SESSION DESCRIPTION

ID: T14

Title of session:
Enhancing ecosystem services by managing soil for water

Hosts:

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Organisation</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host:</td>
<td>Dr Wolde Mekuria</td>
<td>International Water Management Institute (IWMI)</td>
<td><a href="mailto:w.bori@cgiar.org">w.bori@cgiar.org</a></td>
</tr>
<tr>
<td>Host:</td>
<td>Dr Jennie Barron</td>
<td>International Water Management Institute (IWMI)</td>
<td><a href="mailto:J.Barron@cgiar.org">J.Barron@cgiar.org</a></td>
</tr>
</tbody>
</table>

Abstract:

Africa will be severely affected by climate change. There is significant variation across the continent but overall it is vulnerable because of its high dependence on agriculture and natural resources, and because of its limited adaptive capacity. By 2020, between 75 and 250 million people in Africa are projected to be exposed to increased water stress due to climate change, and in some African countries yields from rain-fed agriculture could be reduced by up to 30% (IPCC 2007; IPCC 2014). Also, it is estimated that, by the 2080s, the proportion of arid and semi-arid lands in Africa is likely to increase by 5–8% (IPCC 2007). This will further adversely affect food security and exacerbate malnutrition. Hence, climate change is an additional burden to sustainable development in Africa and threatens to undermine achievement of the sustainable development goals. Under these circumstances, improving soil characteristics to enhance water availability for agriculture and other ecosystem services (e.g., ground water recharge, dry season flow) is in many places a fundamental option for adapting to climate change, reducing climate change associated risks and enhancing sustainability. This session will provide empirical evidence and key lessons related to land management practices and the implications for improving water availability for agriculture and other ecosystem services. Targeted at practitioners, scientists and policy-makers, the session will provide an opportunity to discuss the importance of investment in soil management at the landscape scale for water and ecosystem services.

Goals and objectives of the session:

The objectives of this session are to discuss:
(a) The challenges of climate change/variability in rainfed soil and water management in SSA,
(b) Implications of soil management at the landscape scale for water and other ecosystem services, and
(c) Emerging issues that need to be addressed to sustain land management practices and minimize the impacts of climate change/variability.

Planned output / Deliverables:
Produce a synthesis of evidence on “best practices” related to enhancing soil capability and restoring degraded natural resources for improved ecosystem services (e.g., water availability, crop water productivity, ground water recharge, dry season flow, etc…)

Conference/session proceeding

Voluntary contributions accepted: YES