Participatory Research Update

Tonya Haigh, Nicole Wall, Shim Beyene
Project Objective:

- apply seasonal forecast systems to prediction of socially relevant impacts on crops, flood risk, and economic outcomes, and assess the value of these predictions to decision makers.
Participatory Research:

- A collaborative approach to research that bridges the gap between scientific knowledge and experiential knowledge
Opportunities for Participation:

- Workshop in Addis Ababa, July 2014
- Webinar, June 2015
- Survey/Interview with Participants, July 2015
- Workshop #2, July 2015
- Possible webinars and other opportunities throughout 2015/2016
- Workshop #3, 2016
2014 Workshop

- Discussions of
  - Uses of weather and climate information
  - Agencies involved in generating and transforming/packaging climate information
  - Types of climate information used
  - Gaps in information and data
  - Impacts of climate information and climate extremes

http://drought.unl.edu/NewsOutreach/Outreach/Workshops/NasaEthiopia.aspx
### 2014 Workshop: Climate Change Impacts

<table>
<thead>
<tr>
<th>Type of Impact</th>
<th>Top 3 Perceived Impacts from those listed in the Survey</th>
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<tbody>
<tr>
<td>Natural</td>
<td>Biodiversity, water quantity, insect manifestations</td>
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<tr>
<td>Built</td>
<td>Water wells, energy projects, dams, water and climate monitoring equipment (tied for 3rd)</td>
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<tr>
<td>Financial</td>
<td>Agricultural productivity, number of people in poverty, food costs</td>
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<tr>
<td>Political</td>
<td>Political or water-use conflicts, climate adaptation (tied for 1st), water related policy, satisfaction with governmental leadership</td>
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<tr>
<td>Social</td>
<td>Population migration, social networks and organizations, public awareness of climate/water issues (tie for 2nd), public services</td>
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<tr>
<td>Human</td>
<td>Health/disease, quality of life, education and skills, size of labor force, access to medical treatment (3-way tie for 3rd)</td>
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<tr>
<td>Cultural</td>
<td>Sustainability practices, local foods and cuisines, and gender and age-based roles</td>
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Identifying Stakeholder Partners

- Decision makers and/or their advisors representing the local (private, governmental, and NGOs), regional, and international organizations in the GHA.
Climate Information Flow

1. Generate Climate Information
   - National: Meteorological agencies and departments
   - Regional: IGAD Climate Prediction and Application Centre (ICPAC), FEWSNET, African Flood and Drought Monitor, Regional Center for Mapping Resources for Development

2. Process/package/apply/transfer Climate Information
   - Early Warning/Disaster Risk Management (e.g. FEWSNET, FAO)
   - Agriculture Sector (e.g. Ethiopian Institute of Agricultural Research (EIAR) (also production some information), International Development Enterprise (IDE))
   - Water Sector (e.g. International Water Management Institute (IWMI), Ministry of Water, Irrigation, and Energy (MoWR))
   - Research/Academic – developing innovative methods of transfer

3. End Users
   - National Ministries
   - Local and regional agencies
   - NGOs
   - Farmers/Extension
   - Water managers
   - Community leaders
   - Disaster risk managers
   - Response coordinators
   - Others
Decision-making Needs

Agriculture

- Land preparation
- Fertilization
- Irrigation
- When to plant and/or harvest
- Which crops to plant
- Which crop varieties to plant
- Whether to sell/takeoff livestock
- Whether to buy feed/water for livestock
- Manage Tse Tse fly and Dengue
Decision-making Needs

Water Management

- Plan/build water storage
- Plan/build drinking water improvements projects
- Plan/build irrigation projects
- Manage water supply
- Education/outreach
Decision-making Needs

Disaster Risk Management

- Pre-position stocks of food, water, shelter, etc.
- Make changes to policy
- Lead community irrigation or other building projects
- Issue warnings
- Inform populations-at-risk
- Identify vulnerable people and places
- Deploy staff or train volunteers
- Make contingency plans
At what scale is information needed?

- Agriculture
  - Local to GHA region
- Water Management
  - River basin is a primary need
- Disaster Risk Management
  - Field/plot to GHA region
Today’s Discussion

- When do these and other routine activities or decisions typically take place throughout the year?

- When is seasonal drought and flood information needed?

- How accurate of information is necessary in order to be able to use it? Is there a certain level that is a trigger to action?

- What are the opportunities and limitations for providing needed information?
Tomorrow’s discussion

» What do you think it would take to make this information locally relevant to your decision making sector?

» What is changing? What do modelers need to consider for future climate impact models?
Process

- Split into three sectors (by color of dot on back of nametag)
  - Yellow dot – Agriculture (Andualem Shiferaw, Large Hall)
  - Blue dot – Water Management (Paul Block, 8th floor room)
  - Green dot – Disaster Management (Shimelis Beyene, Large Hall)
  - Red dot – Climate provider (placed equally in the above 3 categories)
Process

- Paper, worksheets, and markers
- Please think on your own before discussing
- Write answers on white large paper or worksheet. Enough large papers to split into 2 sub-groups. Some decisions for each sector (from survey) are already listed for discussion.
Process

- Designate note taker/recorder for feedback
- Each group report out Wednesday morning
- Feedback forms

- We appreciate your participation!
Thank you!

Contact information:
- Tonya Haigh, NDMC, thaigh2@unl.edu
- Nicole Wall, NDMC, nwall2@unl.edu