



AHEAD

ALLIANCE FOR WHEAT ADAPTATION TO
HEAT AND DROUGHT

AHEAD 

AHEAD - A WHEAT INITIATIVE ORGANISATION

AHEAD is the international umbrella organisation under the Wheat Initiative that coordinates core initiatives and projects that are dedicated to addressing scientific gaps and to establish synergies that will support the development of new wheat varieties that are resilient to heat and drought. Our stakeholders are from research, economy and policy organisations who are eager to meet the global challenges in wheat research by pooling resources.

WHEAT INITIATIVE

Created in 2011 following endorsement from the G20 Agriculture Ministries, the Wheat Initiative provides a framework to establish strategic research and organisation priorities for wheat research at the international level in both developed and developing countries. The Wheat Initiative fosters communication between the research community, funders and global policy makers, and aims at securing efficient and long-term investments to meet wheat research and development goals.



WHY WHEAT?

Wheat is an important part of almost everyone's diet, rich or poor, making up 20% of the calories and protein consumed by humans worldwide. In many less-developed countries, it is the main source of calories. The number of extreme weather events – droughts and heat waves included – have tripled in the last 30 to 40 years, causing huge damage or loss of entire crops. Wheat crop losses due to heat and drought, affects food availability and cost for billions of consumers around the world because of price hikes and food shortages. Because wheat is a staple food for so many, if wheat production falters in one country due to heat or drought, food prices and food security are influenced regionally and globally.

WHAT DO WE OFFER?

AHEAD helps plant scientists around the world to:

- Exchange information and ideas equitably by meeting regularly and sharing data.
- Pool resources to allow efficient, cost effective, and smart science.
- Set up international projects with an interdisciplinary approach to generate high impact.
- Increase the relevance and impact of heat and drought research for wheat producers and policymakers.
- Share wheat germplasm for research and breeding.
- Identify what technologies work best to make wheat climate resilient.
- Advocate for investment in heat and drought research with support of the Steering Committee.
- Identify options for new funding.
- Obtain seed funds for staff and student exchanges, meetings and project development.

AHEAD is a network that:

- Facilitates global coordination of wheat research to adapt to weather extremes, specifically heat and drought.
- Enhances the visibility of research and breeding technologies helping our response to global change.
- Connects scientists with different stakeholders from economic, policy and non-governmental sectors as well as with other disciplines.
- Offers access to Expert Working Groups (EWG) and contacts as well as the infrastructure of the Wheat Initiative.

OUR VISION, MISSION & ASPIRATION

A close-up photograph of wheat grain and bread. The wheat grain is golden-brown and has a textured, layered appearance. The bread is a soft, light-colored loaf with a slightly darker crust. The background is dark, making the wheat and bread stand out.

VISION

A global co-ordinating program facilitating development and delivery of new technologies to ensure wheat varieties and agronomic practices can meet the challenges of increasingly hotter and drier production environments.

MISSION

- Bring the wheat research community together to inform and exchange new germplasm, technologies and ideas for enhancing tolerance to heat and drought.
- Build the capacity for research and technology delivery in all regions where heat and drought challenge wheat production.
- Provide a framework for effective investment from funding organisations and value-adding across global research, enabling ready access and uptake of new technologies and resources.
- Engage the global wheat R&D and breeding community to promote collaboration and information sharing on heat & drought-related discoveries.

ASPIRATIONS

- Development of global research programs integrating expertise across multiple international partners
- Knowledge of, and ready access to germplasm, intellectual capacity, technological resources and facilities
- Increased investment in wheat heat and drought research reflecting robust research delivery and rapid progress in global adaptation to heat and drought
- Open and frequent communication globally, and the opportunity for regular exchange of staff and students between research groups and countries
- Ability to openly and effectively compare germplasm and technologies and their communication to facilitate uptake and adoption
- Development of efficient and rapid technology delivery paths to facilitate adoption

WHO WE ARE?

AHEAD is steered by a high level Committee that provides leadership for management, funding, networks, identifies global research questions and supports scientific interaction. The office of AHEAD is based at the Julius-Kühn-Institute with the Wheat Initiative and is coordinated by Stefanie Hagemann.



Greg Rebetzke | Chair of the Steering Committee | Chief Scientist in Resilient Crops at the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia



Michael Baum | Director of Biodiversity and Crop Improvement Program at International Center for Agricultural Research in the Dry Areas (ICARDA), Morocco



Alison Bentley | Director of the Global Wheat Program at the International Maize and Wheat Improvement Center (CIMMYT) and the CGIAR Research Program WHEAT, Mexico



Fernanda Dreccer | Principal Scientist & Leader Abiotic Crop Adaptation Team at the Commonwealth Scientific and Industry Research Organisation (CSIRO) | Chair of the Expert Working Group Adaption of Wheat to Abiotic Stress, Wheat Initiative, Australia



Feng Feng | Professor and Executive Dean of the College of Advanced Agricultural Sciences at University of Chinese Academy of Sciences (UCAS), China



Moha Ferrahi | Wheat Mega-Project National Coordinator at National Institute for Agricultural Research (INRA), Morocco



Felicitas Katepa-Mupondwa | Director of Research Development and Technology Transfer (RDT), Saskatchewan, Agriculture and Agri-Food Canada (AAFC), Canada



Jean-Francois Soussana | Vice-President of International Research Policy at National Research Institute for Agriculture, Food and Environment (INRAE), France



Tim Willis | Associate Director International at the Biotechnology and Biological Sciences Research Council (BBSRC), part of UK Research and Innovation (UKRI), United Kingdom

HOW TO GET INVOLVED

You do research on wheat and want to get involved to the AHEAD network to foster international science on behalf of heat and drought? Then please contact the AHEAD office and introduce yourself and your work to us. We are looking forward to hearing from you and answering your questions.



OUR OFFICE

Stefanie Hagemann (Germany)
Global Coordinator at the Julius Kühn-Institut, Federal
Research Centre for Cultivated Plants @Wheat Initiative

Phone: 0049 531-299 3209

Mail: ahead@julius-kuehn.de

