatives; and establish new partnerships and collaborations.

**Graduate Students:** Disseminate research findings, learn about current cutting edge and broader context for applied agricultural modeling; link up with new collaborators and broader efforts.

## WORKSHOP SESSION OVERVIEW

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| June 27 <sup>th</sup> | Pre-workshop side events and meetings (independently organized)   |
| June 28 <sup>th</sup> | Morning I: Welcome and Introduction   |
| June 28 <sup>th</sup> | Morning II: Next-generation Tools and Open Data   |
| June 28 <sup>th</sup> | Afternoon I and II: Parallel sessions on model intercomparison & improvement and harmonization of data and tools (oral and poster presentations). |
| June 29 <sup>th</sup> | Morning I: Coordinated Global and Regional Assessments  |
| June 29 <sup>th</sup> | Morning II: Sustainable Farming Systems Modeling  |
| June 29 <sup>th</sup> | Afternoon I and II: Parallel sessions on assessments (oral and poster presentations)  |
| June 30 <sup>th</sup> | Morning: AgMIP Activity Breakouts   |
| June 30 <sup>th</sup> | Afternoon I: AgMIP Activity Breakouts   |
| June 30 <sup>th</sup> | Afternoon II: Synthesis and Wrap-up   |
| July 1 <sup>st</sup>  | Post-workshop side events and meetings (independently organized)  |