NASA IDS: Seasonal Prediction of Hydro-Climatic Extremes in the Greater Horn of Africa (GHA)

The Second Participatory Research Workshop and Project Meeting

July 28 - 29, 2015

Washington Hotel, Addis Ababa, Ethiopia

Organized by: The National Aeronautics and Space Administration (NASA), National Drought Mitigation Center, University of Nebraska-Lincoln (USA), National Meteorological Agency (NMA) of Ethiopia, Ethiopian Meteorological Society (EtMS), and Addis Ababa University (AAU), Ethiopia.

NASA GHA Project Goal: *to understand and, where possible, extend the predictive time horizons for extreme drought and flood in the GHA given the challenges of an evolving climate baseline and diverse information needs.*

The Second Participatory Research and Project Meeting Goals and Objectives (rationale):

1. To present first year project results, including preliminary model development and experimental prediction products, to experts and decision makers representing local (private, governmental, and NGOs), regional, and international organizations in the GHA.

2. To identify priority hydro-climatic information needs and to develop a framework for linking forecasts to decision-making and resource management.

3. To review the scope of the project, engage decision makers in our assessment of information requirements, and reorient the project as needed to address decision making needs. This includes learning about existing forecasts and decision processes.

Local Organizers' email/telephone: Mr. Workneh Degefu (ethiopianmetsoc@gmail.com, 251-911-790703), Dr. Diriba Koricha (dkorecha@yahoo.com, 251-913-673352), Dr. Getachew Berhan (getachewb1@yahoo.com, 251-911-638408), Dr. Shimelis Beyene (shimelisb1@yahoo.com), and Mr. Bekure Ketema (bekureketema@yahoo.com)

U.S. coordinators' email/telephone: Dr. Tsegaye Tadesse (ttadesse2@unl.edu, 402-472-3383), Andualem Shimelis Shiferaw (ashiferaw2@unl.edu, 402-419-9605).

AGENDA

Tuesday 28 July, 2015

8:00 – 8:45	Registration and Networking

Morning Session 1 (8:45 – 10:20): Welcome and introductions
(Chairperson: Mr. Workneh Degefu)

8:45 –8:55	Mr. Workneh Degefu, Manager, Ethiopian Meteorological Society, Addis Ababa, Ethiopia (Local Organizer)
8:55 –9:05	Purpose of the meeting and introductions, Dr. Tsegaye Tadesse, principal investigator on the project, Associate Professor, National Drought Mitigation Center (NDMC)/University of Nebraska-Lincoln (UNL), USA
9:05 – 9:15	Opening Remarks: Dr. Girma Amente, President, Haramaya University, Ethiopia
9:15 – 9:30	Keynote Speech: Mr. Fetene Teshome, Director General, National Meteorology Agency, Addis Ababa, Ethiopia
9:30 – 9:50	Introduction of all participants
9:50 – 10:20	Break

Morning Session 2 (10:20 – 1:00): Overview Presentations
(Chairperson: Dr. Tsegaye Tadesse)

10:20 - 10:35	General Progress Report on the NASA-GHA project: Seasonal Prediction of Hydro-Climatic Extremes in the GHA under Evolving Climate Conditions, Dr. Tsegaye Tadesse, Associate Professor, NDMC/UNL, USA
10:35 – 10:50	Models and Farmers: Making Scientific Research Relevant to End Users, Dr. Shimelis Beyene, AAU & DB-PHC, Addis Ababa, Ethiopia
10:50 – 1:00	Participatory Research Group Discussion: Creating Groups, Parallel Group Discussion, and Pre-participation survey (IRB form), Tonya Haigh, Research Specialist and Nicole Wall, outreach and research specialist, NDMC/UNL, USA
1:00 – 2:00	**Lunch**

Afternoon Session 1 (2:00 – 2:45): Participatory Research Discussion
(Discussion facilitators: Tonya Haigh, Nicole Wall, Andualem Shimelis, and Shimelis Beyene)

2:00 – 2:45	Discussion: Parallel discussion groups (General Questions for discussion groups will be provided).

Afternoon Session 2 (2:45 – 3:50): ***Existing Knowledge and Past Experiences - part I (Regional)***
(Chairperson: Dr. Tufa Dinku)

2:45 – 3:00	Role of regional centers for climate information and users' needs: RCMRD/NASA SERVIR experience, Mr. Degelo Sendabo, Remote Sensing Officer, Remote Sensing and GIS, Regional Center for Mapping of Resources for Development, Nairobi, Kenya
3:00 – 3:15	An overview of implications of climate change to drought in the Horn of Africa, Mr. Abebe Tadege, Climate Change Adaptation Specialist at ICPAC, Nairobi, Kenya
3:15 – 3:30	Mainstreaming Climate Smart Agriculture (CSA) into National Policies and Programs, Dr. Fantahun Assefa, Field Program Support and Monitoring Officer, FAO Sub-regional Office for Eastern Africa (SFE)
3:30 – 3:45	Break

Afternoon Session 3 (3:45 – 5:40): ***Existing Knowledge and Past Experiences - part II (Country)***
(Chairperson: Dr. Paul Block)

3:45 – 4:00	Enhancing National Climate Services for Development in Africa, Dr. Tufa Dinku et al., International Research Institute for Climate and Society (IRI), Columbia University (CU), USA
4:00 – 4:15	Current methods and products of seasonal prediction in Kenya, Peter Ambenje, Deputy Director at Kenya Meteorological Department, Nairobi, Kenya
4:15– 4:30	Extreme Hydro-Climatic Events Assessment and Monitoring in Sudan, Amel Mohamed Abdalla, Head Agromet Unit, Sudan Meteorological Authority
4:30 – 4:45	The needs and challenges of climate information in Rwanda, Mr. Kwitonda Philippe, Kigali, Rwanda

4:45 – 5:00	Tanzania experience on the use of Climate information/ seasonal prediction, Dr. Sarah Osima, Head of Environment Section, Tanzania Meteorological Agency
5:00 – 5:15	Wrap-up and announcement

Wednesday 29 July, 2015

Morning Session 1 (8:30 – 10:40): Research and Applications on Seasonal Forecasting Methods: progress report
(Chairperson: Dr. Ben Zaitchik)

8:30 – 9:00	Review of Day 1, reports from discussion groups, Drs. T. Tadesse/Tonya Haigh/Nicole Wall
9:00 – 9:20	Progress report on opportunities and challenges for seasonal prediction in the GHA, Dr. Ben Zaitchik, John Hopkins University (JHU), USA
9:20 – 9:40	Regionalization and Prediction of Seasonal Precipitation in Ethiopia, Dr. Paul Block and Ying Zhang, University of Wisconsin-Madison, USA
9:40 – 10:00	Experimental Vegetation Outlook model for GHA, Dr. Tsegaye Tadesse, NDMC/UNL, USA
10:20 – 10:40	Drought monitoring and impact assessment using satellite-derived evapotranspiration datasets, Dr. Gabriel Senay, U.S. Geological Survey, USA
10:40 -11:00	Break
11:00 – 11:20	Preliminary analysis on modeling current corn yields in Ethiopia, Dr. Gui Baigorria, A/Professor, SNR/UNL, USA
11:20-11:40	Evaluation of CHIRPS, Dr. Tufa Dinku, IRI/CU, USA
11:40 – 12:00	LIS-HyMAP coupled Flood Modeling and Mapping in the Greater Horn of Africa, Dr. Hahn C. Jung, NASA Goddard Space Flight Center (GSFC), USA
12:00 -12:30	General Discussion: Questions and answers (Including feedback on the models and products)
12:30 – 1:15	**Lunch**

Afternoon Session 1 (1:15 – 3:15): Climate Information for Agriculture and Food Security (Chairpersons: Dr. Gabriel Senay)

1:15 – 1:30	Forecasting seasonal agricultural droughts in East Africa, Dr. Shraddhanand Shukla, University of California, Santa Barbara
1:30 – 1:45	Agricultural research and the use of seasonal climate information in Ethiopia, Jemal Seid, Director, Biometrics, GIS and Agrometeorology Research, Ethiopian Institute of Agricultural Research (EIAR)
1:45 – 2:00	Integrated Agricultural Production and Food Security Forecasting System for East Africa, Dr. Kindie Tesfaye, International Maize and Wheat Improvement Center (CIMMYT), Addis Ababa, Ethiopia
2:00 – 2:15	Drought management plans, policies and climate adaptation: current activities and future visions for Somalia, Mr. Noor M. Abanoor, Mogadishu, Somalia
2:15 – 2:30	Agro-weather tools for climate smart agriculture: EIAR-World Bank Pilot Experience in Ethiopia, Dr. Girma Mamo, Climate and Geo-spatial Research Directorate, Ethiopian Institute of Agricultural Research (EIAR)
2:30 - 2:45	FEWS activities in Ethiopia, Yakob Seid, FEWS National Technical Manager, Addis Ababa, Ethiopia
2:45 – 3:15	General Discussion: Questions and answers
3:15 - 3:30	Break

Afternoon Session 2 (3:30 – 5:00): General Discussion (Chairperson: Dr. Tsegaye Tadesse)

3:30 – 4:15	Discussion of next steps
4:15 – 4:40	Participatory Research: Post-participation survey
4:40 – 5:00	Closing Remarks.