Science Environments in Africa

University of Michigan, Ann Arbor May 6-8, 2010

African Studies Center STEM-Africa Initiative Launch Conference NSF-Funded Central African Forests Initiative (CAFI) Annual Research Meeting UM-Mpala Initiative Planning Workshop

> Events Thursday May 6th on Central Campus Events Friday May 7th and Saturday May 8th on North Campus

Thursday, May 6th

Central Campus, Dana Bldg & Rackham

<u>10:30–12:00 PM</u> (2024 Dana)

Panel A (CAFI): Spatial Analysis of Concession Level Change in Coupled Human/Natural Forest Systems. Chaired by Kathleen Bergen (School of Natural Resources and Environment, U-M)

Rachel Kornak (SNRE, U-M): "Geographical Information Systems and Changes in Logging Road Patterns in Cameroon and Republic of Congo (Brazzaville)"

Silvia Cordera-Sancho (SNRE, U-M): "Remotely Sensed Data and Assessing Forest Degradation"

Richard Mbatu (Bowling Green State University, Ohio): "Spatial Analysis of Deforestation in Buea/Limbe region of Cameroon in Relation to Ethnographic Policy Analysis"

Kathleen Bergen (SNRE, U-M): "The State of the Art in Remote Sensing."

1:00-2:30 PM (2024 Dana)

Panel B (CAFI): Changing Social Processes of Forest Management at Concession Scales. Chaired by Rebecca Hardin (SNRE, U-M)

Jacqueline Doremus and Rebecca Hardin (SNRE, U-M): "Colonial and Postcolonial Forestry in Equatorial Africa"

Armand Zongang (MINEF Cameroon and ALPICAM/Decolvenear): "Participatory Management of Forestry Concessions"

Herve Bourgignon (IFEA France): "Certification of Forest Concessions after Economic Crisis"

Alain Karsenty (CIRAD France): "Will Forest Concessions Survive REDD in Central Africa?"

2:30 – 2:45 PM Coffee break

2:45 - 4:30 PM (1040 Dana)

Panel C (CAFI/STEM): Key Resources and Environmental Governance in Africa. Chaired by Arun Agrawal (SNRE, U-M)

Chimere Diaw (African Model Forest Initiative): "REDD, embedded tenure, and virtual property rights: is there a market solution?"

Lauren Persha (SNRE, U-M): "Vegetation Diversity and Forest-based Livelihoods in East African Forest Commons"

Margaret Kinnaird (Director, Mpala Ranch and Research Center): "Water Scarcity and Governance Challenges in Kenya's Ranches and Wildlands"

Emmanuel Danquah (Kwame Nkrumah University of Science & Technology, Ghana): "Modeling Human Impacts on Mammal Diversity in Western Ghana"

5:30 PM **Keynote address** (Rackham Ampitheater)

Welcoming remarks by:

Lester Monts, Senior Vice-Provost for Academic Affairs, U-M
Phil Hanlon, Vice-Provost for Academic and Budgetary Affairs/Provost Designate, U-M
Ken Kollman, Acting Director, International Institute/Acting Vice-Provost for International Affairs, U-M

Dr. Elinor Ostrom

Indiana University, Political Science; 2009 Nobel laureate

"The Challenge of Combining the Social with the Ecological"

Friday, May 7th

North Campus, Computer Science and Engineering Bldg (CSE)

<u>8:45 - 10:45 AM</u> (CSE 1670)

Panel D (CAFI/STEM): Sustainable Economic Growth and Environmental Justice in Africa. Chaired by Rebecca Hardin (SNRE, U-M)

Omolade Adunbi (Yale University): "Oil and Citizenship in Nigeria"

Jesse T. Njoka (Department of Land Resources Management and Agricultural Technology, University of Nairobi): "Integrating Cattle and Wildlife Land Use"

Jerome Nriagu (School of Public Health, U-M): "Directions in Research on Water Pollution Issues"

Abdon Awono (Center for International Forestry Research, Cameroon).

"Livelihoods and Leafy Plants: Sustainability Challenges in the Thriving Trade of Gnetum spp"

8:45 - 10:45 AM (1013 DOW)

Panel E (STEM): Human Environments of Health and Disease. Chaired by Sofia Merajver (Director, Center for Global Health, U-M)

Joe Harford (Director of International Affairs, U.S. National Cancer Institute, NIH): "Cancer in Africa: The Need for Contextual Approaches"

Alexander Kwadwo Nyarko (Director, Noguchi Memorial Institute for Medical Research and Professor of Pharmacology and Toxicology, University of Ghana): "Disease Burden and Health Determinants in Ghana"

Amr Soliman (School of Public Health, U-M): "Cancer Teams in Africa: A Paradigm for Global Health Translational Research in Chronic Disease"

10:45 - 11:00 AM

Coffee break with Poster Presentations from UM Africanist Students and Scholars

11:00 - 1:00 PM (CSE 1670)

Panel F (CAFI/STEM): Climate Change and Human Security. Chaired by Samuel Mukasa (Chair Geological Sciences, U-M)

Gail Ashley (Earth and Planetary Sciences, Rutgers University): "East African Climate: A View from the Past"

Salif Diop (United Nations Environment Program, Kenya): "Climate Change Impacts, Adaptation and Human Security in Africa"

Samuel Ayonghe (Environmental Geology, Geophysics and Hydrogeology, University of Buea): "Trends and Impacts of Climate Change within Different Ecological Zones in Central Africa: Considerations towards Proactive Measures"

Somorin Olofunso (CIFOR): "Adaptation-Mitigation Debate in the Congo Basin forest: Trade Off or Synergy?"

Samuel Mukasa (Chair, Geological Sciences, U-M): "Climate Change in Africa: A Geological Perspective"

<u>11:00 - 1:00 PM</u> (1013 DOW)

Panel G (STEM): Information Technology in Africa. Chaired by Paul Edwards (School of Information, U-M)

Angelo Barbosa (Vice-President for IT, Universidade Cabo Verde): "Cape Verde - An Overview of IT Development"

Stephanie Squires (U.S. Civilian Research and Development Foundation): "Resolving Knowledge Isolation: A New Approach to African Journal Access"

Nii Narku Quaynor (Chairman, Ghana Dot Com; Professor, Computer Science at University of Cape Coast): "How the Internet Reached Africa"

1:00 – 2:00 PM Lunch

2:00 - 3:00 PM Working sessions: Environment, Global Health, and Information Technology

3:00 – 5:00 PM Posters and Presentations in Room 1690 CSE and CSE Atrium

5:00 PM Keynote address (1670 CSE)

Welcoming remarks by:

Kelly Askew, Director, African Studies Center/Associate Professor, Anthropology, U-M Samuel Mukasa, Chair and Professor, Geological Sciences, U-M

Professor Moses Kizza Musaazi

Makerere University, Engineering; Technology 4 Tomorrow

"Appropriate Technologies for Africa"

Saturday, May 8th

Computer Science and Engineering Bldg/Dow Bldg

9:00 – 11:00 AM (CSE 1670)

Panel H (CAFI): Engineering Solutions in Africa. Chaired by Elijah Kannatey-Asibu (College of Engineering, U-M)

Emmanuel Ramde (Engineering, Kwame Nkrumah University of Science and Technology): "Solar Thermal Power Plants in West Africa: Resource Assessment and Site Selection"

Elsie Effah Kaufmann (Biomedical Engineering, University of Ghana): "Engineering Solutions to Healthcare Challenges in Ghana: Perspectives from the First Generation of Locally Trained Biomedical Engineering Students"

Moses Musaazi (Engineering, Makerere University): "Using Appropriate Technologies to Solve Local Problems and Develop Skills"

Henk de Jager (Dean of Engineering, Nelson Mandela Metropolitan U.): "Challenges Facing Engineering Education in Africa: A Case Study of South Africa"

9:00 – 11:00 AM (1013 DOW)

Panel I (STEM): Mathematical Sciences in Africa. Chaired by Daniel Burns (Mathematics, U-M)

Nkem-Amin Khumbah (University of Michigan): "Sustainable Partnerships with African Institutions"

Herb Clemens (Ohio State University): "African Mathematics and the International Mathematical Union (IMU)"

Aderemi Kuku (Grambling State/African Mathematical Union): "Regional and International Collaboration to Strengthen Mathematical Sciences in Africa"

Francis Kofi Ampenyin Allotey (Director, Institute of Mathematical Sciences): "The Role of Mathematical Sciences in the Socio-Economic Development of Africa"

11:00 - 11:15 Coffee break

11:15 - 12:15 PM Working sessions: Engineering and Math Sciences

12:15 -1:15 PM Lunch

1:15 - 3:30 PM (CSE 1670)

Panel J (CAFI/STEM): Education, Funding and Policy Environments for Science in Africa. Chaired by Cinda-Sue Davis (Director, Women in Science and Engineering (WISE), U-M)

Emmet Dennis (President, University of Liberia): "The Inextricable Relevance of Tertiary Scientific Education to the African Socio-Economic Developmental Agenda, A Welcome Realization in Liberia"

Abigail Mechtenberg (Applied Physics, U-M): "Missing Variables in Electricity Optimization Models used in Sub-Saharan Africa: Case Study Investigations as a Foundation for an Innovative Microgrid Model"

Daniel Wubah (Vice President and Dean for Undergraduate Education, Virginia Tech U.): "An immersive summer undergraduate research experience in Ghana focusing on ecology, ethnobotany, and environmental biology"

Lamine Ndiaye (Chairperson, Pan African University High Level Panel): "The Pan African University, One Major Project of the African Union"

Discussant: Marvin Parnes (Associate Vice President for Research and Executive Director of Research Administration, U-M)

<u>3:30 - 3:45 PM</u> Coffee break

3:45 – 4:30 PM All Group Session: Advancing STEM Research and Collaborations in Africa

<u>5:00 PM</u> Walking tour of North Campus for out of town participants