

## 4<sup>th</sup> Global Science Conference on CSA - Conference Programme

Registration desk will be open on November 27 from 11.00am to 06.00pm and from 07.30am on the 28<sup>th</sup> November.

Note: the Conference Secretariat will also be open the 27<sup>th</sup> November through all the Conference days and available to provide support and advise on logistical and administration issues including any outstanding registration issues

Monday, 27-November	Tuesday; 28-November			Wednesday; 29-November			Thursday; 30-November		
	Time	Agenda Item	venue	Time	Agenda Item	venue	Time	Agenda Item	venue
<b>Participants arriving</b>  <b>Note: Rooms available between 2pm and 5pm for Self-organised meetings</b>	09:00	Official Opening Session	Hall 1	09:00	South - South; South – North sharing		09:00	Parallel sessions	
	10:00	Technical Keynotes Presentations:		09:15	Regional Examples				
	11:00	Break		11:00	break		11:00	break	
	11:30	Thematic framework and cross cutting issues		11:30	Regional Examples (cont.)		11:30	Reporting back from parallel session	
	13:00	Lunch		13:00	Lunch		13:00	Lunch	
	14:00	Parallel sessions		14:00	Parallel sessions		14:00	Synthesis	
							15:30	Declaration & closing	
	16:15	break		16:15	break		16:15	-	
	16:45	Poster session		16:45	Poster session				

### Legend

Plenary session	Parallel session	Poster session	Break/lunch
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## Detailed Programme

### Monday; 27<sup>th</sup> November 2017

- ✓ Participants arriving
- ✓ Self-organised meetings (If Intending to self-organise a meeting, pre-inform the Conference Organisers)

### Tuesday; 28<sup>th</sup> November 2017

Time	Agenda Item	Venue
08:30	<p><b>Session 1: Opening Session: Moderator - DST</b></p> <p><i>Opening remarks: Dr Ibrahim Mayaki; NEPAD Agency, CEO and Conference Host</i>  <i>Opening remarks: H.E. Sacko Josefa, AUC DREA Commissioner (tbc)</i>  <i>Opening remarks: Dr Akinwumi A. Adesina, AfDB President (tbc)</i>  <i>Opening Statement: Naledi Pando, South Africa Minister, Science &amp; Technology</i></p>	
10:00	<p><b>Session 2: Lead Keynote Presentations - Setting the scene: Moderator - DST</b></p> <ol style="list-style-type: none"> <li>1. Introductions and conference theme and objectives [Jan]</li> <li>2. Lead Keynote 1: Making the Journey: Wageningen-to-Davis-to-Montpellier and now to Johannesburg: What do we know more and better and where to? [Davis/WUR/CIRAD/NEPAD] – Martin Bwalya</li> <li>3. Lead Keynote 2: Challenges and opportunities for scaling up CSA: Gaps and opportunities in connecting science, policy and practice; [Theo de Jager; World Farmers Organisation]</li> <li>4. Lead Keynote 3: Science-policy-practice interface as a route to scaling up CSA: Linking CSA science to policy and practice [Bruce Campbell; CCAFS]</li> </ol> <p>Moderated Plenary Q&amp;A</p>	
11:00	<b>Break</b>	
11:30	<p><b>Session 3: Technical Lead Presentations - Cross cutting issues: ..... Moderator (lady): .....</b></p> <ol style="list-style-type: none"> <li>1. Technical Lead Presentation 1: The policy landscape for accelerated CSA development and up-take; [Ada Ignaciuk, FAO]</li> <li>2. Technical Lead Presentation 2: Multi-sectorial – experiences and opportunities/ challenges to embrace multi-sectorial approaches to enhance and accelerate execution and delivery (vertically and horizontally) [Patrick Caron, CIRAD]</li> <li>3. Technical Lead Presentation 3: Institutional and human skills/competencies to deliver sustained and widespread systemic capacity to innovate and practice CSA; [???</li> </ol> <p>Moderated Q&amp;A with the audience</p> <p>Arrangements for Parallel session</p>	
13:00	<b>Lunch</b>	



	Moderated Q&A with the audience				
13:00	<b>Lunch</b>				
14:00	<b>Session 7: Parallel Side Events Session</b>				
	<u>Parallel Session 7.1</u>  <u>Sub-theme:</u> Climate smart livestock systems  <u>Venue:</u> Room 1 <u>Moderator:</u> <b>Ermias Kebreab, UCD</b>  <u>Presenters:</u> -	<u>Parallel Session 7.2</u>  <u>Sub-theme:</u> Climate smart Aquaculture and Fisheries systems  <u>Venue:</u> Room 2 <u>Moderator:</u> <b>Sloans Chimatiro; WFC</b>  <u>Presenters:</u> -	<u>Parallel Session 7.3</u>  <u>Sub-theme:</u> Climate smart landscape systems  <u>Venue:</u> Room 3 <u>Moderator:</u> <b>Steve Wheeler UCD</b>  <u>Presenters:</u> -	<u>Parallel Session 7.4</u>  <u>Sub-theme:</u> CSA and Biodiversity Conservation  <u>Venue:</u> Room 4 <u>Moderator:</u> <b>USAID</b>  <u>Presenters:</u> -	<u>Parallel Session 7.5</u>  <u>Sub-theme:</u> Localised CSA innovations and practices in combating land degradation and enhancing soil health  <u>Venue:</u> Room 5 <u>Moderator:</u> <b>Nadine Andrieu</b>  <u>Presenters:</u> -
16:15	<b>Break</b>				
16:15 18:30	<b>Open poster and information kiosk session</b>				
18:30	<b>The CSA Papers: Data leaks to help create a climate-smart future</b> Hosted by: CCAFS' Partnership for Scaling Climate-Smart Agriculture Project (P4S)				

### Thursday, 30<sup>th</sup> November 2017

9:00	<b>Session 8: Parallel Side Events Session</b>			
	<u>Parallel Session 8.1</u>  <u>Sub-theme:</u> Enhancing CSA development and up-take: Investment opportunities and funding instruments;  <u>Venue:</u> Room 1 <u>Moderator:</u> <b>[tc]</b>  <u>Presenters:</u> -	<u>Parallel Session 8.2</u>  <u>Sub-theme:</u> Advisory services (and research) to underpin innovations and up-scaling of CSA;  <u>Venue:</u> Room 2 <u>Moderator:</u> <b>Dr Mike Hoffmann, Cornell University</b>  <u>Presenters:</u> -	<u>Parallel Session 8.3</u>  <u>Sub-theme:</u> Issues / research questions for the Agriculture and food systems of 2050;  <u>Venue:</u> Room 3 <u>Moderator:</u> <b>- Marie DeLattre, CIRAD</b>  <u>Presenters:</u> -	<u>Parallel Session 8.4</u>  <u>Sub-theme:</u> Enhancing soil carbon for climate mitigation, climate adaptation and food security;  <u>Venue:</u> Room 4 <u>Moderator:</u> <b>Dr William Horwath; Davis</b>  <u>Presenters:</u> -
11:30	<b>Break</b>			
11:50	<b>Plenary session: Open reflections on the Conference key messages</b>			
12:15	<b>Conference Synthesis and Outcomes: What next</b>			

	<ul style="list-style-type: none"> <li>▪ Component 1: Key lessons in fostering implementation</li> <li>▪ Component 2: What are the implications for science and research</li> <li>▪ Component 3: What are the implications for policy and for practitioners</li> </ul>	
<b>13:00</b>	<b>Lunch</b>	
<b>14:00</b>	<ol style="list-style-type: none"> <li><b>1. Conference Declaration and Conference Outcome Document</b></li> <li><b>2. Host for the 5<sup>th</sup> Global Science Conference on CSA</b></li> <li><b>3. Closing Remarks</b></li> </ol> <p><i>Remarks: Host for the 5<sup>th</sup> Conference</i> <i>Official Closing Statement</i></p>	
<b>15:00</b>	<b>CLOSE</b>	

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## The 4<sup>th</sup> Global Science Conference on Climate Smart Agriculture (4<sup>th</sup> GSC-CSA) Conference Theme and Sub-themes

**28-30 November 2017; Johannesburg; South Africa**

### 1. MAIN CONFERENCE THEME

Theme	Scope
<p><b>“catalysing local innovations and action to accelerate scaling up of CSA”</b></p> <p>(“innovations” used here to include technological, policy, financing aspects as applied within an identified local setting)</p>	<p>Happening just after key global agreements [Sustainable Development Goals - Agenda 2030; COP 21 Paris Climate Agreement and its entry into force in 2016; the 2015 Addis Financing for Development Agreement], <b>the 4<sup>th</sup> GSC-CSA</b> will inevitably focus on IMPLEMENTATION, RESULTS and IMPACT. Hence, the Conference theme seeks to place science at the very core of the “implementation energy” as member states shift attention to delivering on commitments in the above-mentioned agreements.</p> <p>The challenge for science, which the title of the Conference highlights, is the need to catalyse within defined biophysical, agro-ecological, socio-economic and political economy circumstances, locally adapted innovations – technological, policy and management innovations. As the ultimate goal is accelerated and expanded practicing of CSA, science will have to closely interact with other fields essential for action – these include policy, financing, marketing, technology (including Information and Communications Technology (ICT) and social capital.</p> <p>The Conference theme also aims to qualify what is expected when the term “IMPACT” is used – mindful of the fact that for policy makers, there is an urgent need to appraise the impact (indicators, metrics) of CSA on three dimensions, namely [a] agronomic and biophysical-environmental impacts; [b] social impacts and [c] financial-economic impacts. This includes the point that advances in CSA should demonstrate desired change, i.e. change in the “way-farming-is-done”. In this regard, the conference theme will also pay attention to the fact that science innovations are happening as integral part of existing institutional capacity and indeed helping to reform such institutional and political economy arrangements, including the local socio-economic fabric. Additional to national development plans, several sectoral plans, including the Nationally Determined Commitments (NDCs) exist to provide key strategic implementation frameworks, especially as concerns rallying and addressing public policy, national/government coherence and general environment</p> <p>The 4<sup>th</sup> GSC-CSA theme is also intended to link to and build on the discussions and outcomes of the last three CSA Global Science conferences.</p>

### 2. CROSS-CUTTING ISSUES

<p>Cross cutting Issues (watch out for potential overlap especially between “a” and “b”)</p>	<p>a. Policy coherence and alignment in support of accelerated CSA development and up-take</p> <p>b. Multi-sectoriality – experiences and opportunities/challenges to embrace multi-sectorial approaches to enhance and accelerate execution and delivery (vertically and horizontally)</p> <p>c. Institutional and human skills/competencies to delivery sustained and widespread systemic capacity to innovate and practice CSA</p>
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### 3. CONFERENCE SUB-THEMES

The consultation and brainstorming session involving the scientific committee members resulted in fourteen (14) sub-themes. These have been clustered under the following four clusters

The technical lead players will be responsible for:

- Developing guiding questions (checklist) which the session moderators will use to guide the discussions on such matters
- Prepare and arrange presentation in the main plenary session a keynote presentation on the crosscutting issues (why this issue; implications across the themes; etc...)
- Prepare outline to synthesize the outcomes of the discussions for the Conference Outcomes Document

Cluster 1: Local innovation processes and experiences

Cluster 2: Enabling environment and micro-macro interactions

Cluster 3: Partnerships for action – technical and financing

Cluster 4: Foresight and implications for today's policies and investment options

<b>Cluster 1: Local innovation processes and experiences</b>	
<b>Sub-themes</b>	<b>Scope (brief explanation)</b>
1. Climate-smart agriculture and agroecology: Identifying and addressing the convergences	<p>Beyond research and academic terminologies, expose the convergences between CSA and agroecology; Can/do CSA and agroecology share similar objectives? What is common/different in the techniques and management practices to deliver or achieve the value of CSA and the value of agroecology? What would be unique about CSA compared to agroecology?; What can agroecology and CSA approaches learn from each other; How are practitioners / farmers presenting their experiences with CSA and agroecology in comparison to scientific narrative? What messages does science have for practitioners on CSA in relation to agroecology?</p> <p>Within the locally unique agroecology principles and management practices, how to catalyse networking among small holders producers to address broader multi-sectoral issues?</p> <p>Are there other approaches, which should also be considered / reflected in this discussion (e.g. organic farming)?</p>
2. Localised CSA innovations and practices in combating land degradation and enhancing soil health	<p>Highlighting CSA innovations under varied ecosystems and farming levels with a focus on how such practices/innovations are combating land degradation and/or improving land productivity. The sub-theme will aim to highlight context-specific cases of how science interventions have enhanced the relevancy and appropriateness of the innovations. It is expected that deliberations on this sub-theme will contribute to efforts to define principles to ensure the practicing of CSA is addressing food security, land degradation and soil health issues within the local context and circumstances</p> <p>Smallholder landowners is an important characteristic in the scope of this sub-theme. Therefore, the sub-theme will also address community approaches to landscape issues of land degradation; e.g. how do you get small landholders to network to address landscape issues related to CSAs?</p> <p>Globalisation, population growth and urbanisation have in many cases led to monoculture-cropping that has proven to be detrimental to soil health and agricultural biodiversity. However, the genetic diversity of neglected and underutilized species (NUS), their wild relatives and associated traditional knowledge constitute a very important part of agricultural biodiversity, but it is in rapid decline. Conserving and using NUS as a 'localised CSA innovation' to increase the resilience of agroecosystems can be discussed under this sub-theme.</p>
3. Enhancing soil carbon for climate mitigation, climate adaptation and food security	<p>Soil C sequestration is complementary and integral part of CSA as a climate change mitigation strategy and to foster adaptation and food security. Addressing soil carbon issues in relation to soil fertility / productivity and simultaneously to managing of GHG emissions as integral part of agriculture and food systems is now widely accepted by the scientific community. The 4 per mil initiative is an example. However, how to achieve this goal and make it compatible with farmers' practices remains a difficult question. This session will explore the realities that overly the aspirations.</p>
4. Climate smart livestock systems	<p>Livestock systems are significant contributors to greenhouse gas emission but there is much uncertainty in measurements. Soils from tropical pastures can store substantial amounts of carbon and at landscape scale, carbon emissions and sequestration may be balanced. Some livestock management options are well adapted to</p>



### Cluster 1: Local innovation processes and experiences

Sub-themes	Scope (brief explanation)
	climatic stress (e.g. rangelands, transhumance) and options are available to further adapt them and reduce livestock's carbon footprint, e.g. manure management, improved diet.
5. Climate smart Aquaculture and Fisheries systems	
6. Climate smart landscape systems	Heterogeneity at landscape scale provides opportunities for synergy between adaptation and mitigation. Climate smart landscapes can thus be a preferred option when synergy is not possible at plot or farm scale. Climate-smart territories and villages can be designed to incorporate innovative land management options compatible with climate constraints yet highly productive and sustainable
7. CSA and Biodiversity Conservation	<p>Biodiversity is likely to be most vulnerable to climate change and methods to reduce that vulnerability are necessary first steps to incorporate climate change into biodiversity management plans.</p> <p>To tackle the problems that arise because of climate change and the resultant droughts, floods, land degradation, losses of crop and biodiversity, famine, malnutrition and poverty, there is a need for greater awareness on managing the natural resources within CSA systems.</p>

### Cluster 2: Enabling environment and micro-macro interactions

8. Gender and small scale climate-smart food systems	The small-scale CSA food production systems managed by women contribute to about half of the food production on earth (IPCC, 2014). This CSA at small scale improves nutrition of poor families, maintain soils and store CO <sub>2</sub> , reduces waste and grant food at local level. However, there is little technological support and no credit is available for this type of small scale CSA. How can science help this situation?
9. Understanding the Climate-Agriculture and food systems interactions to enhance scaling up of CSA	<p>This sub-theme exposes challenges and opportunities in balancing across what may be competing needs of environmental stewardship, innovative, cost-effective and sustainable agriculture and food systems and socio-economic prosperity. How is the understanding of the concept of food-energy-water nexus important and applicable in advancing locally appropriate climate smart agriculture (CSA) systems</p> <p>Clear and quantitative explanations of the link between food, energy and water could be as inherent in the rationale for CSA. This understanding would, hence, stimulate and help fostering of systems and multi-sectorial approaches which are essential in driving success in CSA up-take</p>
10. An enabling policy environment to achieve CSA	This sub-theme can bring together lessons learned from positive and negative experiences around an “enabling policy environment to achieve CSA” and present key recommendations for policy-makers to achieve CSA implementation, impact and results.
11. Advisory services (and research) to underpin innovations and up-scaling of CSA	<p>CSA is knowledge intensive. It is about mind-set as much as it is about technological techniques and practices. On the other hand, remaining viable and competitive remains dependent on the ability to access, process and respond to increasingly massive amounts of data and information. This sub-theme will showcase advisory and information support services in formal public and/or private sector facilitated systems including farmer-led and managed systems – looking at both the relevancy and capacity on the service support (supply side) and on the capacity and ability to demand and use the data and information – in this case with particular focus on CSA related advisory services and mechanisms</p> <p>The sub-theme aims to also expose and highlight lessons in the two-way linkages between regional and continental advisory and information support services, on one hand, and community level advisory services, on the other. It will show how modern agricultural advisory services are adapting to rapidly growing scope of technologies and demand for real-time data and information</p>



### Cluster 3: Foresight and implications for today's policies and investment options

<p>12. Issues / research questions for the Agriculture and food systems of 2050</p>	<p>Attempt to identify major trend in national and global agriculture and food systems and hence the anticipated scenarios 20, 30, 50 years from now and what this would mean on current understanding and efforts on CSA</p>
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### Cluster 4: Partnerships for action – technical and financing

<p>13. Fostering South-South cooperation in advancing the value of science in scaling-up CSA</p>	<p>To provide a platform for regional CSA initiatives, including the AU-NEPAD Agriculture Climate Change Programme, Climate Smart Agriculture Strategy for Central America and Dominican Republic, ASEAN Climate Resilience Network, and West African CSA Alliance, to showcase and share innovations in their regions. Many of these initiatives are fostering innovations and supporting the scaling up of CSA in their regions, hence, is much to share and learn from each other especially at the level of what is working/not working and WHY.</p>
<p>14. CSA in pursuit of SDGs: Experiences on practical CSA innovations across Agenda 2030 goals</p>	<p>The SDGs (Agenda 2030) elaborates global development focus. It is comprehensive and much of its success depends on the extent to which implementation will embrace integrated approaches across disciplines, sectors (private, public, civil society) and even geographical, political and ecosystem boundaries at different levels (local, national, global)</p> <p>Therefore, to position CSA as an integral element in SDGs implementation, it will be imperative that efforts to scale up CSA takes approaches and mechanisms that foster integration and coordination across the Agenda 2030 goals and outcomes. This sub-theme shares some practical experiences (insights and lessons) on comprehensive integrated approaches CSA initiatives in the light of the SDGs. CSA at the nexus of several SDGs will be emphasized</p> <p>This sub-theme will be handled as a crossing cutting issue linking across the various relevant SDG goals and targets. It will be important to specially highlight the socio-economic and prosperity parameters such as (youth) employment and incomes; women empowerment; food security and nutrition – zero hunger;</p>
<p>15. Financing CSA development and up-take: Investment opportunities and funding instruments</p>	<p>Specific investments or changes in economic-financing incentives are necessary to support the CSA multiple win, e.g. weather index based insurance systems, carbon markets, productive safety nets, debt finance loans, direct investment, grants and subsidies.</p> <p>Other approaches include rallying blended financing (private domestic, international finance and national budgets) in championing CSA financing; how international climate finance, e.g. Green Climate Fund can best complement other – especially domestic – resources for CSA?</p>