

# Increasing Agricultural Productivity & Enhancing Food Security in Africa

New Challenges & Opportunities

## PROGRAM



IFPRI®



1-3 November 2011  
Africa Hall - UNECA  
Addis Ababa, Ethiopia



## OBJECTIVES

This conference aims to provide a forum for the exchange of ideas, experiences, and innovations on *improving agricultural productivity for achieving food security in Africa* by: (I) showcasing research results on the trend, determinants, constraints, and opportunities for improving agricultural productivity in Africa within the framework of the Comprehensive Africa Agriculture Development Program (CAADP), national agricultural and rural development strategies, and investment plans; (II) identifying areas for policy actions, further research, and innovations towards enhancing food security and reducing rural poverty in the continent and (III) encouraging appropriate communication strategies for conveying and implementing research results that improve agricultural productivity, enhance food security, and reduce rural poverty in Africa.

## ORGANIZERS

### INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI)

IFPRI seeks sustainable solutions for ending hunger and poverty by providing policy solutions. The cornerstones of IFPRI's work are research, policy communications, and capacity strengthening for policy and research. IFPRI takes a systems perspective regarding the policies affecting food and agriculture, and therefore, its research falls under 3 overarching focus areas: efficient and fair functioning of global and national food and agriculture systems; effective strategies and governance at the global, regional, and national level; and enhancing pro-poor food and agriculture system innovations. IFPRI is headquartered in Washington, D.C with regional offices in South Asia, West and Central Africa, and Eastern and Southern Africa and country offices in China, Democratic Republic of Congo, Ethiopia, Ghana, Malawi, Mozambique, Nigeria and Uganda. IFPRI is one of 15 centers supported by the Consultative Group on International Agricultural Research (CGIAR), an alliance of 64 governments, private foundations, and international and regional organizations. More information at <http://www.ifpri.org>

### FORUM FOR AGRICULTURAL RESEARCH IN AFRICA (FARA)

FARA aims to reduce poverty in Africa through sustainable agricultural growth and improved livelihoods, particularly of smallholder and pastoral enterprises, by supporting Africa's sub-regional organizations in strengthening capacity for agricultural innovation that lead to broad-based improvements in agricultural productivity, competitiveness, and markets. FARA is an umbrella organization bringing together and forming coalitions of major stakeholders in agricultural research and development in Africa. FARA complements the innovative activities of national, international, and sub-regional research institutions to deliver more responsive and effective services to its stakeholders. It plays advocacy and coordination roles for agricultural research for development, while the national agricultural research systems (NARS), advanced research institutions (ARIs) and international agricultural research centres (IARCs) develop improved technologies along the research-to-development continuum in their respective countries and coverage areas. More information at <http://www.fara-africa.org>

### AFRICAN UNION COMMISSION (AUC)

AUC is the Secretariat of the African Union. It aims to be "an efficient and value-adding institution driving the African integration and development process in close collaboration with African Union Member States, the Regional Economic Communities and African citizens." AUC portfolio includes peace and security; political affairs; trade and industry; infrastructure and energy; social affairs; rural economy and agriculture; human resources, science and technology; and economic affairs. More information at <http://www.au.int/en/commission>

## **UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA (UNECA)**

UNECA was established by the Economic and Social Council (ECOSOC) of the United Nations (UN) in 1958 as one of the UN's five regional commissions. UNECA promotes economic and social development of its member States, fosters intra-regional integration, and encourages international cooperation for Africa's development. To achieve the above, UNECA focuses on regional integration, trade and infrastructure; meeting the MDGs with a special emphasis on poverty reduction and growth, sustainable development and gender; promoting good governance and popular participation; ICT, science and technology for development; and statistics and statistical development. UNECA's dual role as a regional arm of the UN and a part of the regional institutional landscape in Africa, positions it well to make unique contributions to member States' efforts in addressing their development challenges. More information at <http://www.uneca.org>

# PROGRAM SNAPSHOT

## Tuesday, November 1

Date	Time	Session	Venue
	8:00-9:30 am	Acquisition of identification badge Registration	UNECA Security Office Africa Hall
	9:30-11:00 am	Plenary Session 1: Opening	Main Hall
	11:00-11:30 am	B R E A K	
	11:30-12:00 pm	Plenary Session 2: Keynote Speech African agriculture today: An inventory	Main Hall
	12:00- 1:30 pm	Parallel Paper Session 1 Session 1A: Science, technology, and innovation for increasing agricultural productivity Session 1B: Markets, trade, and regional integration for promoting agricultural growth Session 1C: Appropriate capacities, investments, institutions, and policies for supporting agriculture	Main Hall Conference Rm 1 Conference Rm 2
	1:30-2:30 pm	L U N C H	
	2:30-3:15 pm	Plenary Session 3: Panel Discussion What are the challenges of increasing agricultural productivity in Africa and how can they be overcome?	Main Hall
	3:15-4.45 pm	Parallel Paper Session 2 Session 2A: Science, technology, and innovation for increasing agricultural productivity Session 2B: Markets, trade, and regional integration for promoting agricultural growth Session 2C: Appropriate capacities, investments, institutions, and policies for supporting agriculture	Main Hall Conference Rm 1 Conference Rm 2
	4:45-5:15 pm	B R E A K	
	5:15-6:00 pm	Parallel Poster Session 1 Session 1A: Science, technology, and innovation for increasing agricultural productivity Session 1B: Markets, trade, and regional integration for promoting agricultural growth Session 1C: Appropriate capacities, investments, institutions, and policies for supporting agriculture	Foyer, Africa Hall Foyer, Africa Hall Foyer, Africa Hall
	6:00-6:45 pm	Plenary Session 4: Panel Discussion Options for scaling up strategic investments in agriculture	Main Hall

# Wednesday, November 2

Date	Time	Session	Venue
	9:00-9:30 am	<b>Plenary Session 5: Keynote Speech</b> Delivering African agricultural productivity and food security through a Green Revolution: prospects and challenges	Main Hall
	9:30-11:00 am	<b>Parallel Paper Session 3</b>  <b>Session 3A:</b> Science, technology, and innovation for increasing agricultural productivity <b>Session 3B:</b> Agriculture, nutrition, and health linkages <b>Session 3C:</b> Agriculture and climate change mitigation and adaptation	Main Hall Conference Rm 1 Conference Rm 2
	11:00-11:30 am	B R E A K	
	11:30-1:00 pm	<b>Plenary Session 6: Panel Discussion</b> Agriculture transformation in Africa	Main Hall
	1:00-2:00 pm	L U N C H	
	2:00-2:30 pm	<b>Plenary Session 7: Keynote Speech</b> Strengthening capacity for agricultural science and technology in Africa	Main Hall
	2:30-4:00 pm	<b>Plenary Session 8</b> Strategies for raising and sustaining high agricultural productivity in Africa:	Main Hall
	4:00-4:30 pm	B R E A K	
	4:30-5:15 pm	<b>Parallel Poster Session 2</b>  <b>Session 2A:</b> Participatory radio- an effective model for enhancing food security in Africa <b>Session 2B:</b> Agriculture, nutrition, and health linkages <b>Session 2C:</b> Agriculture and climate change mitigation and adaptation	Foyer, Africa Hall Foyer, Africa Hall Foyer, Africa Hall
	5:15-6:00 pm	<b>Plenary Session 9: Keynote speech</b> Scenarios for the future of the small farm in Africa	Main Hall
	7:30-9:30 pm	International Buffet Dinner with invited speaker and Ethiopian dancing	Hilton Hotel Ballroom II and Ibex Nyala

# Thursday, November 3

Date	Time	Session	Venue
	9:00-9:30 am	<b>Plenary Session 10: Keynote speech</b> How comprehensive is the Comprehensive Africa Agriculture Development Program (CAADP) in guiding Africa's agricultural development?	Main Hall
	9:30-11:00 am	<b>Parallel Paper Session 4</b>  <b>Session 4A:</b> Harnessing the non-farm sector, economic growth, and poverty reduction for increased agricultural productivity and food security <b>Session 4B:</b> Agriculture, nutrition, and health linkages <b>Session 4C:</b> Agriculture and climate change mitigation and adaptation	Main Hall  Conference Rm 1  Conference Rm 2
	11:00-11:30 am	B R E A K	
	11:30-12:00 pm	<b>Plenary Session 11: Keynote speech</b> Food security in Africa today: A synopsis	Main Hall
	12:00 - 1:00pm	<b>Plenary Session 12: Panel Discussion</b> What are the priorities for taking action to increase agricultural productivity & enhancing food security in Africa?	Main Hall
	1:00-1:30 pm	<b>Plenary Session 13: Conclusion and Way Forward</b>	Main Hall
	1:30-2:00 pm	L U N C H   A N D   A D J O U R N M E N T	

# FULL PROGRAM

## TUESDAY, NOVEMBER 1

8:00-9:30	<b>ACQUISITION OF IDENTIFICATION BADGE AT SECURITY OFFICE</b>  <b>REGISTRATION AT AFRICA HALL</b>	UNECA Security Office  Africa Hall, Conference Center
9:30-11:00	<b>PLENARY SESSION 1: OPENING</b> Chair: H.E. Rhoda Peace Tumusiime <ul style="list-style-type: none"> <li>• <b>REMARKS BY CHAIRPERSON</b> H.E. Rhoda Peace Tumusiime, Commissioner, Rural Economy and Agriculture, Africa Union Commission</li> <li>• <b>WELCOME AND OVERVIEW</b> Kwadwo Asenso-Okyere, Director, Eastern &amp; Southern Africa Regional Office, International Food Policy Research Institute (IFPRI)</li> <li>• <b>OPENING REMARKS: INNOVATIONS, POLICIES, AND INVESTMENTS TO PROMOTE SMALLHOLDER PRODUCTIVITY</b> Shenggen Fan, Director General, IFPRI</li> <li>• <b>KEYNOTE SPEECH: SCIENCE, TECHNOLOGY, AND INNOVATION IN AFRICAN AGRICULTURE</b> Monty Jones, Executive Director, Forum for Agricultural Research in Africa (FARA)</li> <li>• <b>MESSAGE: DEVELOPING PARTNERSHIPS FOR LIVESTOCK RESEARCH IN AFRICA</b> Jimmy Smith, Director General, International Livestock Research Institute (ILRI)</li> <li>• <b>MESSAGE: FROM FOOD AID TO FOOD ASSISTANCE</b> Abdu Dieng, Representative and Country Director, World Food Program, WFP-Ethiopia</li> <li>• <b>OFFICIAL OPENING</b> H.E. Tefera Derbew, Minister of Agriculture, Federal Democratic Republic of Ethiopia</li> </ul>	Main Hall
<b>B R E A K</b>		
<b>P R E S S   C O N F E R E N C E</b> ( b y   i n v i t a t i o n )		
11:00-12:00	<b>PLENARY SESSION 2</b>  <b>KEYNOTE SPEECH: AFRICAN AGRICULTURE TODAY: AN INVENTORY</b>  Josue Dione, UNECA Discussant: Eleni Gabre-Medhin, ECX	Main Hall
11:30-12:00	<b>PARALLEL PAPER SESSION 1</b>	
12:00-13:30	<b>SESSION 1A: SCIENCE, TECHNOLOGY, AND INNOVATION FOR INCREASING AGRICULTURAL PRODUCTIVITY</b> Chair: Aggrey Agumya, FARA <ul style="list-style-type: none"> <li>• <b>TECHNOLOGICAL PROGRESS, INNOVATION, AND PRODUCTIVITY GROWTH IN AFRICA'S AGRICULTURE</b> Adeleke Salami</li> </ul>	Main Hall



- IMPACT OF AGRICULTURAL WATER MANAGEMENT TECHNOLOGIES ON POVERTY IN ETHIOPIA  
**F. Hagos, G. Jayasinghe, S. B. Awulachew, M. Loulseged, A.D. Yilma**
- INCREASED BEAN PRODUCTIVITY THROUGH INCREASED ACCESS TO IMPROVED SEEDS AND USE OF IMPROVED MANAGEMENT TECHNIQUES IN ETHIOPIA  
**J.C. Rubyogo, S. Gebeyehu, K. Tumsa, K.Negash, E. Habte, E. Katungi, L. Sperling, D. Wozemba**
- AN EARLY BIOCHEMICAL CRITERIA TO SCREEN MAIZE GENOTYPES FOR THEIR TOLERANCE TO ALUMINUM TOXIC SOIL OF CAMEROON  
**Mapiemfu-Lamaré Delphine, Thé Charles, Tsoata Esaïe, M. Eddy Leonard Ngonkeu Mangaptche, Zonkeng Celicard, Bihnchang Lovelyn**

**SESSION 1B: MARKETS, TRADE, AND REGIONAL INTEGRATION FOR PROMOTING AGRICULTURAL GROWTH**

Conference Room 1

Chair: **Bart Minten, IFPRI**

- FOOD SECURITY WITHOUT FOOD TRANSFERS: A CGE ANALYSIS FOR ETHIOPIA OF THE DIFFERENT FOOD SECURITY IMPACTS OF FERTILIZER SUBSIDIES AND LOCALLY SOURCED FOOD TRANSFERS  
**A. Stefano Caria, Seneshaw Tamru, Gera Bizuneh**
- THE BEST CHOICE OF FERTILIZER FOR MAIZE (ZEA MAYS) AND CLIMBING BEANS (PHASEOLUS VULGARIS) ROTATION FOR RICH, MEAN, AND POOR FARMERS IN SOUTH KIVU, D.R. CONGO  
**Bossissi Nkuba, Venant Cidoro, Janvier Bashagaluke, Jean Walangululu, Peter Pypers**
- ASSESSMENT OF FOOD RESERVES, MARKETS, TRADE, AND REGIONAL INTEGRATION SYSTEMS IN SUB-SAHARAN AFRICA (SSA): ARE THESE EFFECTIVE PATHWAYS TO FOOD SECURITY?  
**Abiodun Elijah Obayelu**

**SESSION 1C: APPROPRIATE CAPACITIES, INVESTMENTS, INSTITUTIONS, AND POLICIES FOR SUPPORTING AGRICULTURE**

Conference Room 2

Chair: **Yemi Akinbamijo, AUC**

- IMPLICATIONS OF POLICY AND INVESTMENT CHOICES ON SPATIAL PATTERNS OF PROFITABILITY OF FERTILIZER USE IN MAIZE PRODUCTION SYSTEMS IN NORTHERN AND CENTRAL CORRIDORS OF EAST AFRICA  
**Zhe Guo, Jawoo Koo, Stanley Wood**
- TRAINING AND FARMER PRODUCTIVITY: AN EVALUATION USING RANDOMIZED CONTROL TRIAL (RCT) FOR THE MILLENNIUM CHALLENGE ACCOUNT (MCA)-GHANA PROGRAM  
**Andrew Agyei-Holmes, Hayford M. Ayerakwa, Robert D. Osei, Isaac Osei-Akoto**
- EMPLOYMENT OF AGRICULTURAL GRADUATES: WHO ARE WE TRAINING FOR?  
**Sidi Sanyang, Samba Ly, Stella Ennis, Lamin Jobe, Lassine Diarra, Pierre Bantaba**
- IMPACT OF LAND RIGHTS ON PRODUCTIVITY OF AGRICULTURE AND NATURAL RESOURCE ENTERPRISES IN AFRICA  
**Mandivamba Rukuni, Cuthbert Kambanje**
- INTEGRATING LIVESTOCK IN THE CAADP FRAMEWORK: POLICY ANALYSIS USING A DYNAMIC COMPUTABLE GENERAL

EQUILIBRIUM MODEL FOR ETHIOPIA  
A. Gelan, E. Engida, A. S. Caria, J. Karugia

13:30-14:30

LUNCH

14:30-15:15

### PLENARY SESSION 3

Main Hall

**PANEL DISCUSSION:** WHAT ARE THE CHALLENGES OF INCREASING AGRICULTURAL PRODUCTIVITY IN AFRICA AND HOW CAN THEY BE OVERCOME?

Moderator: **Alemayehu Seyoum Taffesse, IFPRI**

Panelists: **Sylvester Oikeh, AATF**  
**Thomas Jayne, MSU**  
**Stephen Muchiri, EAFF**  
**John Dixon, ACIAR**

15:15-16:45

### PARALLELL PAPER SESSION 2

Main Hall

**SESSION 2A:** SCIENCE, TECHNOLOGY, AND INNOVATION FOR INCREASING AGRICULTURAL PRODUCTIVITY

Chair: **Aggrey Agumya, FARA**

- TECHNOLOGY ADOPTION AND LAND AND WATER MANAGEMENT PRACTICES AMONG MAIZE FARMERS IN GHANA  
**Akwasi Mensah Bonsu, Daniel Bruce Sarpong, Ramatu Al-Hassan, Samuel Asuming-Brempong, Irene Egyir, John Kuwornu, Yaw Osei-Asare**
- CEREAL PRODUCTION AND TECHNOLOGY ADOPTION IN ETHIOPIA  
**Bingxin Yu, Alejandro Nin-Pratt, Jose Funes, Sinafikeh Asrat**
- INCORPORATION OF *MUCUNA PRURIENS* IN THE DIETS OF LACTATING DAIRY COWS: EFFECT ON MILK YIELD AND MILK COMPOSITION  
**R.T. Niyreba, J. F. Mupangwa, C. Ebong, G. Uwimama, A. Musoni**
- A REVIEW OF NIGERIAN AGRICULTURAL PRODUCTION EFFICIENCY LITERATURE, 1999-2011: WHAT DOES ONE LEARN FROM FRONTIER STUDIES?  
**K. Ogundari, T.T. Amos**

**SESSION 2B:** MARKETS, TRADE, AND REGIONAL INTEGRATION FOR PROMOTING AGRICULTURAL GROWTH

Conference Room 1

Chair: **Bart Minten, IFPRI**

- CHALLENGES AND OPPORTUNITIES FOR MAIZE SEED SECTOR DEVELOPMENT IN EASTERN AFRICA  
**Olaf Erenstein, Girma Tesfahun Kassie, Wilfred Mwangi**
- FUTURE OF WHEAT PRODUCTION IN SUB-SAHARAN AFRICA: ANALYSIS OF THE EXPANDING GAP BETWEEN SUPPLY AND DEMAND AND ECONOMIC PROFITABILITY OF DOMESTIC PRODUCTION  
**Bekele Shiferaw, Asfaw Negassa, Jawoo Koo, Stanley Wood, Kai Sonder, Hans Jochim Braun, Thomas Payne**
- UNPACKING THE MEANING OF "MARKET ACCESS" IN RURAL KENYA  
**Jordan Chamberlin, Thomas S. Jayne**
- GRAIN RESERVES, SOCIAL SAFETY-NETS, AND PRODUCTIVITY LINKAGES: CONCEPTUAL FRAMEWORK AND SOME EMPIRICS FROM AFRICA  
**Shahidur Rashid**

**SESSION 2C: APPROPRIATE CAPACITIES, INVESTMENTS, INSTITUTIONS AND POLICIES FOR SUPPORTING AGRICULTURE**

Conference Room 2

Chair: **Yemi Akinbamijo, AUC**

- JOINTLY DEVELOPING REGIONAL AGRICULTURAL VALUE CHAINS AS PATHWAY FOR INCREASED AGRICULTURAL PRODUCTIVITY: A CASE FOR INCREASING PRODUCTIVITY OF AFRICAN LOCAL CEREALS SECTOR THROUGH PRICE STABILIZATION AND RISK MANAGEMENT OPTIONS  
**Adama Ekberg Coulibaly, Jonas Bayoulou, Ouattara Daouda**
- POLICY ASSESSMENTS OF AGRICULTURE, FOOD SECURITY, AND POVERTY USING COMPUTER SIMULATION MODELS  
**Teresa Walter, Tesfamichael Wossen, Thomas Berger**
- PRO-POOR LIVESTOCK DEVELOPMENT: ANALYSIS OF PERFORMANCE OF PROJECTS AND LESSONS  
**Francis Wanyoike, Derek Baker**
- ASSESSMENT OF THE SHORT-RUN IMPACT OF BRAC'S AGRICULTURE AND LIVESTOCK PROGRAM IN UGANDA  
**Proloy Barua**

16:45-17:15

**B R E A K**

17:15-18:00

**PARALLEL POSTER SESSION 1**

**PARALLEL POSTER SESSION 1A: SCIENCE, TECHNOLOGY, AND INNOVATION FOR INCREASING AGRICULTURAL PRODUCTIVITY**

Africa Hall

Chair: **Paul Thangata, IFPRI**

- CONSERVATION AGRICULTURE: AN INNOVATION FOR INCREASING FOOD SECURITY AMONG SMALLHOLDERS IN ZAMBIA  
**Bridget B. Umar, Progress H. Nyanga, Jens B. Aune**
- PRODUCTIVITY AND EFFICIENCY ANALYSIS OF SMALLHOLDER MAIZE PRODUCERS IN SOUTHERN ETHIOPIA  
**Endris Geta, Ayalneh Bogale, Belay Kassa, Eyasu Elias**
- FARMERS' PERCEPTIONS AND ADOPTION OF IMPROVED FARMING TECHNIQUES IN LOW-LAND RICE PRODUCTION IN NORTHERN GHANA  
**Samuel A. Donkoh, Joseph A. Awuni**
- DETERMINANTS OF AGRICULTURAL TECHNOLOGY ADOPTION IN MOZAMBIQUE  
**Rafael N. Uaiene**
- FERTILIZER USE AMONG SMALL-HOLDER FARMERS IN UGANDA  
**Stephen Bayite-Kasule, Patrick Lubega Korugyendo, Todd Benson**

**SESSION 1B: MARKETS, TRADE, AND REGIONAL INTEGRATION FOR PROMOTING AGRICULTURAL GROWTH**

Foyer, Africa Hall

Chair: **Derek Headey, IFPRI**

- INCREASING WORLD FOOD PRICES AND THE IMPACT ON THE AGRICULTURAL SECTOR OF SUDAN: TRADE-OFFS BETWEEN FOOD SECURITY AND AGRICULTURAL TRADE  
**Mohamed B. Elgali, Rajaah H. Mustafa, D. Kirscheke**
- SENSORY EVALUATION AND CONSUMER ACCEPTABILITY OF ORANGE-FLESHED SWEET POTATO BY PREGNANT WOMEN AND CHILDREN UNDER 2 YEARS IN WESTERN KENYA  
**Oyunga-Ogubi, Cornelia Loechl, Hermann Quedraogo, Jan Low**

- ENHANCING FOOD SECURITY THROUGH THE USE OF SOLAR FISH DRIERS  
**S.A. Omitoyin, A.O. Ajiboye, O. Adeyemi-Doro, B. Awoseyi**
- CREATING VIABLE INNOVATION PLATFORMS TO FACILITATE MARKET-LINKED LEGUME VALUE CHAINS TO ENHANCE FOOD SECURITY AND ENVIRONMENTAL SYSTEMS IN MALAWI  
**Amon Kabuli, Vernon Kabambe, Paul Mapfumo**
- RESOURCE USE EFFICIENCY OF SMALLHOLDER CROP PRODUCTION IN THE CENTRAL HIGHLANDS OF ETHIOPIA  
**Essa C. Mussa, Gideon A. Obare, Ayalneh Bogale, Franklin P. Simtowe**
- CASSAVA BROWN STEAK VIRUS DISEASE (CBSVD): A NEW THREAT TO CASSAVA INDUSTRY IN UGANDA  
**Bill Williams Khizzah, D. Ocan, G. Openy**

**SESSION 1C: APPROPRIATE CAPACITIES, INVESTMENTS, INSTITUTIONS, AND POLICIES FOR SUPPORTING AGRICULTURE**

Foyer, Africa Hall

Chair: **Elias Zerfu, IFPRI**

- THE IMPACT OF THE RURAL CAPACITY BUILDING PROJECT ON FARM HOUSEHOLD EFFICIENCY IN ETHIOPIA  
**Paul Thangata, Teferi Mequaninte**
- BUILDING ADVISORY SERVICES CAPACITY TO MANAGE FOR IMPACT: LESSONS AND EXPERIENCES FROM ZANZIBAR, TANZANIA  
**Elias Zerfu, Suresh C. Babu**
- INCREASING INORGANIC FERTILIZER USE IN UGANDA: SUPPLY-SIDE ISSUES  
**Patrick Lubega Korugyendo, Stephen Bayite-Kasule, Todd Benson**
- IMPROVING AGRICULTURAL PRODUCTION AND PRODUCTIVITY OF SMALLHOLDER FARMERS THROUGH INCREASED ACCESS TO IMPROVED PLANTING MATERIAL: EVIDENCE FROM SOUTH WEST REGION, CAMEROON  
**Manfred T. Besong**

18:00-18:45

**PLENARY SESSION 4**

Main Hall

**PANEL DISCUSSION: OPTIONS FOR SCALING UP STRATEGIC INVESTMENTS IN AGRICULTURE**

Moderator: **Myra Wopereis-Pura, FARA**

Panelists: **Elisabeth Atangana, PAFFO**  
**Abddirahman Beileh, AfDB**  
**Isabelle Tsakok, "Success in Agricultural Transformation"**  
**Edith Jibunoh, One International**

19:00-20:00

**COCKTAIL RECEPTION AT UNCC**

## Wednesday, November 2

9:00-9:30

### PLENARY SESSION 5

Main Hall

**KEYNOTE SPEECH:** DELIVERING AFRICAN AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY THROUGH A GREEN REVOLUTION: PROSPECTS AND CHALLENGES

**Namanga Ngongi, AGRA**

Discussant: **Seyfu Ketema, ASARECA**

9:30-11:00

### PARALLEL PAPER SESSION 3

**SESSION 3A:** SCIENCE, TECHNOLOGY, AND INNOVATION FOR INCREASING AGRICULTURAL PRODUCTIVITY

Main hall

Chair: **Aggrey Agumya, FARA**

- PHOSPHORUS USE EFFICIENCY IN AMARANTH (AMARANTHUS CRUENTUS L.)  
**O. David Ojo, A. Akinrinde Ezekiel, O. Akorada Malachy**
- EFFECT OF POST ANTHESIS MOISTURE STRESS ON PERFORMANCE OF STAY GREEN SORGHUM HYBRID IN EASTERN PROVINCE OF KENYA  
**T. Okiyo, S. Gudu, O. Kiplagat, J. Owuoché**
- ACTION RESEARCH IN PARTNERSHIPS FOR AGRICULTURAL INNOVATIONS: LESSONS LEARNT FROM A CAMEROONIAN EXPERIENCE IN GRAND-SOUTH CAMEROON  
**N.A. Onguene, F. Ngo Nonga, M. Havard, Bella-Manga, P. Pédelahore**
- DO ORGANIZATIONAL FACTORS AFFECT INDIVIDUAL SCIENTIST'S PRODUCTIVITY? A COMPARATIVE AND MULTILEVEL ANALYSIS OF NIGERIA AND GHANA AGRICULTURAL RESEARCH SYSTEMS  
**Catherine Ragasa**

**SESSION 3B:** AGRICULTURE, NUTRITION, AND HEALTH LINKAGES

Conference Room 1

Chair: **Boitshepo Bibi Giyose, NEPAD-PCA**

- THE INTERACTION BETWEEN HEALTH AND FARM LABOR PRODUCTIVITY IN AFRICA  
**Kwadwo Asenso-Okyere, Daniel Ayalew Mekonnen**
- A SYNERGETIC LINKAGE BETWEEN AGRICULTURE, NUTRITION, AND HEALTH  
**Foluso Temitope Agulanna**
- THE IMPACT OF HIV/AIDS ON THE PRODUCTIVITY OF FARM HOUSEHOLDS IN ABIA STATE, NIGERIA  
**O.R. Iheke, C.A Okezie, A.O. Onyekanma**
- HEALTH SHOCKS AND AGRICULTURAL PRODUCTION: EVIDENCE FROM GHANA  
**Isaac Osei-Akoto, Clement Adamba, Robert Osei-Darko**

**SESSION 3C:** AGRICULTURE AND CLIMATE CHANGE MITIGATION AND ADAPTATION

Conference Room 2

Chair: **Sokona Youba, UNECA**

- THE IMPACT OF CLIMATE CHANGE IN MOZAMBIQUE'S AGRICULTURE  
**Verona Parkinso, Firmino G. Mucavele**

- THE MICRO-ECONOMICS OF CLIMATE CHANGE ADAPTATION IN MAIZE PRODUCTION: THE CASE OF MUREWA DISTRICT IN ZIMBABWE  
**Medicine Massiwa**
- APPROXIMATING THE COST OF SOIL CARBON SEQUESTRATION ON MT. KILIMANJARO USING DYNAMIC OPTIMIZATION MODEL  
**Francis Mulangu, David Kraybill**
- TARGETED FOOD SECURITY AND CARBON BENEFITS FROM SOIL FERTILITY REPLENISHMENT AGROFORESTRY TECHNOLOGIES  
**Tracy Beedy, Frank M. Place, Jules Bayala, Antoine Kalinganire**
- INTEGRATED GLOBAL ASSESSMENT OF THE ECONOMICS OF LAND DEGRADATION: THE CASE OF SUB-SAHARAN AFRICA  
**Ephraim Nkonya, Nicolas Gerber, Philipp Baumgartner, Joachim von Braun, Alex De Pinto, Valerie Graw, Edward Kato, Julia Kloos, Teresa Walter**

11:00-11:30

B R E A K

11:30-13:00

### PLENARY SESSION 6

Main Hall

**PANEL DISCUSSION: AGRICULTURE TRANSFORMATION IN AFRICA**

Chair: **Khalid Bomba, ATA-Ethiopia**

Organized by: Country Strategy Support Programs-IFPRI

- THE DYNAMICS OF TECHNOLOGICAL TRANSFORMATION OF THE AGRICULTURAL SECTOR IN AFRICA: A STORY OF BAD PRODUCTS TRAP  
**John Ulimwengu, Badibanga Thaddee**
- SUSTAINABLE INTENSIFICATION FOR AFRICA: A CASE STUDY FROM MALAWI  
**Klaus Droppelman, Sieglinde Snapp, Peter Gaff, Wezi Mhango**
- IMPLICATIONS OF TAXES AND MISSING PUBLIC GOODS ON FERTILIZER SUPPLY TO SMALLHOLDER FARMERS IN UGANDA, TANZANIA, AND MOZAMBIQUE  
**Todd Benson**
- AGRICULTURAL PRODUCTIVITY IN ETHIOPIA AND CHALLENGES TO FURTHER GROWTH  
**Alemayehu Seyoum Taffesse, Fantu Nisrane**

13:00-14:00

L U N C H

14:00-14:30

### PLENARY SESSION 7

Main Hall

**KEYNOTE SPEECH: STRENGTHENING CAPACITY FOR AGRICULTURAL SCIENCE AND TECHNOLOGY IN AFRICA**

**Yusuf Abubakar, ARCN**

Discussant: **Dorothy Mukhebi, AWARD**

14:30-16:0

### PLENARY SESSION 8

Main Hall

**STRATEGIES FOR RAISING AND SUSTAINING HIGH AGRICULTURAL PRODUCTIVITY IN AFRICA**

Chair: **Samuel Benin, IFPRI**

Organized by: Regional Strategic Analysis & Knowledge Support System (ReSAKSS)

- TRENDS AND SPATIAL ANALYSIS OF AGRICULTURAL PRODUCTIVITY  
**Zhe Guo**
- DETERMINANTS OF AGRICULTURAL PRODUCTIVITY GROWTH AND ECONOMIC ANALYSIS OF ALTERNATIVE STRATEGIES FOR RAISING AGRICULTURAL PRODUCTIVITY  
**Alejandro Nin Pratt**
- CASE STUDIES OF SUCCESSFUL AND FAILED AGRICULTURAL INVESTMENT PROGRAMS  
**Joseph Karugia, Mbaye Yade, Emmanuel Mubasa, Claude Bizimana**
- STRATEGIES FOR RAISING AGRICULTURAL PRODUCTIVITY: A TYPOLOGY OF AGRICULTURAL PRODUCTIVITY ZONES  
**Bingxin Yu**

16:00-16:30

**B R E A K**

16:30-17:15

**PARALLEL POSTER SESSION 2**

**SESSION 2A:** PARTICIPATORY RADIO: AN EFFECTIVE MODEL FOR ENHANCING FOOD SECURITY IN AFRICA

Foyer, Africa Hall

Organized by: Farm Radio International

Presenters: **Fryhiwot Nadew, Farm Radio International**  
**Mark Leclair, Farm Radio International**  
**Sheila Rao, Farm Radio International**

**SESSION 2B:** AGRICULTURE, NUTRITION, AND HEALTH LINKAGES

Foyer, Africa Hall

Chair: **Disha Ali, IFPRI**

- SWEET POTATO PRODUCT DEVELOPMENT IN GHANA: TOWARDS ALLEVIATION OF NUTRITIONAL DEFICIENCIES IN WOMEN AND CHILDREN  
**E. Adu-Kwarteng, I.O.O. Ansah, Regina Sagoe, Stephen Amoah**
- EXPLORING NEW METRICS: NUTRITIONAL DIVERSITY OF CROPPING SYSTEMS  
**Roseline Remans, Dan F.B. Flynn, Fabrice Declerck, Willy Diru, Jessica Fanzo, Kaitlyn Graynor, Isabel Lambrecht, Joseph Mudiope, Patrick K. Mutuo, Phelire Nkhoma, David Siriri, Clare Sullivan, Cheryl A. Palm**
- RICE FARMERS' PRODUCTIVITY IN NIGERIA: HOW HAS MALARIA NOT HELPED?  
**S.O.M. Awoniyi, T.T. Amos, M.M. Omole**
- HOME GARDENING AS A COPING STRATEGY FOR URBAN AND PERI-URBAN HOUSEHOLDS: THE CASE OF MUTARE CITY, MANICALAND PROVINCE, ZIMBABWE  
**Mrema May, Chitiyo Fortunate**

**SESSION 2C:** AGRICULTURE AND CLIMATE CHANGE MITIGATION & ADAPTATION

Foyer, Africa Hall

Chair: **Guush Berhane, IFPRI**

- CONTRIBUTION OF CONSERVATION AGRICULTURE IN RAIN-FED CROP WATER PRODUCTIVITY IMPROVEMENT: A CASE STUDY OF MAIZE RAIN-FED SYSTEM IN CENTRAL MALAWI  
**Lameck Fiwa, Kefasi J. Kamoyo**
- FARMERS' ADAPTATION TO CLIMATE IN THE CHIVI DISTRICT OF ZIMBABWE  
**Evangelista Mudzonga**

- ECONOMIC ASSESSMENT OF INVESTMENT IN SOIL CONSERVATION: THE CASE OF EROSION CONTROL FACILITIES IN THE CATCHMENT OF LAKE LAGDO IN CAMEROON  
**Ngondjeb Yong Dorothé**
- WATERMELON (CITRULLUS LANATUS): LIVE MULCH CLIMATE CHANGE ADAPTATION CAPABILITIES IN AMARANTH CROPPING SYSTEM  
**O.D. Ojo, S.O. Taiwo, A. A. Kintomo**
- DEFICIT IRRIGATION AND PRODUCTIVITY OF SOME SELECTED CROPS  
**J.D. Owusu-Sekyere, J. A. Andoh**

17:15-18:00

**PLENARY SESSION 9**

Main Hall

**KEYNOTE SPEECH:** SCENARIOS FOR THE FUTURE OF THE SMALL FARM IN AFRICA

**Philip Kiriro, EAFF**

Discussants: **Castro Caramada, FAO**

**Steven Were Omamo, WFP**

**INTERNATIONAL BUFFET DINNER**

19:30-21:30

**Invited speaker:** Ato Newai Gebreab, Director, Ethiopian Development Research Institute (EDRI) and Senior Economic Advisor to the Prime Minister of Ethiopia

Sponsored by: EDRI and Ethiopia Strategy Support Program, IFPRI

Hilton Hotel Ballroom II and Ibex Nyala



9:00-9:30

## PLENARY SESSION 10

Main Hall

**KEYNOTE SPEECH:** HOW COMPREHENSIVE IS THE COMPREHENSIVE AFRICA AGRICULTURE DEVELOPMENT PROGRAM (CAADP) IN GUIDING AFRICA'S AGRICULTURAL DEVELOPMENT?

Presenters: **Martin Bwalya, CAADP-NEPAD Secretariat**  
**Godfrey Bahigwa, Ministry of Agriculture-Uganda**  
 Discussant: **John Ulimwengu, IFPRI**

9:30-11:00

## PARALLEL PAPER SESSION 4

**SESSION 4A:** HARNESSING THE NON-FARM SECTOR, ECONOMIC GROWTH, & POVERTY REDUCTION FOR INCREASED AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY

Main Hall

Chair: **Adama Ekberg Coulibally, UNECA**

- THE NON-FARM SECTOR AS A CATALYST FOR POVERTY REDUCTION IN THE NIGER DELTA REGION, NIGERIA  
**Andrew Onwuemele**
- FARM HOUSEHOLDS' ENTRY AND EXIT INTO AND FROM NON-FARM ENTERPRISES IN RURAL ETHIOPIA: DOES CLUSTERING PLAY A ROLE?  
**Merima Ali, Jack Peerlings**
- NON-FARM INCOME DIVERSIFICATION AND WELFARE STATUS OF RURAL HOUSEHOLDS IN SOUTH-WEST ZONE OF NIGERIA  
**Olabisi Alaba Awoniyi, Kabir Kayode Salma**
- A POLYCENTRIC APPROACH TO RURAL POVERTY REDUCTION: CASE OF ZAMBIAN SMALLHOLDER FARMERS  
**Progress H. Nyanga, Bridget B. Omar**

**SESSION 4B:** AGRICULTURE, NUTRITION, AND HEALTH LINKAGES

Conference Room 1

Chair: **Boitshepo Bibi Giyose**

- DETERMINANTS OF FARM HOUSEHOLD FOOD EXPENDITURE AND IMPLICATIONS FOR FOOD SECURITY AND NUTRITION IN RURAL KENYA  
**Jumba Idalinya, Siegfried Bauer, Khalid Siddig**
- FORESTS, BIO-DIVERSITY, AND FOOD SECURITY  
**Terry C. H. Sunderland**
- UNDERSTANDING THE LINKAGES BETWEEN AGRICULTURAL PRODUCTIVITY AND NUTRIENT CONSUMPTION: EVIDENCE FROM UGANDA  
**John Ulimwengu, Saweda Lliverpool-Tasie, Josee Randriamamonjy, Racha Ramadan**
- HEALTH, NUTRITION, AND AGRICULTURAL PRODUCTION: EVIDENCE FROM RURAL HOUSEHOLDS IN BURKINA FASO  
**Fleur Wouterse**

**SESSION 4C:** AGRICULTURE AND CLIMATE CHANGE MITIGATION AND ADAPTATION

Conference Room 2

Chair: **Sokona Youba, UNECA**

- COMPARATIVE ANALYSIS OF MAIZE-BASED LIVELIHOODS IN DROUGHT PRONE REGIONS OF EASTERN AFRICA: ADAPTATION LESSONS FOR CLIMATE CHANGE  
**Olaf Erenstein, Girma Tesfahun Kassie, Wilfred Mwangi**

- CLIMATE CHANGE ADAPTATION STRATEGIES FOR MAIZE AND WHEAT PRODUCTION IN SUB-SAHARAN AFRICA: A QUANTITATIVE ASSESSMENT USING CROP SIMULATION AND SPATIAL MODELING  
**Sika Gbegbelegbe, Kai Sonder, Jawoo Koo, Zhe Guo, Bekele Shiferaw, Jonathan Hellin**
- UNRAVELING SOIL FERTILITY DILEMMA BY SMALLHOLDERS IN SUB-SAHARAN AFRICA: DO ARBUSCULAR MYCORRHIZA FUNGI HAVE A ROLE TO PLAY?  
**E. Mugendi, L. Avio, M. Giovannetti**
- EFFECTS OF DROUGHT TOLERANCE ON MAIZE YIELD IN SUB-SAHARAN AFRICA  
**Nicola Cenacchi, Jawoo Koo, Mark Rosegrant**

11:00-11:30

B R E A K

11:30-12:00

**PLENARY SESSION 11**

Main Hall

**KEYNOTE SPEECH:** TITLE: FOOD SECURITY IN AFRICA TODAY: A SYNOPSIS

**Abebe HaileGabriel**

Discussant: **Ayalneh Bogale, CAADP Pillar 3, University of KwaZulu-Natal**

12:00-13:00

**PLENARY SESSION 12**

Main Hall

**PANEL DISCUSSION:** WHAT ARE THE PRIORITIES FOR TAKING ACTION TO INCREASE AGRICULTURAL PRODUCTIVITY AND ENHANCING FOOD SECURITY IN AFRICA?

Moderator: **Boaz Keizire Blackie, AUC**

Panelists: **Isaka Mashauri, Tanseed International-Tanzania**

**Mafa Chipeta, formerly FAO**

**Robson Mutandi, IFAD**

**Achim Fock, World Bank**

13:00-13:30

**PLENARY SESSION 13**

Main Hall

**CONCLUSION AND WAY FORWARD**

Presenters: **Kwadwo Asenso-Okyere, IFPRI**

**Yemi Akinbamijo, AUC**

**Adama Ekberg Coulibaly, UNECA**

**Aggrey Agumya, FARA**

13:30-14:00

L U N C H & A D J O U R N M E N T

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