Dry Grain Pulses Collaborative Research Support Program (CRSP) GLOBAL PULSE RESEARCHERS MEETING

February 13 – 17, 2012 Lemigo Hotel, Kigali, Rwanda

PROGRAM

Saturday, February 11

10:00 am – 6:00 pm TMAC meeting at Lemigo Hotel

Sunday, February 12

9:00 am – 4:00 pm TMAC meeting continues at Lemigo Hotel

5:00-7:00 pm Registration

Monday, February 13

7:00 – 8:00 am Registration

8:00 – 11:00 am Inaugural Session

- Session Moderator: Dr. Theodore Asiimwe, Rwanda Agriculture Board
- Chair, Organizing Committee, Dr. Louis Butare, Regional Director, Rwanda Agriculture Board (RAB)
- Director General, Rwanda Agriculture Board, Prof. Martin Shem Ndabikunze
- Minister of Agriculture and Animal Resources, Honorable Dr. Agnes Kalibata
- Vice Rector Academic, Kigali Institute of Science and Technology (KIST),
 Prof. John Severin Mshana
- Director, USAID Mission to Rwanda, Dennis Weller
- AOTR, Office of Agriculture Research and Policy, Bureau of Food Security, USAID/ Washington, Dr. Larry Beach
- Director, Dry Grain Pulses Collaborative Research Support Program (CRSP), Dr. Irvin E. Widders

<u>Keynote Address</u>: Dr. Daphrose Gahakwa, Deputy Director General in charge of Research, RAB. *"Climbing beans in Rwanda: sharing the success, challenges and implications in enhancing food and nutritional security for small-holder farmers"*

11:00 – 11:30 am Break (group photograph)

11:30 am – 1:00 pm	Keynote Session: <u>Session Moderator</u> - Dr. Doug Buhler, Interim Dean, College of Agriculture and Natural Resources, Michigan State University.
11:30 – 12:15 pm	"Food Requirements of a Growing World- Strategies for Sustainable Intensification of Agriculture and the Role of Pulse Crops in Achieving Food and Nutritional Security". Dr. Paul Gepts, Department of Plant Sciences/Crop and Ecosystem Sciences, University of California- Davis, and Director, Kirkhouse Fund Project for Eastern Africa.
12:15 – 12:45 pm	"Global Pulse Production and Consumption Trends- The Potential of Pulses to Achieve 'Feed the Future' Food and Nutritional Security Goals". Dr. Mywish Maredia, Department of Agriculture Food and Resource Economics, Michigan State University.
12:45 – 1:00 pm	Meeting Agenda and Arrangements (Dr. Cynthia Donovan, Deputy Director)
1:00 – 2:30 pm	Lunch (Lemigo Hotel)
2:30 - 4:15 pm	Thematic Session 1: Enhancing Dietary Quality and Achieving Nutritional and Health Outcomes through Pulses

Invited Presentation: Enhancing Dietary Quality and Achieving Nutritional and Health Outcomes of the Poor in Sub-Saharan Africa through Enhanced Production and Consumption of Grain Legumes; Dr. Esi Colecraft, Department of Nutrition and Food Science, University of Ghana-Legon, Ghana.

Session Moderator: Dr. Abdul Kipruto Faraj, Egerton University, Kenya.

Increasing Utilization of Cowpeas to Promote Health and Food Security in Africa (PIII-TAMU-1). Pls: Drs. Joseph Awika, Susanne Talcott, Lloyd Rooney and Bir Bahadur Singh, Texas A&M University; John Shindano, and Kalaluka Lwanga Munyinda, U. Zambia; Kennedy Muimui, Zambia Agriculture Research Institute, Zambia; Abdul Faraj, Prisca Tuitoek, Egerton University, Kenya; Amanda Minnaar, Gyebi Duodu and Andre Oelofse, University of Pretoria, South Africa.

Improving Nutritional Status and CD4 Counts in HIV-Infected Children through Nutritional Support (PIII-MSU-3). Pls: Maurice Bennink, Michigan State University: Theobald Mosha and Henry Laswai, Sokoine University of Agriculture, Tanzania; and Elizabeth Ryan, Colorado State University.

<u>Panel</u>: Drs. Esi Colecraft, Joseph Awika and Maurice Bennink (or proxies)

4: 15 – 4:40 pm

Break

4:40 - 6:40 pm

Thematic Session 2: **The potential of modern science and technology to enhance pulse productivity through sustainable intensification of small-holder cropping-systems in Africa and Latin America.**

Session Moderator: Dr. Malick Ba, INERA, Burkina Faso

Invited Presentation: "The potential of modern science and technology to enhance pulse productivity through sustainable intensification of small-holder cropping-systems in Africa and Latin America". Dr. Bir Bahadur Singh, Department of Crop Science, Texas A&M University, USA.

Biological Foundations for Management of Field Insect Pests of Cowpea in Africa (PII-UIUC-1). Pls: Drs. Barry Pittendrigh, University of Illinois at Urbana-Champaign; Clementine Dabire, Institut de l'Environment et des Rechereches Agricole (INERA), Burkina Faso; Ibrahim Baoua, l'Institut National de la Recherche Agronomique du Niger (INRAN), Niger; and Mohammad Ishiyaku, Institute for Agricultural Research (IAR), Nigeria.

Improving Bean Production in Drought-Prone, Low Fertility Soils of Africa and Latin America – An Integrated Approach (PII-PSU-1). PIs: Drs. Jonathan Lynch and Jill Findeis, Pennsylvania State University; and Magalhaes Miguel, Instituto de Investigação Agrária Moçambique (IIAM), Mozambique

Enhancing Biological Nitrogen Fixation of Leguminous Crops Grown on Degraded Soils in Uganda, Rwanda, and Tanzania (PIII-ISU-2). Pls: Mark E. Westgate, Iowa State University; Mateete Bekunda, Makerere University, Uganda; Susan Mchimbi-Msolla and Hamisi Tindwa, Sokoine University of Agriculture, Tanzania; Augustine Musoni, Institit des Sciences Agronomiques du Rwanda, Rwanda; Michael Ugen, National Crops Research Institute, Uganda; Henry Kizito Musoke, Volunteer Efforts for Developmental Concerns, Uganda; Lynne Carpenter-Boggs, Washington State University; Karen Cichy, USDA-ARS, Michigan State University; James D. Kelly, Michigan State University; Phillip Miklas, USDA-ARS, Washington; and Eda Reinot, Becker Underwood, Inc., Iowa.

<u>Panel</u>: Drs. Bir Bahadur Singh, Barry Pittendrigh, Jonathan Lynch and Mark Westgate (or proxies)

6:40 - 7:30 pm

Dinner (on one's own)

7:00 – 9:30 pm

Poster Session open for public viewing

Tuesday, February 14

8:30 - 10:30 am

Thematic Session 3: **Sustainable Seed Production and Dissemination Systems for Pulses**

<u>Session Moderator</u>: Dr. Juan Carlos Rosas, Head, Bean Program, Escuela Agricola Panamericana- Zamorano, Honduras.

<u>Invited Presentation</u>: "Sustainable seed systems for grain legumes in Sub-Saharan Africa". Jean-Claude Rubyogo, Seed Systems Expert, CIAT, Tanzania.

Cowpea Seed Systems and Dissemination of Seed of Improved Varieties in West Africa. Dr. Jeff Ehlers, University of California-Riverside; Dr. Ndiaga Cisse, Institut Senegalais de Recherches Agricole (ISRA), Senegal; and Dr. Issa Drabo, Institut de l'Environment et des Recherches Agricole (INERA), Burkina Faso.

Rapid Bean Technology Dissemination in Honduras, Guatemala, Nicaragua and Haiti. Dr. Luis Flores, Michigan State University; Dr. James Beaver, University of Puerto Rico; Dr. Juan Carlos Rosas, Escuela Agricola Panamericana-Zamorano, Honduras; Ing. Julio Cesar Villatoro, ICTA, Guatemala; Ing. Aurelio Llano, INTA, Nicaragua; and Emmanuel Prophete (NSS) and Alfredo Mena (IICA), Haiti.

Seed Systems as a Basis for Achieving Impacts from Research Investments in Bean and Cowpea Breeding. Drs. Byron Reyes, Rick Bernsten, Mywish Maredia and Eric Crawford, Michigan State University.

<u>Panel</u>: Drs. Jean-Claude Rubyogo, Ndiaga Cisse, Luis Flores and Byron Reyes (or proxies)

10:30-11:00 am

Break (Posters available for public viewing)

11:00 am - 1:00 pm

Thematic Session 4: Transforming Pulse Value Chains for the Benefit of Small-Holder Women Farmers in Sub-Saharan Africa and Latin America

Session Moderator: Dr. Celestina Jochua, IIAM, Chokwe, Mozambique

Invited Presentation: "Transforming Pulse Value Chains for the Benefit of Small-Holder Women Farmers in Sub-Saharan Africa and Latin America".

Dr. Jill L. Findeis, Director of Division of Applied Social Sciences and Professor of Agricultural & Applied Economics, University of Missouri, USA.

Expanding Pulse Supply and Demand in Africa and Latin America: Identifying Constraints and New Strategies (PII-MSU-2). Pls: Drs. Richard Bernsten and

Cynthia Donovan, Michigan State University; David Kiala, Universidade Jose Eduardo dos Santos, Angola; Feliciano Mazuze, Instituto de Investigação Agrária Moçambique (IIAM), Mozambique; and Juan Carlos Rosas, Escuela Agricola Panamericana-Zamorano (EAP), Honduras

Enhancing Nutritional Value and Marketability of Beans through Research and Strengthening Key Value Chain Stakeholders in Uganda and Rwanda (PII-ISU-

1). Pls: Drs. Robert E. Mazur, Iowa State University; Dorothy Nakimbugwe, Makerere University, Uganda; Michael Ugen, National Crops Resources Research Institute (NCRRI), Uganda; Henry Kizito Musoke, Volunteer Efforts for Development Concerns (VEDCO), Uganda; Hilda Vasanthakaalam, Kigali Institute of Science and Technology (KIST), Rwanda.

Pulse Value Chain Initiative – Zambia (PIII-KSU-1). Pls: Dr. Vincent Amanor-Boadu, Dr. Tim Dalton, Dr. Allen Featherstone and Dr. Kara Ross, Kansas State University; Dr. Gelson Tembo, Mukwiti Mwiinga, Priscilla Hamukwala and Rebecca Ludinda, University of Zambia, Zambia.

<u>Panel</u>: Drs. Jill Findeis, Cynthia Donovan, Robert Mazur and Vincent Amanor-Boadu (or proxies)

1:00 – 2:00 pm Lunch, Lemigo Hotel

2:00 – 4:00 pm Poster Session (Authors to be present at Posters)

4:00 – 4:30 pm Break

4:30 – 6:30 pm Global Research Partnerships to Achieve 'Feed the Future' Goals for Pulses

Session Moderator: Dr. Tim Porch, ARS-USDA, Puerto Rico.

Strategic partnerships to achieve Feed the Future Research Goals- A USAID Perspective. Dr. Sahara-Moon Chapotin, Research Division, Office of Agriculture, Research and Technology, Bureau for Food Security, U.S. Agency for International Development, Washington.

CRP3.5 Grain Legumes- A new vision for grain legume research within the CGIAR. Dr. David Hoisington, Deputy Director General for Research, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India.

Sustainable intensification of cereal-legume systems in East and Southern Africa- Strategies of the Southern Africa Community of Practice. Dr. Charles Riches, Liaison Scientist, Southern Africa Community of Practice, McKnight

Foundation Collaborative Crop Research Program, University of Greenwich, United Kingdom.

Putting Nitrogen to work for small-holder legume farmers in Africa- An effort in international partnerships. Dr. Ken Dashiell, Project Manager, N2Africa, Nairobi, Kenya.

Capacities of U.S. universities that can benefit international research efforts on grain legumes- A collaborative research experience in biological management of cowpea insect pests in West Africa. Dr. Manuele Tamo, Entomogist, International Institute for Tropical Agriculture (IITA), Benin Station.

<u>Panel</u>: Drs. Sahara-Moon Chapotin, David Hoisington, Charles Riches, Ken Dashiell, and Manuele Tamo

6:00 – 8:00 pm Dinner (on one's own)

8:00 – 10:00 pm Informal Team Time

Wednesday, February 15

7:00 am – 7:00 pm Field Trip to bean production and research sites in Northern Rwanda. Lunch

provided. (Field Trip Planning Committee: Drs. Louis Butare, Augustine Musoni,

Gerardine Mukeshimana, Hilda Vasanthakaalam, and James Kelly)

7:00 pm Dinner (on one's own)

Thursday, February 16

8:30 – 10:30 am Thematic Session 5: *Utilizing Tools of Modern Molecular Genetics and*

Traditional Breeding to Position Small-Holder Pulse-Based Production Systems

for Climate Change.

 $\underline{Session\ Moderator};\ Dr.\ Louis\ Butare,\ Regional\ Director,\ RAB,\ Rwanda\ .$

<u>Invited Presentation</u>: *Phenotyping of common bean and cowpea- The need to exploit opportunities afforded by genomics.* Dr. Steve Beebe, Head, Global Bean Program, Centro Internacional de Agricultura Tropical (CIAT), Colombia

Modern Cowpea Breeding to Overcome Critical Production Constraints in Africa and the U.S. (PI-UCR-1). Pls: Philip Roberts and Jeff Ehlers, University of California-Riverside; Ndiaga Cisse, Institut Senegalais de Recherches Agricole (ISRA), Senegal; Dr. Issa Drabo, Institut de l'Environment et des Recherches

Agricole (INERA), Burkina Faso; and Antonio Chicapa Dovala, Instituto Investigacao Agronomica (IIA), Angola.

Development, Testing and Dissemination of Genetically Improved Bean Cultivars for Central America, the Caribbean and Angola (PI-UPR-1). Pls: Drs. James Beaver and Consuelo Estevez, University of Puerto Rico; Timothy Porch, USDA-ARS Tropical Agriculture Research Station-Mayaguez; Juan Carlos Rosas, Escuela Agrícola Panamericana-Zamorano (EAP), Honduras; Emmanuel Prophete, National Seed Program, Ministry of Agriculture, Haiti; and António Chicapa Dovala, Instituto de Investigação Agronómica (IIA), Angola.

Combining Conventional, Molecular and Farmer Participatory Breeding Approaches to Improve Andean Beans for Resistance to Biotic and Abiotic stresses (PI-MSU-1). Pls: James Kelly and Sieglinda Snapp, Michigan State University; George Abawi, Cornell University; Eduardo Peralta, Instituto Nacional de Investigacion Agropuecuaria (INIAP), Ecuador; and Louis Butare, Rural Agriculture Bureau (RAB), Rwanda.

Panel: Beebe, Roberts, James Beaver, and James Kelly (or proxies)

10:30 – 11:00 am

Break

11:00 am - 1:00 pm

Pulse Research Consultations and Proposed Pulse Research Priorities for Improving Productivity and Nutrition

<u>Session Moderator</u>: Dr. Doug Maxwell, Chair, Technical Management Advisory Committee (TMAC), Professor Emeritus, University of Wisconsin, Wisconsin.

Rational for Convening Pulse Research Consultations. Dr. Irvin Widders, Director, Dry Grain Pulses CRSP, Michigan State University

Enhancing Pulse Productivity on Problem Soils by Small-Holder Farmers-Challenges and Opportunities. Hosted by Dr. Jonathan Lynch, Pennsylvania State University, August 14 – 17, 2011. (Dr. Lynch to present workshop research recommendations.)

Respondent 1: To Productivity Enhancing Research Priorities- Dr. Sieglinda Snapp, Department of Crop and Soil Science, Michigan State University

Panel Discussion: Drs. Lynch and Snapp

Pulse Nutrition Research Consultation. Hosted by Dr. Maurice Bennink and the Department of Food Science and Human Nutrition, Michigan State University, December 5 - 6, 2011. (Dr. Bennink to present consultation research recommendations.)

Respondent 2: To Nutrition/Health Enhancing Research Priorities- Dr. Robert

Mazur, Sociology, Iowa State University

Panel Discussion: Drs. Bennink and Mazur

1:00 – 2:00 pm Lunch (Provided at the Lemigo Hotel)

2:00 – 3:00 pm Concurrent Sessions

2:00 – 3.00 pm <u>Session A</u>: **Pan Africa Bean Research Alliance (PABRA) Research Strategies and Achievements**

PABRA's Small Pack Approach to Seed Delivery (a video)

Introduction to PABRA - Dr. Robin Buruchara, Coordinator, PABRA, CIAT, Kawanda- Uganda

PABRA Breeding Strategy and Achievements - Dr. Rowland Chirwa, Coordinator, Southern Africa Bean Research Network (SABRN), Chitedze-Malawi

Bean intensification in PABRA countries: Assessing the adoption and contribution of improved climbing bean technologies in Rwanda - Enid Katungi, Agriculture Economist, CIAT, Kawanda-Uganda

PABRA Nutrition Strategy, Activities and Achievements - Martha Nyagaya, Nutrition Specialist, CIAT, Kwanda-Uganda

Discussion- Moderated by Mathew Abang, Coordinator, Eastern and Central Africa Bean Research Network (ECABRN), CIAT, Kampala-Uganda

40 pm Session B: CRSP Management Office Info for U.S. PIs (One U.S. PI representing each Phase II and III project) should attend these two presentations.)

Enhancing public visibility and promoting research and capacity building achievements and development outcomes that benefit pulse value chains by the Dry Grain Pulses CRSP. Dr. Marguerite Halverson, Communications Specialist, Dry Grain Pulses CRSP Management Office, Michigan State University.

Procedures and timelines for closing-out Phase II and III Dry Grain Pulses CRSP sub-contracted projects. Ben Hassankhani, Administrative Officer, Management Office of the Dry Grain Pulses CRSP, Michigan State University.

2:00 – 2:40 pm

3:00 – 6:00 pm	Unstructured time for Pulse CRSP Project Team meetings to plan and coordinate research, technology dissemination and institutional capacity building activities.
5:00 pm	Authors/presenters are requested to take down their posters before 5:00 pm today.
6:30 – 9:30 pm	Dry Grain Pulses CRSP " Appreciation Dinner ", Lemigo Hotel. (Special guests invited)
Friday, February 17	
8:30 – 10:00 am	Future of the Dry Grain Pulses CRSP Session Moderator: Dr. James Kelly, Michigan State University
	Lessons Learned from Past Bean/Cowpea and Pulse CRSP Investments in Research- Refocusing and Positioning the CRSP to Achieve Development Outcomes that Benefit the Pulse Sector. Dr. Mywish Maredia, Impact Assessment Coordinator for Pulse CRSP, Michigan State University.
	TMAC Review of Dry Grain Pulses CRSP and Perspectives on Future Directions for Research and Capacity Building. Dr. Douglas Maxwell, Chair, Technical Management Advisory Committee and Professor Emeritus, University of Wisconsin.
	USAID Perspectives on Grain Legume Research Internationally and the Role of the Dry Grain Pulses CRSP in Achieving Feed the Future Research Objectives. Dr. Larry Beach, AOTR, Office of Agriculture, Research and Technology, Bureau of Food Security, USAID/ Washington.
10:00 – 10:30 am	Break
10:30 – 12:00 pm	Five-Year Extension of the Pulse CRSP- Program Evaluation, Future Research Vision, Preparation of Technical and Cost Applications, and Implementation. Dr. Irvin Widders, Director, Dry Grain Pulses CRSP, Michigan State University
	Group Discussion

Lunch at the Lemigo Hotel

Reflections on Bean/Cowpea and Pulse CRSP Research Achievements and Impact on Common Bean Production and Utilization in Central America and

12:00 - 1:30 pm

1:30 - 2:00 pm

	Wisdom for the Future. Dr. Juan Carlos Rosas, Escuela Agricola Panamericana-Zamorano, Honduras.
2:00 – 2:30 pm	Reflections on Bean/Cowpea and Pulse CRSP Achievements in Socio-Economic Research and Wisdom for the Future. Dr. Richard Bernsten, Michigan State University.
2:30 – 3:00 pm	Reflections on Bean/Cowpea and Pulse CRSP Research Achievements in Genetic Improvement and Varietal Development in Common Bean and Wisdom for the Future. Dr. James Beaver, University of Puerto Rico.
3:00 – 3:30 pm	Break
3:30 – 4:00 pm	Closing Comments and Acknowledgements- Dr. Irvin Widders and Cynthia Donovan, Director and Deputy Director (respectively), Dry Grain Pulses CRSP Management Office; Dr. Louis Butare, Rwanda Agriculture Board; Dr. Larry Beach, AOTR, USAID.
4:00 pm	Meeting Adjourned
Saturday, February 18	

TMAC Meeting in Lemigo, Hotel

8:30 am – 4:00 pm