Justice. Evidence. Urgency. Inspiring a Climate for Change

Sarah Evanega @sarah_evanega
snd2@cornell.edu
Sept 28, 2017 STI Conf, 2017
Agriculture will need to increase production by 70% to feed a global population of > 9 billion in 2050 - while reducing current impacts of food production:

- 33% of the world's GHG emissions
- 75% of US N₂O emissions
- 80% of deforestation worldwide
- 40% of US drinking water supply polluted
- 70% of the world's water consumption
- 50% of global topsoil loss
Mansur Sarkar
Bangladesh
“We took the decision (regarding GM crops) after considering all aspects related to it. We’ll not change our stance.”

Matia Choudhury, Agriculture Minister of Bangladesh
Justice.
Selma Njukwage
Chambezi, Tanzania
GM Water Efficient Maize
Dodoma, Tanzania
Dr. Alois Kullaya
WEMA maize field trial
Agriculture will need to increase production by 70% to feed a global population of > 9 billion in 2050 - while reducing current impacts of food production:

- 33% of the world's GHG emissions
- 75% of US N₂O emissions
- 80% of deforestation worldwide
- 40% of US drinking water supply polluted
- 70% of the world's water consumption
- 50% of global topsoil loss
Nitrogen-fixing maize will reduce need for fertilizer
Low methane rice will reduce GHG emissions from agriculture.
Insect-resistant cowpea reduces chemical use
Zero till agriculture conserves our soils
Intensification -> Land Sparing
MARCH FOR SCIENCE

WASHINGTON, DC

APRIL 22, 2017
The Cornell Alliance for Science seeks to promote access to scientific innovation as a means of enhancing food security, improving environmental sustainability, and raising the quality of life globally.
Greening disease-resistant citrus
Biofortified bananas
SUPPORT FARMERS & BETTER ACCESS TO INNOVATION

Join us! Become a Science Ally!
allianceforscience.cornell.edu
Jemanesh Haile,
Ethiopia
The Science Enabling Environment

Research

Communication

Policy & Regulatory

Community Engagement
GROWING A GLOBAL NETWORK IN SUPPORT OF SCIENCE-BASED AGRICULTURE.

Join us! Become a Science Ally!
allianceforscience.cornell.edu
Training
“How can I expect people to praise and worship God if they are hungry and mired in poverty?”

Rev. Fr. Noli Alparce, the Philippines
“Every field is using scientific innovation to advance and there should be no exception in plant breeding.”
- Clet Masiga, Uganda
“Our family farm saw the benefits of biotechnology for small scale farmers.”

-Joni Kamiya, Hawaii
“We must advocate for access to innovations that will reduce smallholder farmers’ exposure to pesticides and ensure farming families’ futures are more secure to ensure the food security of our nations.”

- John Dziwornu, Ghana
Communications
CHANGING THE CONVERSATION AROUND FOOD, JUSTICE, BIOTECH, SCIENCE.

Join us! Become a Science Ally!
allianceforscience.cornell.edu
Ken Kamiya, Hawaii
Mae Somkhuan, Thailand