

**Title:** National and regional partnerships to support integration of climate change in agriculture and food systems

## 1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2016	RP EA	Radeny, Maren <M.Radeny@cgiar.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2	Complete	ILRI - International Livestock Research Institute - Kenya	Radeny, Maren <M.Radeny@cgiar.org>

### Project is working on

Flaship(s)
F1 (before F4 - Philip): Priorities and Policies for CSA

Region(s)
EA: East Africa

### Project summary

The project supports national, regional, continental and global processes to fully contribute to the UNFCCC work program on agriculture, specifically supporting the African Group of Negotiators (AGN), policy makers, civil society organizations and marginalized groups to build their capacity to participate in policy development to improve food security and climate-smart agriculture. This will involve active engagement and participation in key national, regional, Africa-wide and global events and conferences related to climate change and agriculture (e.g. SBSTA, COP, AMCEN and CCDA). At national level, the project will work with the Ministries of Agriculture and Environment, CGIAR centres, private sector, NGOs and other stakeholders to support the piloting of Climate Smart Agriculture (CSA) priority actions identified in the national adaptation plans (NAPS) in Uganda and National Climate Change Action Plan (NCCAP) in Kenya. A decision support tool for targeting CSA investment in Kenya will also be developed and tested.

## 2. Partners

### Partner #1 (Leader)

**Institution:** ILRI - International Livestock Research Institute

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Radeny, Maren <M.Radeny@cgiar.org>	Activity 2014-122 *Leader* - In 2016 the focus will be on supporting at least 2 countries to access climate finance (GCF and AfDB) Activity 2014-125 *Leader* - Monitoring and documentation of emerging policies, strategies and tools related to climate change and agriculture in East Africa Will also ensure technical oversight for project activities.	HQ
Project Coordinator	Mungai, Catherine <c.mungai@cgiar.org>	Activity 2014-129 *Leader* - Synthesis of NAPA projects to inform the development of integration of climate change in agriculture and food security policies in Uganda, this activity was carried forward to 2016.	HQ
Partner	Atakos, Vivian <v.atakos@cgiar.org>	Leader in activity #4 - Will spearhead the communication efforts related to this project for example through the Climate and Agriculture Network for Africa (CANAN), newsletters, blogs, videos, facilitating media interviews and organizing exhibits in events as required.	HQ

### Partner #2

**Institution:** CIFOR - Center for International Forestry Research

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Rufino, Mariana <m.rufino1@lancaster.ac.uk>	Development and testing of a decision support tool for targeting CSA investments in Kenya, Activity 2014-129 *Partner*. This activity ends in 2015	Nairobi, Kenya

### Partner #3

**Institution:** COMESA - Common Market for Eastern and Southern Africa

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Wamukoya, George <gwamukoya@comesa.int>	Activity 2014-122 *Partner* - Convening the Africa Group of Negotiators (AGN) - ends in 2015 Activity 2014-125 *Partner* - Convening the Africa Group of Negotiators (AGN)	HQ

### Partner #4

**Institution:** ACPC - African Climate Policy Centre

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Denton, Fatima <FDenton@uneca.org>	Activity 2014-122 *Partner* - Convening the Africa Group of Negotiators (AGN)	HQ

### Partner #5

**Institution:** MEWNR - Ministry of Environment, Water and Natural Resources

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Mutai, Charles <drcmutai@gmail.com>	Activity 2014-129 *Partner* - National climate change focal point in Kenya and will support convening of meetings with national partners.	HQ

### Partner #6

**Institution:** MWE - Ministry of Water and Environment

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Maikut, Chebet <chmaikut@gmail.com >	Activity 2014-129 *Partner* - National climate change focal point for Uganda Support the CSA-FP development process in Uganda	HQ

### Partner #7

**Institution:** MAFC - Ministry of Agriculture, Food security and Cooperatives

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Shakwaanande, Natai <aikairuwa@gmail.com >	Support the CSA-FP development process in Tanzania	HQ

### Partner #8

**Institution:** CORAF/WECARD - West and Central African Council for Agricultural Research and Development

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Jalloh, Abdulai <abdulai.jalloh@coraf.org>	Activity 2014-125 *Partner* - Convening the Africa Group of Negotiators (AGN)	HQ

### Partner #9

**Institution:** Pamoja Media-Kenya

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Wanyama, Joshua <joshua@pamojamedia.com>	Support the development and maintenance of the Climate and Agriculture Network for Africa (CANA) knowledge sharing platform Technical support on the use of CANA - this partnership arrangement will end in 2015	HQ

### Partner #10

**Institution:** Ministry of Agriculture, Kenya-Kenya

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Obora, Michael <michaelobora@yahoo.com>	Support the CSA-FP development process in Kenya	HQ

### Partner #11

**Institution:** MAAIF - Ministry of agriculture Animal Industry and Fisheries

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Muwaya, Stephen <smuwaya@yahoo.com>	Support the CSA-FP development process in Uganda	HQ

### Partner #12

**Institution:** VPO - Vice President's Office

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Muyungi, Richard <tanzania37@gmail.com>	Activity 2014-129 *Partner* - National climate change focal point for Tanzania Support the CSA-FP development process in Tanzania	HQ

### Partner #13

**Institution:** PACJA - Pan African Climate Justice Alliance

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Mwenda, Mithika <mithika@pacja.org>	Supports engagement with media practitioners on climate change	HQ

### Partner #14

**Institution:** IDRC - International Development Research Centre

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Adera, Edith <eofwona@idrc.ca>	Supports engagement with the African Group of Negotiators	HQ

## Partner #15

**Institution:** CSAYN - Climate-Smart Agriculture Youth Network

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Ntiokam, Divine <ntiokam2@gmail.com >	Supported engagement with youth.	HQ

## Lessons regarding your partnerships and possible implications for the coming planning cycle:

Year	Lesson(s)
2016	Joint collaboration with government is critical for sustainability and integration and application of research outputs in policy development and implementation. As countries begin to implement their Nationally Determined Contributions, it will be critical to identify entry points for CCAFS research outputs and tools. For instance working with governments and other stakeholders to identify and prioritize suitable climate-smart agricultural interventions to address food nutrition and security.

## Partnerships overall over the last reporting period:

Through old and new partnerships with ministries focusing on climate change and agriculture, Regional Economic Commissions, NGOs, donors, media, private sector and national and international research institutions, CCAFS EA supported engagement on integrating climate change and agriculture policies at global, regional, national and local scales. Of interest is our evolving engagement on youth and climate-smart agriculture with Climate-Smart Agriculture Youth Network (CSA-YN) and media engagement on climate change reporting with the Pan African Climate Justice Alliance (PACJA). Together with the International Livestock Research Institute (ILRI), national partners from Uganda and Kenya explored how to measure agricultural emissions.

### 3. Locations

---

This project is not global

Project level	Latitude	Longitude	Name
Country			Kenya
Country			Uganda
Country			United Republic of Tanzania
Country			Rwanda

## 4. Outcomes

### 4.1 Project Outcomes

**Project Outcome statement:**

African UNFCCC negotiators and CAADP focal points are using CCAFS science to effectively articulate the African position on agriculture and climate change issues and reflecting agreed positions in current and emerging global agreements; and National governments are using scientific evidence and decision support tools to implement CSA programs/actions, including the priority actions identified within the National Adaptation Plans and National Climate Change Action Plans and Strategies resulting in increased investments in the agriculture sectors.

**Annual progress towards outcome (end of 2016\*):** Support the country and AGN submissions SBSTA on agriculture in 2016, specifically submissions on adaptation measures and agricultural practices and technologies, working with CGIAR centres and CCAFS coordinating unit. Contribute a case study on adaptation planning as part of the resources for the AGN.

**Annual progress towards project outcome in the current reporting cycle (2016\*):** CCAFS EA convened two working sessions for African Agriculture and Gender negotiators and experts to prepare submissions to UNFCCC on agriculture and gender issues, working in collaboration with CCAFS WA, African Climate Policy Centre (UNECA/ACPC), Africa Development Bank (AfDB), and AfricaInteract through the International Development Research Centre (IDRC). The submissions were prepared for the 44th and 45th sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) held in Germany and Morocco respectively. The AGN submissions on Agriculture in March 2016 were supported by African Group of Negotiators Expert Support (AGNES) and informed by CCAFS knowledge outputs i) Adaptation Measures in Agricultural Systems: Messages to SBSTA 44 agriculture workshops (CCAFS WP 145) ii) Adaptation measures in agricultural systems and Agricultural practices and technologies to enhance resilience, food security and productivity (WP 146). CCAFS EA contributed a case study on "Adaptation planning in Kenya: Devolving Kenya's National Climate Change Action Plan". AGN agriculture submissions requested for adaptation measures that would create opportunities for agricultural transformation, taking into consideration regional, national and local planning, financing, governance, policy frameworks, value chain development, economic incentives, research and database development, knowledge processes and technology development. Gender submissions focused on 'Gender responsive climate policy with a focus on adaptation and capacity building and training for delegates on gender issues'. The submission stressed provision of guidance for mainstreaming and integrating gender into policy making and implementation with focus on gender integration into NAPs, NDCs, Technology Needs Assessments, NAPAs, and REDD+. Gender indicators should be included in Measuring, Reporting and Verification (MRV) frameworks. During the September session, agriculture negotiators prepared elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement and the outcomes of the four agriculture workshops. A technical report analyzing the NAPA implementation process in Uganda was also finalized.

**How communication and engagement activities have contributed to achieving your Project outcomes:\*** Communication and engagement activities in 2016 supported centre and region led

projects, including bilateral projects. CCAFS EA supported the USAID funded project “Climate Services for Agriculture: Empowering Farmers to Manage Risk and Adapt to a Changing Climate in Rwanda” - under FP2. Activities included dissemination of CSA experiences to policy makers, practitioners, researchers, farmers and media through the CANA platform, quarterly newsletters, blogs and videos. Networking and information sharing during major events and exhibitions at research and policy platforms - CSA Alliance, FARA-AASW, AGRF, CCDA, SBSTA, and COP22. Countries like Kenya are now developing CSA implementation strategies.

**Evidence documents of progress towards outcomes:\***

[https://marlo.cgiar.org/data/ccafs/projects//108/projectOutcome/CCAFS%20East%20Africa%20%20Communication%20Report%202016\\_Final.docx](https://marlo.cgiar.org/data/ccafs/projects//108/projectOutcome/CCAFS%20East%20Africa%20%20Communication%20Report%202016_Final.docx)

**Annual progress towards outcome (end of 2015):** A contribution in the UNFCCC negotiation that reflects the inputs of the AGN on agriculture supported by CCAFS science, including a reflection of AGN input on emerging agreements at the global level; and Sub-national and national governments in Uganda and Kenya using CCAFS science to inform investments in CSA at national and local levels. The compendium of evidence on successful CSA practices across Africa (including gender dimensions on Africa's agriculture in a changing climate) prepared by CCAFS EA in time to contribute towards the Paris Agreements (COP21) and to inform the negotiations on the emerging Sustainable Development Goals (SDGs) and the post-2015 development agenda.

**Annual progress towards outcome (end of 2017):** NA

**Annual progress towards outcome (end of 2018):**

**Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them:\*** Through continued interactions with AGN, ministries of agriculture and environment and working with CG centers and other partners, CCAFS knowledge outputs were used to influence decision making processes by offering technical support to the AGN and contributing to climate change policy platforms at national level. As a result, the AGN made submissions at SBSTA 44 on Gender and Climate Change, Adaptation measures in agricultural systems and Agricultural practices and technologies to enhance resilience, food security and productivity. And prior to SBSTA 45/ COP 22 the AGN prepared elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement and the outcomes of the four agriculture workshops. Building on the CSA-Framework Programs developed in 2015, the Ministry of Agriculture, Livestock and Fisheries in Kenya is finalizing a comprehensive climate-smart agriculture framework while Tanzania through support from FAO developed CSA Guidelines and used the CSA-FP to write a concept to ACSAA. This engagement process was critical to build trust and strong relationships and in the identification of gaps where CCAFS research can be used. For science to inform decision making, continuous engagement with policy/decision makers is essential.

## 4.2 CCAFS Outcomes

**RP EA Outcome 2019:** National Ministries of Agriculture, Environment and parliamentarians are collaborating to make evidence-informed policies for increased investments in climate resilient food systems.

**Indicator #1:** # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019
<p><b>Target value:</b> 3</p> <p><b>Cumulative target to date:</b> 6</p> <p><b>Target narrative:</b> Kenya, Tanzania, and Uganda</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> No explicit gender and social inclusion contribution. The policies and strategies are expected to address gender issues.</p>
2015
<p><b>Target value:</b> 1</p> <p><b>Cumulative target to date:</b> 1</p> <p><b>Target narrative:</b> Kenya</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> &lt;Not Defined&gt;</p>

2016

**Target value:** 2

**Cumulative target to date:** 3

**Target achieved:** 2.0

**Target narrative:** Kenya, Tanzania, and other regional initiatives

**Narrative for your achieved targets, including evidence:** Building on the CSA-FPs developed in 2015, Kenya is finalizing the climate-smart agriculture framework programme (2015 - 2030) to support implementation of the Climate Change Policy and Act enacted in 2016. The plan is being developed by ministries of agriculture and environment for implementation at national and county levels. Tanzania, through support from FAO developed CSA Guidelines and used the CSA-FP to write a concept to ACSAA. Policy makers from Uganda and Kenya explored collaboration with ILRI on improving monitoring of GHG emissions from agriculture to support the Measuring, Reporting and Verification (MRV) frameworks under national communications to UNFCCC.

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** CCAFS EA supported Kenya submissions on gender and climate change to UNFCCC during SBSTA 44 and 45. Initiated an online discussion on CANA platform on youth engagement in CSA during the World Youth Skills Day, culminating in a side-event "Youth Engagement in Climate Smart Agriculture in Africa" during COP22 in Marrakesh, Morocco. Organized a webinar during International Women's Day on "Agricultural Development for Women". Active engagement of women in designing agricultural adaptation measures and decision making processes at different scales (from farm to national level) will improve women's leadership, incomes, empowerment and thus increasing their adaptive capacity and resilience.

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** Policies and strategies are expected to include gender.

## Major Output groups:

- F1 (before F4 - Philip): Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

**RP EA Outcome 2019:** African Group of Negotiators (AGN) and African UNFCCC Focal points are using scientific evidence to effectively articulate the African position on agriculture and climate change issues reflecting also in current and emerging global agreements.

**Indicator #1:** # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs

2019
<p><b>Target value:</b> 4</p> <p><b>Cumulative target to date:</b> 7</p> <p><b>Target narrative:</b> AGN, UNFCCC, COMESA, ACPC</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> Not explicitly</p>
2015
<p><b>Target value:</b> 1</p> <p><b>Cumulative target to date:</b> 1</p> <p><b>Target narrative:</b> COMESA</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> &lt;Not Defined&gt;</p>

2016

**Target value:** 2

**Cumulative target to date:** 3

**Target achieved:** 2.0

**Target narrative:** ACPC CCAFS EA working with COMESA & ACPC to influence the AGN to develop a common position on agriculture for the UNFCCC negotiations).

**Narrative for your achieved targets, including evidence:** Submissions were prepared for the 44th and 45th sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) held in Germany and Morocco respectively. The submissions were informed by CCAFS knowledge outputs and the African Group of Negotiators Expert Support (AGNES). CCAFS scientists presented papers on: Adaptation measures in agricultural systems and Agricultural practices and technologies to enhance resilience, food security and productivity. Prior to COP22, agriculture negotiators prepared elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement and the outcomes of the four agriculture workshops.

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS**

**outcome:** Submission on 'Gender responsive climate policy with a focus on adaptation and capacity building and training for delegates on gender issues workshop on gender and climate change' made during SBSTA 44. The submission stressed the provision of guidance for mainstreaming and integrating gender into policy making and implementation with focus on gender integration NAPs, NDCs, Technology Needs Assessments, NAPAs, and REDD+. In addition gender indicators need to be included into the Measuring, Reporting and Verification (MRV) frameworks.

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** The common position on agriculture should reflect gender and social inclusion.

## Major Output groups:

- F1 (before F4 - Philip): Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

## 4.3 Other Contributions

---

### **Contribution to other CCAFS Impact Pathways:**

NA

### **Collaborating with other CRPs**

<This project does not have a CRP selected yet.>

## 4.4 Case Studies

### Case Study #124

**Title:** State and non-state actors prepare implementation guidelines and concept notes to scale-up CSA in Tanzania

**Year:** 2016

**Project(s):** P108

**Outcome Statement:** Tanzania's Ministry of Agriculture, Livestock and Fisheries (MALF) in collaboration with United Nations Food and Agriculture Organization (FAO) and the stakeholders involved in the Alliance for Climate-Smart Agriculture in Africa (ACSAA) have developed (1) climate-smart agriculture (CSA) implementation guidelines and (2) a government-led cross-stakeholder concept note for CSA investments in Tanzania. With the backing of state and non-state actors, these documents serve to guide practically all future investments and activities on CSA in Tanzania.

**Research Outputs:** 1. Tanzania CSA Program 2015-2025 (CSAP): Policy level document created with a multi-stakeholder process facilitated by COMESA (G. Wamukoya) with facilitation and technical input from CCAFS East Africa (J. Kinyangi) and the Partnership for Scaling CSA Project including ICRAF and CIAT (T. Rosenstock, E. Girvetz, C. Corner-Dolloff, C. Lamanna). CCAFS' team inputs include both co-design and implementation of the facilitated process and technical analysis on climate impacts. <http://canafrica.com/wp-content/uploads/2015/08/TANZANIA-CSA-PROGRAM-Final-version-3-August-2015.pdf> 2. MALF-FAO CSA Guidelines. Outlines CSA options and methods for implementation. Stakeholder validation has occurred but final version has not yet been made publically available. Cites Tanzania CSA Program. <http://www.slideshare.net/mmmviestinta/csa-guideline-a-ladder-to-successful-agriculture-in-tanzania> 3. Alliance for CSA in Africa Concept Note for CSA in Tanzania. Concept note developed by iNGO, government and research partners to solicit investment and state guiding principles for CSA in Tanzania (6 page document available upon request). Cites Tanzania CSA Program.

**Research Partners:** CCAFS East Africa: Catalyzed CSAP, collaboration with COMESA and received initial NEPAD Climate Change Fund Grant (US\$ 150,000) ICRAF: Facilitation and technical input in CSAP workshops, analysis and drafting of document. Staff, travel and writing support to country teams financially supported by CCAFS P56. CIAT: Facilitation and technical input in CSAP workshops, analysis and drafting of document. Staff, travel and writing support to country teams financially supported by CCAFS P56.

**Activities:** This outcome is the result of repeated engagements by CCAFS, ICRAF and CIAT with MALF, iNGOs in ACSAA including CARE, FAO and other partners. These relationships date back at least 6 years to ICRAF and FAO as part of the FAO MICCA program and to extensive work with CCAFS East Africa with government partners in the region but have developed in earnest in more recent times. The CSA Program and subsequently the implementation guidelines and concept note were created through numerous stakeholder processes with repeated interactions. The meetings that occurred are too many to list individually. For the most part, the CSAP was developed between February 2015 and June 2015 and kicked off with a workshop in Arusha attended by all research partners. ICRAF's Tanzania office participated in workshops, development and review of the CSA Guidelines and ACSAA Concept Note.

**Non-Research Partneres:** 1. MALF: Participated and championed processes, first on the Tanzania CSAP and then subsequently on CSA Guidelines and ACSAA Concept Note 2. COMESA: Convened the initial workshops and partners for CSAP 3. FAO: Led the process of developing the CSA Guidelines 4. ACSAA: Convened the country-level working group that developed the concept note with MALF

**Output Users:** MALF, UN FAO and ACSAA for situation analysis of projected climate impact and a fundamental basis for designing entry points for scaling up CSA in Tanzania

**Evidence Outcome:** CSAP displays CCAFS research outputs (Figures 7-11). The CSA Guidelines and ACSAA Concept cite CSAP, as URT (2015) and footnotes 2, 5, and 9 respectively. Also, Figures 1-3 in the CSA Guidelines are outputs of Climate Wizard (Girvetz et al). This is in addition to facilitation and negotiation support.

**Output Used:** Outputs were used directly by non-research partners to formulate the CSAP, ACSAA concept note and the CSA Guidelines. While there are few committments now, there are indications that these documents will underlie future CSA projects in Tanzania (eg, USDA-FAS is investing ~\$3m on CSA and the SOWs cite these documents).

**References Case:** United Republic of Tanzania (2015) Climate-smart Agriculture Program. Ministry of Agriculture Food Security and Cooperatives. United Republic of Tanzania (2016). Climate-Smart Agriculture Guideline. Ministry of Agriculture, Livestock and Fisheries. Alliance for CSA in Africa (ACSAA-Tanzania) (2016). Strengthening climate-resilient livelihoods in Tanzania. 6 June 2016 version.

**Primary 2019 outcome indicator(s):**

- # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

**Link between outcome story and and the FP Outcome(s):** This outcome case directly aligns with the FP2 and RP EA outcomes by illustrating that national and subnational institutions are using best available information to design appropriate CSA responses. This outcome case contributed to changes in behavior of at least three institutions (MALF, FAO, and ACSAA).

**Annex uploaded:**

<https://marlo.cgiar.org/data/ccafs/projects//56/caseStudy/TANZANIA-CSA-PROGRAM-Final-version-3-August-2015.pdf>

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

**F1 (before F4 - Philip):** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

**Brief bullet points of your expected annual 2019 contribution towards the selected MOG:**

[should be 2018, as project ends in 2018.] New joined up policies for implementing Nagoya Protocol and ITPGRFA adopted (or under formal process of consideration for adoption). Local community protocols with women in decision-making roles recognized by national government.

**Brief 2019 plan of the gender and social inclusion dimension of the expected annual output:**

[should be 2018] Local community protocols with women in decision-making roles recognized by national government.

**F1 (before F4 - Philip):** Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

**Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined>

**Brief 2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

## Major Output groups - 2016

**F1 (before F4 - Philip):** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

**Brief bullet points of your expected annual 2016 contribution towards the selected MOG:**

Building on the previous engagement initiatives in EA, to monitor and document the emerging policies and strategies and tools related to climate change and agriculture. Expanded use of the CANA platform to facilitate timely information sharing and engagement between policy makers, researchers and development practitioners, the media and other stakeholders

**Brief summary of your actual 2016 contribution towards the selected MOG:** Four webinars hosted on CANA platform; i) Youth engagement in CSA in Africa ii) Gender and agriculture iii) Media in climate change communication, iv) Climate services in Africa. CANA popularity increased significantly with 30,638 views and 11,540 unique views compared to 2015. Continued national engagement e.g supporting Kenya's draft CSA-FP.

**Brief 2016 plan of the gender and social inclusion dimension of the expected annual output:** No explicit expected annual gender output. However, the policies and strategies are expected to reflect gender and social inclusion and the dialogues will seek to include women researchers.

**Summary of the gender and social inclusion dimension of the 2016 outputs:** Technical support to Kenya's submission on gender and climate change to the UNFCCC during SBSTA 44 and 45. Discussion on Africa Youth Engagement in CSA held on CANA this culminated in a side event during COP 22. During International Women's Day a webinar on CANA discussed agricultural development for women.

**F1 (before F4 - Philip):** Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

**Brief bullet points of your expected annual 2016 contribution towards the selected MOG:** In collaboration with the CU and CGIAR centres, support the AGN submissions to SBSTA on agriculture - on adaptation measures and agricultural practices and technologies, including contributing a case study on adaptation planning in Kenya as part of the resources for the AGN.

**Brief summary of your actual 2016 contribution towards the selected MOG:** AGN agriculture and gender submissions prepared for SBSTA 44 and 45 informed by CCAFS knowledge outputs and CGIAR centers, supported by AGN Expert Support (AGNES). During AGN workshop, CCAFS scientists presented papers on: Adaptation measures in agricultural systems and Agricultural practices and technologies to enhance resilience, food security and productivity.

**Brief 2016 plan of the gender and social inclusion dimension of the expected annual output:** The submissions should incorporate gender and indigenous knowledge.

**Summary of the gender and social inclusion dimension of the 2016 outputs:** AGN submission on 'Gender responsive climate policy with a focus on adaptation and capacity building and training for delegates on gender issues' made during SBSTA 44, stressing on provision of guidance for mainstreaming and integrating gender into policy making and implementation, including integrating gender indicators into MRV frameworks.

### Major Output groups - 2015

**F1 (before F4 - Philip):** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

**Brief bullet points of your expected annual 2015 contribution towards the selected MOG:**

Stakeholders within each of the two countries engaged; awareness raising exercises conducted; formation of a multi-stakeholder platform for overseeing research, policy instrument development and coordination among stakeholders. Four case study/partner communities identified and awareness-raising conducted to enable their meaningful participation in following project activities.

**Brief summary of your actual 2015 contribution towards the selected MOG:** Continued engagement in national and regional policy processes: including a review of the Kenya Agricultural Policy and the EAC Forest Management and Protection Bill; contributed to the development of the country CSA-FPs (Kenya, Uganda and Tanzania) using CGIAR technical support; and national consultative dialogues on preparation of the Kenya INDC.

**Brief 2015 plan of the gender and social inclusion dimension of the expected annual output:**

Local community leaders engaged in national project level planning processes. Women's groups in case study-partner communities contacted and informed about options for participation.

**Summary of the gender and social inclusion dimension of the 2015 outputs:** Four youth from the climate-smart villages participated in the Youth Conference on Community Based Adaptation (CBA) held on April 28th, the outcome statement prepared was presented at COP 21. Also, CCAFS scientists participated in the review of the gender goal in the Sustainable Development Goals (SDGs).

**F1 (before F4 - Philip):** Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

**Brief bullet points of your expected annual 2015 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:** Continued to provide technical support to the African Group of Negotiators (AGN) to prepare submissions on the integration of agriculture into global climate change discussions through the UNFCCC. Specifically, three submissions were made on i) Early Warning Systems, ii) Risks and Vulnerability in Agricultural Systems, iii) Gender and Climate Change.

**Brief 2015 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:** Technical support to the African Group of Negotiators and civil society groups to prepare submissions on gender and climate change to the UNFCCC during SBSTA 42 in June.

### Major Output groups - 2014

**F1 (before F4 - Philip):** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief 2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

**F1 (before F4 - Philip):** Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief 2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

## 5.2 Deliverables

### D2856 - ACCER 2016 awards finalists` gala

#### Main Information

**Type:** Outreach products

**Subtype:** Article for media/Magazine/Other (not peer-reviewed)

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

#### Deliverable dissemination

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<http://kenyanewsagency.go.ke/en/accer-2016-awards-finalists-gala/>

**Open access:** Yes

**License adopted:** No

#### Deliverable Metadata

**Disseminated title:** ACCER 2016 awards finalists` gala

**Description / Abstract:** This article highlights CCAFS - PACJA engagement on the 2016 African Climate Change and Environmental Reporting (ACCER) Awards 2016. The competition which is the Third Edition since its inception in 2013 has contributed to improved climate change reporting among African journalists.

**Publication / Creation date:** 2016-09-01

**Language:** English

**Country:** Kenya

**Keywords:** Media, climate change, Africa, Awards

**Citation:** Kenya News Agency (KNA)

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

#### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

**D2857 - Adoption of CSA through a Gendered Intersectionality Lens: Experiences from Kenya**

**Main Information**

**Type:** Outreach products

**Subtype:** Multimedia

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://www.youtube.com/watch?v=qFr8vioWSIA>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Periscope: Adoption of CSA through a Gendered Intersectionality Lens: Experiences from Kenya

**Description / Abstract:** The video is a conversation on integration of gender in CSA based on the CIRCLE fellowship supported by CCAFS EA.

**Publication / Creation date:** 2016-03-01

**Language:** English

**Country:** Kenya

**Keywords:** Gender, CSA, Climate change, CSVs, Intersectionality

**Citation:** Youtube Video - Periscope

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

## D243 - Constructing Africa's narrative on agriculture and gender in global climate change discussions

### Main Information

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2015

**New expected year:** 2016

**Cross-cutting dimension:**

- Gender
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

### Deliverable dissemination

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/constructing-africa%E2%80%99s-narrative-agriculture-and-gender-global-climate-change-discussions#.WKaveRJ95UO>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

### Deliverable Metadata

**Disseminated title:** Constructing Africa's narrative on agriculture and gender in global climate change discussions

**Description / Abstract:** This blog story documents the process of engaging with the AGN on preparing submissions on agriculture and gender to the UNFCCC. The writing sessions were supported by CCAFS, United National Economic Commission for Africa/African Climate Policy Centre (UNECA/ACPC), Africa Development Bank (AfDB), and AfricaInteract through the International Development Research Centre (IDRC). The working sessions were informed by technical material developed by CCAFS and the African Group of Negotiators Expert Support (AGNES).

**Publication / Creation date:** 2016-04-01

**Language:** English

**Country:** Kenya

**Keywords:** AGN, UNFCCC, Gender, COP, Partnerships

**Citation:** CCAFS Blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Kilungu - Solomon
- Mungai - Catherine
- Nyasimi - Mary

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Other

**D1225 - Uganda's National Adaptation Programme of Action: Implementation, Challenges and Emerging Lessons**

**Main Information**

**Type:** Reports and other publications

**Subtype:** Discussion paper/Working paper/White paper

**Status:** Complete

**Year of expected completion:** 2015

**New expected year:** 2016

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/79935>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Uganda's National Adaptation Programme of Action: Implementation, Challenges and Emerging Lessons

**Description / Abstract:** The agrarian economy of Uganda has been declining due to many factors including climate change. With the majority of Ugandans depending on agriculture and agricultural related activities for their livelihoods, this decline is threatening their survival as well as Uganda's future economic development. The changing climate is further compounding the problem of declining agricultural production, prompting the Government of Uganda (GoU) to take measures to address its the impacts. In 2007, Uganda submitted its National Adaptation Programme of Action (NAPA) to the United Nations Framework Convention on Climate Change (UNFCCC). The submission was made based on Uganda's commitment to address climate change impacts as a signatory to the convention. The NAPA aimed to prioritize and implement initiatives that respond to communities' urgent needs to adapt to climate change. The NAPA identified nine adaptation priority areas. These included community tree growing; land degradation management; strengthening meteorological services; community water and sanitation; water for production; drought adaptation; vectors, pests and disease control; indigenous knowledge and natural resource management and climate change and development planning. This report assesses the status of the NAPA projects in Uganda, identifying the major activities for each of the projects, target beneficiaries and outcomes, including lessons learned and challenges arising from implementing the projects to inform policy. The report is based on a review of existing reports and other published literature from a variety of sources on NAPA in Uganda and interviews of personnel in various government departments, sub-county officials and beneficiaries. Implementation of the NAPA was initiated in 2012 with funding from the Danish government for one-year (2011/12). The NAPA projects were piloted in four districts—Apac, Pallisa, Bundibugyo and Nakasongola—located in different ecosystems (arid, semi-arid, lowland and

highlands). The initiative was led by the Ministry of Water and Environment (MWE), working with different agencies and local government to implement the activities at community level. Activities implemented within each of the projects focused on agriculture, energy and water. The target population for NAPA activities included men and women. Each district implemented on average 8-10 different adaptation actions, however, sustainability of the NAPA projects was not considered from the onset. The NAPA process did not establish a sustainability strategy as part of a comprehensive monitoring and evaluation plan. While the aim of the NAPA projects was to build community resilience, beneficiaries were not ready to adopt the new climate resilient technologies without more assistance from the project at the end of the implementation period, except for water storage tanks and the valley dam technologies. The implementation period of one year was not sufficient to build long-term sustainability of the adaptation activities amongst communities, and the lessons learned have not been documented. Luckily the NAPA process created an opportunity for learning and identifying challenges that communities are facing in adapting to climate change, which were used to develop the National Adaptation Plan (NAP), Intended National Determined Contributions (INDC) and the Climate Smart Agriculture Program (2015-2025). Specifically, some of the activities implemented in NAPA are also outlined in the INDC, CSA program and NAP. Prominent inclusion of climate change adaptation actions have also been made on some of the policies and plans such as the National Development Plan, National Policy for Disaster Preparedness and Management, National Climate Change Policy. At local level, issues of climate change adaptation are difficult to tackle, due to lack of knowledge on the effects and impacts of climate change and budgeting allocation for adaptation actions. As of 2015, despite adoption of the various policies and plans outlined above, Uganda's national government is not allocating funds for local level adaptation. What are some of the emerging lessons from implementing NAPA pilot projects in Uganda? First, involving the community right from vulnerability assessment is essential for identification of adaptation strategies. Second, capacity building for community to manage and implement activities takes time and requires a lot of patience and commitment. Third, capacity building is necessary for local and national government staff to enable them to implement, monitor and evaluate projects with a gender lens. Lastly, community livelihoods are multifaceted and hence one activity is not sufficient to build adaptive capacity. Therefore, local governments need to promote multiple interventions that address climate change that build community resilience.

**Publication / Creation date:** 2017-02-01

**Language:** en

**Country:** UGANDA

**Keywords:** CLIMATE CHANGE, AGRICULTURE, FOOD SECURITY, AGRICULTURAL POLICIES

**Citation:** Nyasimi M, Radeny M, Mungai C, Kamini C. 2016. Uganda's National Adaptation Programme of Action: Implementation, Challenges and Emerging Lessons. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

**Handle:** <http://hdl.handle.net/10568/79935>

**DOI:** <Not Defined>

**Creator / Authors:**

- Nyasimi, - Mary
- Radeny, - Maren
- Mungai, - Catherine
- Kamini, - Cornelius

## Deliverable Quality check

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

D2638 - Integrating climate change in agriculture and food security policies and strategies

**Main Information**

**Type:** Reports and other publications

**Subtype:** Discussion paper/Working paper/White paper

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Capacity Development

**Gender level(s):**

- Development of innovations/ interventions/ policies with explicit gender targeting

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/78781>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Integrating climate change in agriculture and food security policies and strategies: Experiences and lessons from East Africa

**Description / Abstract:** Several African countries are proactively putting in place policies and strategies for climate change adaptation and mitigation in agriculture at national and local levels. In order for policy makers to develop and implement successful climate change policies and programs, they require reliable and timely information on the uncertainties and complexities related to climate change, including risks, and vulnerability. In East Africa, CCAFS scientists have been working with policy makers from 2011 to identify suitable policy and institutional frameworks that support evidence based policy and program development. This entails making available evidence from research to support policy development and implementation at different levels—local, national, regional and global.

**Publication / Creation date:** 2017-01-01

**Language:** en

**Country:** KENYA

**Keywords:** CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY

**Citation:** Mungai C, Radeny M, Nyasimi M, Atakos V. 2016. Integrating climate change in agriculture and food security policies and strategies: Experiences and lessons from East Africa. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

**Handle:** <http://hdl.handle.net/10568/78781>

**DOI:** <Not Defined>

**Creator / Authors:**

- Mungai, - Catherine
- Radeny, - Maren
- Nyasimi, - Mary
- Atakos, - Vivian

### Deliverable Quality check

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

**D2639 - Comparing smallholder farmers' perception of climate change with meteorological data: Case study from southwestern Nigeria.**

**Main Information**

**Type:** Articles and Books

**Subtype:** Journal Article (peer reviewed)

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- N/A

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<http://www.sciencedirect.com/science/article/pii/S2212094716300755>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Comparing smallholder farmers' perception of climate change with meteorological data: A case study from southwestern Nigeria

**Description / Abstract:** This paper examines smallholder farmers' perceptions of climate change, climate variability and their impacts, and adaptation strategies adopted over the past three decades. We use ethnographic analysis, combined with Cumulative Departure Index (CDI), Rainfall Anomaly Index (RAI) analysis, and correlation analysis to compare farmers' perceptions in Southwestern Nigeria with historical meteorological data, in order to assess the way farmers' observations mirror the climatic trends. The results show that about 67% of farmers who participated had observed recent changes in climate. Perceptions of rural farmers on climate change and variability are consistent with the climatic trend analysis. RAI and CDI results illustrate that not less than 11 out of 30 years in each study site experienced lower-than-normal rainfall. Climatic trends show fluctuations in both early growing season (EGS) and late growing season (LGS) rainfall and the 5-year moving average suggests a reduction in rainfall over the 30 years. Climatic trends confirmed farmers' perceptions that EGS and LGS precipitations are oscillating, that rainfall onset is becoming later, and EGS rainfall is reducing. Overall impacts of climate change on both crops and livestock appear to be highly negative, much more on maize (62.8%), yam (52.2%), poultry (67%) and cattle (63.2%). Years of farming experiences and level of income of farmers appear to have a significant relationship with farmers' choice of adaptation strategies, with  $r=0.60@ p0.05$  and  $r=0.520@ p0.05$  respectively. The study concluded that farmers' perceptions of climate change mirror meteorological analysis, though their perceptions were based on local climate parameters. Smallholder farmers are particularly vulnerable to climate change since the majority of them do not have enough resources to cope.

**Publication / Creation date:** 2016-12-01

**Language:** English

**Country:** Nigeria

**Keywords:** Climate change; Smallholder farmers; Perception analysis; Nigeria

**Citation:** Ayanlade A, Radeny M, Morton JF(nd). 2016. Comparing smallholder farmers' perception of climate change with meteorological data: A case study from southwestern Nigeria. Weather and Climate Extremes.

**Handle:** <Not Defined>

**DOI:** <https://doi.org/10.1016/j.wace.2016.12.001>

**Creator / Authors:**

- Ayanlade - Ayansina
- Radeny - Maren
- Morton - John F

**Publication Metadata**

**Volume:**

**Issue:**

**Pages:**

**Journal/Publisher name:** Weather and Climate Extremes

**Indicators for journal articles:** <Not Defined>

**Publication acknowledge:** No

**Flagships contribution:**

**Deliverable Quality check**

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible

**D2640 - Rural Farmers' Attitude to Climate Change Adaptation Techniques in Southwestern Nigeria.**

**Main Information**

**Type:** Outreach products

**Subtype:** Presentation/Poster

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- N/A

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<http://www.slideshare.net/ISPC-CGIAR/rural-farmers-attitude-to-climate-change-adaptation-techniques-in-southwestern-nigeria>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Rural Farmers' Attitude to Climate Change Adaptation Techniques in Southwestern Nigeria. Presented during the Science Forum 2016, 12 -14 April, 2016. Addis Ababa, Ethiopia:

**Description / Abstract:** Despite great advancement of climate science in understanding and dealing with the problem of climate change and its impacts on agricultural sector at the international level, awareness and the concern for the problem at local levels, especially among the rural farmers in Africa remains crucial.

**Publication / Creation date:** 2016-04-01

**Language:** English

**Country:** Ethiopia

**Keywords:** Adaptation, attitude, Nigeria

**Citation:** Ayansina A, Radeny M. 2016. Rural Farmers' Attitude to Climate Change Adaptation Techniques in Southwestern Nigeria. Presented during the Science Forum 2016, 12 -14 April, 2016. Addis Ababa, Ethiopia: CCAFS

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Ayanlade - Ayansina
- Radeny - Maren

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible

**D2641 - Active communication of CCAFS research through expanded use of the CANA platform**

**Main Information**

**Type:** Outreach products

**Subtype:** Website

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:** <http://canafrica.com/>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Climate and Agriculture Network for Africa (CANA)

**Description / Abstract:** An online knowledge sharing platform disseminating climate change and agriculture related information with a focus on Africa.

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** Kenya

**Keywords:** English

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Catherine - Mungai
- Tabitha - Muchaba

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other
---	------------------------------------	-------

**D2833 - Post-COP22 roadmap: Kenyan stakeholders explore implementation of the Paris Agreement**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/post-cop22-roadmap-kenyan-stakeholders-explore-implementation-paris-agreement#.WKapyRJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Post-COP22 roadmap: Kenyan stakeholders explore implementation of the Paris Agreement

**Description / Abstract:** This blog highlights Kenya's commitment to address climate change by putting in place policies and plans that will help enhance resilience to climate change and inform low carbon development. The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) East Africa program and the Climate Change Directorate at Kenya's Ministry of Environment and Natural Resources hosted a stakeholder meeting in Nairobi on 13 December 2016 to discuss the outcome of the 22nd United Nations Framework Convention on Climate Change Conference of Parties (COP22) and identify specific actions going forward. The stakeholders were from research, policy, private sector and civil society organizations.

**Publication / Creation date:** 2016-12-01

**Language:** English

**Country:** Kenya

**Keywords:** Kenya, Policy, Implementation

**Citation:** CCAFS Blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

## Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

D2642 - The SmartAG partner: CCAFS East Africa Quarterly Newsletter, January – March 2016

**Main Information**

**Type:** Outreach products

**Subtype:** Newsletter

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/73440>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** The SmartAG partner: CCAFS East Africa Quarterly Newsletter, January – March 2016

**Description / Abstract:** We are pleased to share with you the second issue of our quarterly newsletter in 2016. We present key highlights from ongoing research and policy engagement initiatives. In March, the African Group of Negotiators (AGN) convened a working session to prepare submissions on issues related to agriculture for the upcoming Bonn Climate Change Conference (SBI 44 and SBSTA 44). Read about proposed adaptation measures and the need for gender inclusive policies. To celebrate International Women's Day on 8 March, CCAFS EA organized a webinar on achieving gender parity in African agricultural systems. Learn about case studies from Africa presented during the webinar. From Kenya, key stakeholders working on climate change recently held a post COP21 meeting to better understand the 2015 Paris climate agreement. Read about opportunities presented for the country in this agreement. Uganda has developed guidelines to mainstream climate change into the agriculture sector policies, plans, programs and activities. Read about this process and why it is important for the country. Common beans are vital for Africa's struggle to achieve food security. But what determines farmers' preference and adoption of bean varieties? Find out from a study by researchers from Pan Africa Bean Research Alliance (PABRA) in Uganda. Also, see how farmers and researchers in Uganda are out scaling climate-smart agriculture (CSA). In Rwanda, we recently launched an exciting new project on climate services for agriculture. Find out how this collaborative project will transform Rwanda's farming communities and national economy through

improved climate risk management. Finally, CCAFS EA early career scientist Catherine Mungai received a best paper award at the symposium on climate change adaptation in Africa held in Addis Ababa, Ethiopia. Read more about her paper and others from CCAFS, highlighting ongoing work in CCAFS climate-smart villages.

**Publication / Creation date:** 2016-05-01

**Language:** en

**Country:** ETHIOPIA,KENYA,RWANDA,TANZANIA,UGANDA

**Keywords:** AGRICULTURE,ADAPTATION,FOOD SECURITY,CLIMATE SERVICES,CLIMATE CHANGE

**Citation:** CCAFS. 2016. The SmartAG partner: CCAFS East Africa Quarterly Newsletter, January – March 2016. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

**Handle:** <http://hdl.handle.net/10568/73440>

**DOI:** <Not Defined>

**Creator / Authors:**

- CGIAR Research Program on Climate Change, - Agriculture and Food Security

### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

**D2643 - The SmartAG partner: CCAFS East Africa Quarterly Newsletter, April – June 2016**

**Main Information**

**Type:** Outreach products

**Subtype:** Newsletter

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/77047>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** The SmartAG partner: CCAFS East Africa Quarterly Newsletter, April – June 2016

**Description / Abstract:** We are pleased to share with you our quarterly newsletter. We present key highlights from ongoing research and policy engagement from April to June 2016. In May, policy makers from Kenya’s Climate Change Directorate and Uganda’s Climate Change Department, visited CCAFS and International Livestock Research Institute (ILRI) to dialogue on tools for greenhouse gas (GHG) measurements and inventories for East Africa. Find out more about this meeting. Kenya has recently put in place a Climate Change Act, 2016 which is a comprehensive climate change law. Within the Act, a National Climate Change Council will be set up to coordinate the country’s climate change efforts. Read more about the Act. From Uganda, a platform to prioritize local climate-smart agriculture options has been launched in Mbale district. Read an update from the Policy Action for Climate Change Adaptation project. At the seventh Africa Agriculture Science Week (AASW7) held from 13 – 16 June in Kigali, Rwanda, stakeholders discussed exciting opportunities to make climate services available to farmers in Rwanda. Read key messages emerging from a side event organized by CCAFS and partners. Read highlights on recent outcomes and innovations from CCAFS partners from the CCAFS 2015 annual report. A recently released paper by ILRI scientists helps us understand small ruminant production, based on lessons from the CCAFS climate-smart villages (CSVs) of Nyando in Western Kenya. From the Lushoto CSVs in Tanzania, CCAFS Working Paper 173 compiles lessons from the Farms of the Future approach on enhancing farmers adaptive capacity through learning journeys.

**Publication / Creation date:** 2016-09-01

**Language:** en

**Country:** ETHIOPIA,KENYA,RWANDA,TANZANIA,UGANDA

**Keywords:** CLIMATE SERVICES,ADAPTATION,AGRICULTURE,CLIMATE CHANGE,FOOD SECURITY,FOOD SECURITY

**Citation:** CCAFS. 2016. The SmartAG partner: CCAFS East Africa Quarterly Newsletter, April – June 2016. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

**Handle:** <http://hdl.handle.net/10568/77047>

**DOI:** <Not Defined>

**Creator / Authors:**

- CGIAR Research Program on Climate Change, - Agriculture and Food Security

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

**D2644 - The SmartAG partner: CCAFS East Africa Quarterly Newsletter, July - September 2016**

**Main Information**

**Type:** Outreach products

**Subtype:** Newsletter

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/78574>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** The SmartAG partner: CCAFS East Africa Quarterly Newsletter, July - September 2016

**Description / Abstract:** We are pleased to share with you the third issue of the SmartAg Partner quarterly newsletter, highlighting ongoing research and policy engagement from July to September 2016. To mark World Youth Skills Day (WYSD) on July 15, CCAFS held an online discussion forum on Youth Engagement in Climate Smart Agriculture (CSA) and the 2030 Agenda for Sustainable Development. Find out what skills young farmers need to adopt CSA. CCAFS also organized a farmer field day in partnership with Friends of Katuk Odeyo (FOKO) and Kapsokale, two key communitybased organizations (CBOs) working at the Nyando climate-smart villages (CSVs). Also from the field, find out how Galla goats are changing the lives of farmers in Nyando and how improved fodder is contributing towards reducing climate risks. In September, the Africa Group of Negotiators (AGN) in partnership with African Group of Negotiators Expert Support (AGNES) convened a pre-COP meeting in Nairobi to discuss the possible elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement. Read more about the critical issues identified by the AGN for discussion at the 22nd session of the Conference of the Parties (COP22). In Uganda, CCAFS researchers engaged with policymakers to discuss the need for gender responsive policies and strategies to respond to climate change in agriculture. Find out more about the discussions. Within the framework of the CCAFS project "Policy Action for Climate Change Adaptation (PACCA)", the International Institute of Tropical Agriculture (IITA) has partnered with the Parliamentary Forum on

Climate Change and the Parliamentary Forum on Food Security, Population and Development to strengthen the national research-base on agriculture, climate change and food security in the country. Learn more from the outcomes of this partnership. In Rwanda, meteorology experts were trained on the application of the Climate Predictability Tool (CPT). Read more about the training and development of downscaled seasonal forecasts. A recently released working paper by CCAFS and ICRAF compiles evidence-based opportunities for out-scaling climate-smart agriculture in East Africa from 175 peer-reviewed and grey literature studies.

**Publication / Creation date:** 2017-01-01

**Language:** en

**Country:** KENYA

**Keywords:** CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY

**Citation:** CCAFS. 2016. The SmartAG partner: CCAFS East Africa Quarterly Newsletter, July - September 2016. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

**Handle:** <http://hdl.handle.net/10568/78574>

**DOI:** <Not Defined>

**Creator / Authors:**

- CGIAR Research Program on Climate Change, - Agriculture and Food Security

### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

**D2645 - Implementing and Monitoring Community Based Adaptation Interventions. Local Level Perspectives**

**Main Information**

**Type:** Articles and Books

**Subtype:** Book chapter (peer reviewed)

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<http://www.acts-net.org/images/CBA/CBA-Cover-final.pdf>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Implementing and Monitoring Community Based Adaptation Interventions. Local Level Perspectives: Enhancing Adaptation to climate Change in developing countries through community – based adaptation.

**Description / Abstract:** Adaptation to climate change is a priority for local communities in developing countries who suffer most from the impacts of climate change. As the Paris Agreement enters the implementation phase, it is time to shift focus from global and national negotiations to sub-national and local level actions to enable adaptation technologies and resources reach where they are most needed. This book presents evidence on how adaptation technologies, resources and expertise can get devolved to the local levels through Community-Based Adaptation (CBA) approaches. Evidence presented in the book is drawn from a wide array of stakeholders whose experiences and lessons have informed the key messages in book. The illustrative experiences and lessons on CBA in this book provide a foundation for enhancing south-south knowledge sharing and building institutional frameworks for financing and scaling in CBA.

**Publication / Creation date:** 2016-12-01

**Language:** English

**Country:** Kenya

**Keywords:** Community Based Adaptation, monitoring

**Citation:** Lalisa A Duguma, Joanes Atela, Peter A Minang, Anna Colom, Catherine Mungai (2016). Implementing And Monitoring Community Based Adaptation Interventions. Local Level Perspectives :Enhancing Adaptation to climate Change in developing countries through community – based adaptation in Enhancing Adaptation to climate change in developing countries through community-based adaptation, Joanes Atela et al. 2016 ACTS Press. African Centre for Technology Studies (ACTS), Nairobi, Kenya

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Duguma - Lalisa
- Atela - Joanes
- Minang - Peter
- Colom - Ann
- Mungai - Catherine

### Publication Metadata

**Volume:**

**Issue:**

**Pages:**

**Journal/Publisher name:** African Center for Technology Studies (ACTS), Nairobi, Kenya

**Indicators for journal articles:** <Not Defined>

**Publication acknowledge:** No

**Flagships contribution:**

### Deliverable Quality check

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

**D2837 - From food to money in the pocket: Engaging African youth in climate-smart agriculture**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/food-money-pocket-engaging-african-youth-climate-smart-agriculture#.WKapxhJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** From food to money in the pocket: Engaging African youth in climate-smart agriculture

**Description / Abstract:** This blog documents CCAFS EA engagement on African Youth and CSA focusing on the online discussion and the side event held during COP 22.

**Publication / Creation date:** 2016-12-01

**Language:** English

**Country:** Kenya

**Keywords:** Youth, CSA, SDGs, Africa

**Citation:** CCAFS Blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Muchaba - Tabitha
- Mungai - Catherine
- Ntiokam - Divine

**Partners contributing to this deliverable:**

Institution	Partner	Type
-------------	---------	------

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible
---	---	-------------

**D2839 - Towards excellence in climate change and environmental reporting in Africa**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/towards-excellence-climate-change-and-environmental-reporting-africa#.WKapvxJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Towards excellence in climate change and environmental reporting in Africa

**Description / Abstract:** This blog story documents CCAS EA engagement with the media on reporting climate change issues. It also highlights the outcomes of the webinar on discussing how to improve interactions between the media and scientists.

**Publication / Creation date:** 2016-11-01

**Language:** English

**Country:** Kenya

**Keywords:** Media, climate change, Africa

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Muchaba - Tabitha
- Mungai - Catherine
- Atakos - Vivian
- Radeny - Maren

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



**D2840 - Towards sustainable greenhouse gas inventories for Kenya and Uganda**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/towards-sustainable-greenhouse-gas-inventories-kenya-and-uganda#.WKapoBJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Towards sustainable greenhouse gas inventories for Kenya and Uganda

**Description / Abstract:** On 3 and 4 May 2016, policy makers from climate change departments of Kenya and Uganda met with scientists from the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and the International Livestock Research Institute (ILRI) for discussions on greenhouse gas (GHG) emissions reporting. This blog highlights the key issues discussed.

**Publication / Creation date:** 2016-05-01

**Language:** English

**Country:** Kenya

**Keywords:** Kenya, Uganda, GHG, Policy

**Citation:** CCAFS Blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Atakos - Vivian
- Mungai - Catherine

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



D2841 - CCAFS early career scientist wins best paper award at climate change conference

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/news/ccafs-early-career-scientist-wins-best-paper-award-climate-change-conference#.WKapihJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** CCAFS early career scientist wins best paper award at climate change conference

**Description / Abstract:** As part of the CIRCLE initiative, Catherine Mungai, a researcher at CCAFS has won an award for best paper at the Symposium on Climate Change Adaptation in Africa held in Addis Ababa, Ethiopia between 21-23 February 2016. The purpose of the symposium was to showcase experiences from research, field projects and best practice in climate change adaptation in African countries, which may be useful or implemented in other countries in the continent. Out of the 600 papers submitted for the symposium, three CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) East Africa papers—focusing on emerging lessons from the Nyando Climate-Smart Villages in Western Kenya— were part of the 65 that made the final cut.

**Publication / Creation date:** 2016-03-01

**Language:** English

**Country:** Kenya

**Keywords:** Gender, CSA, Climate change, CSVs

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Mungai - Catherine

- Kimeli - Philip

### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

D1179 - Existing partnerships strengthened and new partnerships developed

Main Information

**Type:** Governance, Administration & Management

**Subtype:** Events

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

Deliverable dissemination

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/more-action-less-talk-african-negotiators-call-investments-agricultural-transformation#.WKapuxJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

Deliverable Metadata

**Disseminated title:** More action, less talk: African negotiators call for investments in agricultural transformation

**Description / Abstract:** This blog is an example of the engagement process supported by CCAFS and partners. In September, the AGN agriculture negotiators in partnership with African Group of Negotiators Expert Support (AGNES) convened a pre-COP meeting in Nairobi to discuss the possible elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement. The meeting was facilitated by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) East Africa Program and the International Development Research Centre (IDRC). CCAFS has been working with the AGN since 2011 and this session was critical to inform the next phase of engagement following the UNFCCC in session workshops.

**Publication / Creation date:** 2016-10-01

**Language:** English

**Country:** Kenya

**Keywords:** AGN, UNFCCC, COP, Partnerships

**Citation:** CCAFS Blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Mungai - Catherine
- Nyasimi - Mary

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible
ILRI - International Livestock Research Institute	Mungai, Catherine<c.mungai@cgiar.org>	Other

D1371 - Emerging policies on climate change and agriculture in East Africa

**Main Information**

**Type:** Reports and other publications

**Subtype:** Research workshop report

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/news/climate-change-bill-signed-law-kenya#.WKappBJ96WZ>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:**

<https://ccafs.cgiar.org/news/climate-change-bill-signed-law-kenya#.WKappBJ96WZ>

**Description / Abstract:** This blog story highlights developments made on the enactment of the Climate Change bill in Kenya.

**Publication / Creation date:** 2016-05-01

**Language:** English

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Atakos - Vivian

**Deliverable Quality check**

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Other
---	--	-------

**D2843 - Kenya stakeholders meet, review Paris Climate agreement**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/news/kenya-stakeholders-meet-review-paris-climate-agreement#.WKaphBJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Kenya stakeholders meet, review Paris Climate agreement

**Description / Abstract:** Key stakeholders working on climate change in Kenya recently met for a post COP21 meeting to better understand the new 2015 climate agreement as well opportunities presented for the country. During the meeting, stakeholders - from research, policy, private sector and civil society - discussed the Paris agreement highlighting the need to come up with specific action plans including resource mobilization strategies for the country.

**Publication / Creation date:** 2016-02-01

**Language:** English

**Country:** Kenya

**Keywords:** Kenya, Policy, COP 21

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Atakos - Vivian
- Nyasimi - Mary

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



**D2844 - Achieving gender parity in African agricultural systems**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/achieving-gender-parity-african-agricultural-systems#.WKapjRJ96WZ>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Achieving gender parity in African agricultural systems

**Description / Abstract:** To commemorate International Women's Day, the Climate and Agriculture Network for Africa (CANAN) and partners, among them the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), held a webinar on achieving gender parity in African agricultural systems linking to the 2015 Sustainable Development Goals (SDGs) and the Paris Climate Agreement. The aim of the webinar was to highlight issues that are central to agricultural development for women in Africa at local, national and international levels.

**Publication / Creation date:** 2016-03-01

**Language:** English

**Country:** Kenya

**Keywords:** Women, SDGs, parity

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Nyasimi - Mary
- Kilungu - Solomon

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

**D1373 - Active communication of CCAFS research through expanded use of the CANA platform, webinars, blogs, newsletter**

**Main Information**

**Type:** Outreach products

**Subtype:** Website

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Gender
- Youth
- Capacity Development

**Gender level(s):**

- Diagnostics/analysis to understand gender issues

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:** <http://canafrica.com/>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Climate and Agriculture Network for Africa ([www.canafrica.com](http://www.canafrica.com))

**Description / Abstract:** An online knowledge sharing platform disseminating climate change and agriculture related information with a focus on Africa.

**Publication / Creation date:** <Not Defined>

**Language:** English

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Mungai - Catherine
- Muchaba - Tabitha

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other
---	------------------------------------	-------

**D2845 - Reaching a million farmers in Rwanda with useful climate services**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/reaching-million-farmers-rwanda-useful-climate-services#.WKapIRJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Reaching a million farmers in Rwanda with useful climate services

**Description / Abstract:** This blog covers the launch of the Rwanda Climate Services for Agriculture project under FP2.

**Publication / Creation date:** 2016-04-01

**Language:** English

**Country:** Rwanda

**Keywords:** climate information services, Rwanda, meteorology

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Atakos - Vivian

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

**D2846 - Managing uncertainty in a changing climate: what's the role of climate services?**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/managing-uncertainty-changing-climate-whats-role-climate-services#.WKaphrJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Managing uncertainty in a changing climate: what's the role of climate services?

**Description / Abstract:** The CGIAR Research Program on climate Change, Agriculture and Food Security (CCAFS), the Center for International Tropical Agriculture (CIAT), the Rwanda Agriculture Board (RAB) and the Rwanda Meteorological Agency (Meteo-Rwanda) held a side event on strengthening climate services for agricultural transformation in Africa on the sidelines of AASW7 in Kigali. The event created an opportunity for policymakers, scientists and technical experts from the CGIAR and other research institutions, as well as the National Meteorological and Hydrological Services (NMHSs) and other stakeholders to learn from and build on examples of good practice in farmer-focused climate information and advisory services in Rwanda and Senegal, and to share elements of good practice in agricultural planning and food security management in the face of a variable and changing climate.

**Publication / Creation date:** 2016-06-01

**Language:** English

**Country:** Rwanda

**Keywords:** Climate services, Rwanda, uncertainty

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Mungai - Catherine
- Atakos - Vivian
- Hansen - Jim

## Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

**D2847 - Building capacity of intermediaries to avail climate services to farmers**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/news/building-capacity-in-termediaries-avail-climate-services-farmers#.WKaptxJ96WZ>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Building capacity of intermediaries to avail climate services to farmers

**Description / Abstract:** From 6 to 10 June 2016, CCAFS organized a training of trainers session on the Participatory Integrated Climate Services for Agriculture (PICSA) approach in Nyamata, in the outskirts of Kigali, Rwanda. The training session was part of key activities under the recently launched Rwanda Climate Services for Agriculture project, funded by the United States Agency for International Development (USAID Rwanda).

**Publication / Creation date:** 2016-07-01

**Language:** English

**Country:** Rwanda

**Keywords:** Climate services, Rwanda, Training

**Citation:** CCAFS blog

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:**

- Atakos - Vivian

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Mungai, Catherine <c.mungai@cgiar.org>	Responsible

# ILRI-F1 (before F4 - Philip)-EA-P108 - Research Project

Submitted on 2017-02-18 at 07:45 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



## 5.3 Project Highlights

Project highlight 194	
<b>Title:</b> Youth Engagement in Climate-Smart Agriculture and the 2030 Agenda	
<b>Author:</b> Tabitha Muchaba and Catherine Mungai	<b>Subject:</b> Youth, Climate-Smart Agriculture (CSA), Sustainable Development Goals (SDGs)
<b>Publisher:</b> CCAFS EA	<b>Year reported:</b> 2016
<b>Project highlights types:</b> <ul style="list-style-type: none"> <li>• Gender and social inclusion</li> <li>• Innovative non-research partnerships</li> <li>• Policy engagement</li> </ul>	<b>Is global:</b> No
<b>Start date:</b> Jan 2016	<b>End date:</b> Dec 2016
<b>Keywords:</b> Youth, gender, science-policy, agriculture, learning platform, knowledge sharing	<b>Countries:</b>
<p><b>Highlight description:</b> Given the increased focus on youth in the 2030 development agenda, and the increasing dependence on agriculture for economic development and food security, this initiative explored practical solutions which governments and institutions can apply to engage African youth in climate-smart agriculture (CSA) as a climate risk management approach. Through online platforms and face-to-face engagements, the activity focused on creating a platform for African youth, experts and stakeholders working with the youth to identifying entry points for investments targeting African youth. Over the years, African youth have proved their innovation potential in promoting and implementing climate change adaptation projects. However, they face various challenges that include low technical capacity and education, high rates of poverty and lack of financial resources. Within the context of agriculture, African youth continue to battle challenges associated with the negative perception of agriculture as a “difficult” job with little returns and also lack of access to land and markets. Using examples from the CCAFS climate-smart villages in Nyando, this activity demonstrated how stakeholders can engage youth in implementing climate change response strategies in the agricultural sector. In 2015 two global policy agreements relating to climate change and sustainable development were made: the 2015 Paris agreement and the 2030 sustainable development agenda (SDGs). As countries continue to develop policy and implementation strategies to respond to the global agenda, it is essential to ensure that the youth are brought on board.</p>	
<p><b>Introduction / Objectives:</b> For countries to succeed in achieving the SDGs and addressing the impacts of climate change, governments and development partners must seek out an active and substantive engagement of young women and men from diverse backgrounds in national-level planning, implementation, and monitoring. Objectives: • Explore the contribution of African youth to CSA and showcase examples of youth taking the lead on CSA • Explore resource and skills gaps for youth in terms of CSA adoption and implementation • Identify available opportunities and incentives to promote youth engagement in CSA</p>	
<p><b>Results:</b> As part of the World Youth Skills Day celebrated on 15th July every year, CCAFS EA organized an online discussion forum on youth engagement in CSA and the 2030 Agenda from 13 to 22 July 2016. The discussion was hosted on the Climate and Agriculture Network for Africa (CANAN) platform and attracted over 70 participants from key institutions - NEPAD, ASARECA, FAO, CTA, YPARD, CLIMDEV-Africa Youth Platform (ACLYP), FINTRAC, AYICC and individual experts working with</p>	

the youth from all over the world. The online forum culminated in a side event on 'Youth Engagement in CSA' in Africa at the twenty-second session of the COP22 in November 2016 IN Marrakesh, Morocco. Key issues emerging from the discussions and engagements included: need for governments and other stakeholders to actively engage the youth in identifying the most relevant entry points in the agricultural value chain; need to address perception regarding agriculture across generations in order for the older generation to encourage young people to take up agriculture as a source of livelihood; stakeholders need to work with youth to explore how to increase ICT use in agriculture with a focus on development and implementation of sound e-agriculture strategies and innovations. At the local level, CCAFS EA has been engaging youth groups across the CSVs in East Africa through several initiatives; for example, testing a combination of CSA practices— through smart farms involving greenhouse production of tomatoes and green beans for better disease and pest control, continuous production to meet market demand; rain water harvesting irrigation and fish farming for improved nutrition; and uptake of resilient breeds of goats and sheep. Other activities include agroforestry, where fruit trees are integrated with multipurpose trees for fodder and fuel wood, and tree nurseries for income. Climate Information Services (CIS) is an integral part of these initiatives.

**Partners:** Climate-Smart Agriculture Youth Network (CSAYN) CLIMDEV-Africa Youth Platform (ACLYP) Young Professionals for Agricultural Development (YPARD)

**Links / Sources for further information:** Online discussion on CANA:  
[http://canafrica.com/caina\\_blog/csa-and-youth-engagement-in-the-sdgs/](http://canafrica.com/caina_blog/csa-and-youth-engagement-in-the-sdgs/) Photo story: Equipping young people with skills for sustainable development COP 22 Blog: From food to money in the pocket: Engaging African youth in climate-smart agriculture COP 22 Presentations: Youth Engagement in Climate – Smart Agriculture in Africa

## 6. Activities

### A122 - Using CCAFS science to build AGN capacity in UNFCCC and supporting countries access climate finance

**Description:** In collaboration with COMESA and ACPC, CCAFS will continue to support the AGN with scientific evidence to articulate the African vulnerability to climate change in global climate change process, and to support individual countries to access climate finance for readiness in developing CSA country programs. In addition, documentation of successful case studies in adaptation and mitigation in Africa will supplement the writing of technical papers and science briefs for the group. In 2016, the regional program working with CGIAR centres and CCAFS coordinating unit to support the country and AGN submissions to SBSTA on agriculture, specifically on adaptation measures and agricultural practices and technologies, including contributing a case study on adaptation planning as part of the resources for the AGN.

**Start date:** Jan 2015

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Radeny, Maren  
<M.Radeny@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** CCAFS, UNECA/ACPC, AfDB, AfricaInteract/IDRC convened workshops for agriculture and gender negotiators and experts to prepare submissions to UNFCCC on issues related to agriculture and gender. Informed by technical material developed by CCAFS and the African Group of Negotiators Expert Support (AGNES) submissions were prepared for SBSTA 44 and 45. CCAFS scientists presented papers on: Adaptation measures in agricultural systems and Agricultural practices and technologies to enhance resilience, food security and productivity. Submission on 'Gender responsive climate policy with a focus on adaptation and capacity building and training for delegates on gender issues' was drafted. The submission stressed provision of guidance for mainstreaming and integrating gender into policy implementation and implementation. Prior to COP22 agriculture negotiators prepared elements of a draft decision on agriculture taking into consideration the provisions of the Paris Agreement and the outcomes of the four agriculture workshops. Technical paper analyzing the NAPA implementation process in Uganda finalized.

**Deliverables in this activity:**

- D1179: Existing partnerships strengthened and new partnerships developed
- D2638: Integrating climate change in agriculture and food security policies and strategies
- D2645: Implementing and Monitoring Community Based Adaptation Interventions. Local Level Perspectives
- D243: Constructing Africa's narrative on agriculture and gender in global climate change discussions
- D1225: Uganda's National Adaptation Programme of Action: Implementation, Challenges and Emerging Lessons

## A129 - CSA priority actions within NAPs, Climate Change Action Plans, and CSA investments decision support tool

**Description:** At the national level, the project will work with the Ministries of Agriculture and Environment, CGIAR centres, private sector, NGOs and other stakeholders to identify CSA priority actions in Kenya and Uganda within the national adaptation plans (NAPs) and National Climate Change Action Plans (NCCAPs). A decision support tool for targeting CSA in Kenya will also be developed and tested.

**Start date:** Jan 2015

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Mungai, Catherine  
<c.mungai@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** Kenya is finalizing the climate-smart agriculture framework programme (2015 - 2030) to support implementation of the NCCAP. Building on CSA-FPs developed in 2015, with support from CCAFS and CGIAR scientists, the plan is being developed by ministries of agriculture and environment. CCAFS part of the technical committee that organized 2nd Africa Climate Smart Agriculture (CSA) Alliance, and working with ILRI, ICRAF and CIAT hosted a session on INDC implementation. In Tanzania, a CSA Guidelines has been developed with support from FAO and the CSA-FP used to prepare a concept to ACSAA. Policy makers from Uganda and Kenya are exploring collaboration with ILRI on improving monitoring GHG emissions from agriculture to support the MRV frameworks under the national communications to the UNFCCC, including land use, land-use change and forestry (LULUCF).

### **Deliverables in this activity:**

- D247: Decision support tool for targeting CSA investments in Kenya
- D1179: Existing partnerships strengthened and new partnerships developed
- D1371: Emerging policies on climate change and agriculture in East Africa
- D2833: Post-COP22 roadmap: Kenyan stakeholders explore implementation of the Paris Agreement
- D2843: Kenya stakeholders meet, review Paris Climate agreement

#### A499 - Policies, strategies and tools related to climate change and agriculture in East Africa

**Description:** This activity focuses on documenting, monitoring and dissemination of emerging policies and strategies and tools related to climate change and agriculture building on 4 years of engagement in East Africa through expanded use of CANA platform. The CANA platform will be used to facilitate timely information sharing and engagement between policy makers, researchers and development practitioners, the media and other stakeholders. This will also involve dissemination of information on current successful CSA practices to inform policy decisions and potential up-scaling. A strong emphasis will be on gender and the youth. Also, it will support co-generation of knowledge and shared learning in key regional and Africa-wide events and conferences related to climate change, agriculture and food security (e.g. AMCEN and CCD, SBSTA, COP). Key partners include Pan African Climate Justice Alliance (PACJA), CSA Youth Alliance, CANA Network Partners, and Kenya Environment and Science Journalists Association.

**Start date:** Jan 2016

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Atakos, Vivian <v.atakos@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** CCAFS EA supported the USAID funded 'Climate Services for Agriculture: Empowering Farmers to Manage Risk and Adapt to a Changing Climate in Rwanda' project under Flagship 4. A key engagement here was a side event on 'Strengthening Climate Services for Agricultural Transformation in Africa' held during the 7th Africa Agriculture Science Week (AASW7). Online discussion on youth engagement in CSA in Africa and 3 webinars addressing gender, media engagement and climate information services held on the CANA platform. Together with PACJA, CCAFS was part of the African Climate Change and Environmental Reporting Awards (ACCER). Networking and information sharing during events and exhibitions held at research and policy platforms such as CSA Alliance, FARA, AGRF, CCD, SBSTA, COP22. Supported CIRCLE fellow Ayansina Ayanlade from Obafemi Awolowo University in Nigeria to undertake research on 'Perceptions and responses to climate change impacts, adaptive capacity and vulnerability among rural farmers in Southwestern Nigeria'.

**Deliverables in this activity:**

- D1176: Communication of CCAFS research and policy engagement through CANA platform, blogs, quarterly newsletter
- D1179: Existing partnerships strengthened and new partnerships developed
- D2639: Comparing smallholder farmers' perception of climate change with meteorological data: Case study from southwestern Nigeria.
- D2640: Rural Farmers' Attitude to Climate Change Adaptation Techniques in Southwestern Nigeria.
- D2641: Active communication of CCAFS research through expanded use of the CANA platform
- D2642: The SmartAG partner: CCAFS East Africa Quarterly Newsletter, January – March 2016
- D2643: The SmartAG partner: CCAFS East Africa Quarterly Newsletter, April – June 2016
- D2644: The SmartAG partner: CCAFS East Africa Quarterly Newsletter, July - September 2016
- D2837: From food to money in the pocket: Engaging African youth in climate-smart agriculture
- D2841: CCAFS early career scientist wins b

## 7. Leverages

---

No leverages added

**Title:** Innovations, institutions and business models for scaling up CSVs in East Africa

## 1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2016	RP EA	Radeny, Maren <M.Radeny@cgiar.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2	Complete	ILRI - International Livestock Research Institute - Kenya	Recha, John <j.recha@cgiar.org>

### Project is working on

Flaship(s)
F2 (before F1 - Andy): Climate-Smart Technologies and Practices

Region(s)
EA: East Africa

### Project summary

The project builds on previous initiatives in CCAFS climate-smart villages (CSVs) in East Africa. Through participatory action research (PAR) and in collaboration with local communities, national and international research organizations, NGOs and government extension, the project will identify and test a portfolio of climate-smart agriculture (CSA) technologies and innovations. The project will also explore innovations, institutions and business models for up scaling CSVs in East Africa and support local adaptation planning. CSA interventions to be tested include risk management interventions (agro-advisory and climate services, and livelihood diversification), improving small ruminant (sheep and goat) breeds and feeding strategies, multiple-stress tolerant crop varieties, soil and water conservation, agroforestry, strengthening access to micro credit, micro-insurance schemes and rural financing models (village SACCOS,CBOs Innovation fund) and smart-farm models; and piloting of rangeland rehabilitation practices for improved livestock feed and nutrition security in Borana, Southern Ethiopia.

## 2. Partners

### Partner #1 (Leader)

**Institution:** ILRI - International Livestock Research Institute

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Ojango, Julie <J.Ojango@cgiar.org>	Piloting of the livestock-related interventions, specifically promoting uptake of improved small ruminant (SR) breeding programs under changing climatic conditions and expanding the smallholder feed base for small ruminants in Nyando CSVs. Activity 2014-209 *Leader*.	HQ
Project Leader	Recha, John <j.recha@cgiar.org>	Activity 2014-132 *Leader*.	HQ
Partner	Radeny, Maren <M.Radeny@cgiar.org>	RPL East Africa	HQ
Partner	Goopy, John <J.goopy@cgiar.org>	Piloting of the livestock-related interventions, specifically expanding the smallholder feed base for small ruminants in Nyando CSVs. Activity 2014-209 *Partner*.	HQ

**Partner #2**

**Institution:** Vi Agroforestry-Kenya

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Nyariwo, Wilson <wilson.nyariwo@viagroforestry.org>	Working in the Nyando CSVs by supporting the CSA interventions related to climate risk management, including institutional innovations with Innovation funds for strengthening rural financing through linking CBOs to the private sector. Strengthening the smart farms as learning hubs for farmers and seed multiplication sites for resilient crop and fodder varieties. Also, enhancing access to input supplies through strengthened linkages of CBOs and private sector (agro dealers). Activity 2014-130 *Partner*.	HQ

**Partner #3**

**Institution:** Maseno University-Kenya

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Ogindo, Harun <hogindo@maseno.ac.ke>	Enhancing CSA through decision support tools, agro-advisories and climate information services in Nyando CSVs. Activity 2014-130 *Partner*.	HQ

## Partner #4

**Institution:** SARI - Selian Agricultural Research Institute

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Mafuru, January <januarymafuru@yahoo.com>	Promotion of early maturing, pest tolerant varieties of Irish potato, beans and maize varieties in Lushoto CSVs. Activity 2014-132 *Partner*.	HQ

## Partner #5

**Institution:** NARO - National Agricultural Research Organization

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Hafashimana, David <davidhaf2000@yahoo.com>	Promotion of drought tolerant, faster maturing, and highly nutritious cassava and sweet potato varieties in Hoima CSVs. Activity 2014-132 *Partner*.	HQ

**Partner #6**

**Institution:** KALRO - Kenya Agricultural and Livestock Research Organization

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Leley, Phillip <Phillip.Leley@kalro.org >	Dissemination and uptake of new sorghum and legume technologies, and explore opportunities for creating farmer market linkages in Wote CSVs. Activity 2014-132 *Partner*.	HQ
Partner	Ojiem, John <johnojiem@gmail.com >	Dissemination and uptake of new sorghum and legume technologies integrated with improved soil and water management technologies and explore opportunities for creating farmer market linkages in Nyando CSVs. Activity 2014-132 *Partner*.	HQ

**Partner #7**

**Institution:** MARIL-Ethiopia - Managing Risk for Improved Livelihoods-Ethiopia

**Contact(s):**

Type	Contact	Responsibilities and contributions	Branch
Partner	Desta, Solomon <solomon.desta82@gmail.com>	Rangeland rehabilitation practices for improved livestock feed and nutrition security through enclosures and strategic grazing management in Borana - mostly in 2015 Activity 2014-209 *Partner*.	HQ

## Lessons regarding your partnerships and possible implications for the coming planning cycle:

Year	Lesson(s)
2016	Through participatory action research (PAR) in collaboration with local communities, the partnership tested on-farm and evaluated a portfolio of promising risk management CSA technologies and practices. With reduced funds, the focus going forward would be on documentation of successful CSA technologies and linking farmers to markets. Through the process, research reports, journal articles have been prepared on promising risk management technologies and interventions, and farmer experimentation networks have been strengthened.

## Partnerships overall over the last reporting period:

The partnership involved 6 CGIAR centers (ILRI, CIAT, CIP, Bioversity, ICRISAT, CIMMYT), County governments (Kericho and Kisumu), national agricultural research institutions (KALRO, NARO, SARI), Maseno University), private sector through Magos enterprises and development partners (VI Agroforestry and World Neighbors). The partners mainly worked with the farmers through community based organizations (CBOs) pilot various CSA technologies and practices related to crops, small ruminants, livestock feeds and rangeland rehabilitation, including developing institutional innovations and business models for uptake of CSA

### 3. Locations

---

This project is not global

Project level	Latitude	Longitude	Name
CCAFS Site	-0.269	35.068	Nyando
CCAFS Site	-1.809	37.724	Makueni
CCAFS Site	1.535	31.546	Albertine Rift
CCAFS Site	-4.79	38.417	Usambara
CCAFS Site	4.957	38.567	Borana

## 4. Outcomes

### 4.1 Project Outcomes

#### **Project Outcome statement:**

National Agricultural Research Institutions (KALRO, NARO, ARI, EIAR), IARCs, and Ministries of Agriculture are designing, developing and packaging appropriate CSA technologies and practices. In collaboration with development partners and research institutions as well as local businesses, they are building resilience to climate related shocks through rural innovations in agriculture. In addition, the project will be contributing to scaling-out CSA through farmer experimentation networks and exchange programs as well supporting Local Adaptation Plans of Action (LAPAs).

**Annual progress towards outcome (end of 2016\*):** Evidence of 1-2 partners designing appropriate interventions with farmers, such as smart farms, testing business models and creating farmer market linkages from proven CSA packages and interventions

**Annual progress towards project outcome in the current reporting cycle (2016\*):** In Nyando CSVs, the acreage under improved crop varieties of cereals and legumes has increased, working in partnership with the private sector, development partners and research institutions. The CBOs in Nyando also collaborated with Kericho and Kisumu County governments to host the annual farmer learning event, over 1,200 farmers participating. The Kericho County government has partnered with the CBO in promoting the small ruminants (Galla goats) and integrating this into the county development plans. Annual goat auction - emerging innovative marketing strategy - took place in Decemer 2016 in the CSV. In Lushoto CSVs, the Lushoto District Council, SARI, CIAT, private sector (PANNAR seed company) are scaling up on-farm multiplication of improved seeds as a strategy of helping farmers adapt to the changing climate, through the existing SACCOS. Through the village seed banks managed by the SACCOS, the maize, bean and Irish potato multiplication aims to provide at least 4,000 farmers with faster maturing, drought tolerant, and disease resistant varieties. The SACCOS also collaborated with Lushoto Distict Council to host a farmer learning event in March 2016 with over 200 farmers participating. In Wote CSVs, the Makueni County government is scaling up cereal-legume inter-crop innovations through extension support and linking up the farmers private sector players and market. The County used the innovation to successfully seek for seed money from Department for International Development (DFID)-UK through the Adaptation Consortium to be climate finance ready and mainstream climate change in planning and implementation. In Hoima CSVs, the Hoima district government is scaling up crop innovations by linking up the Hoima District Farmers Association with the private sector. The CBOs held farmer learning events, an avenue used to increase the number of farmers to ensure they produce sufficient quantities for the market. Currently compiling emerging stories of success from EA CSVs .

#### **How communication and engagement activities have contributed to achieving your Project outcomes:**

\* Emerging CSA success stories were documented and disseminated to policy makers, practitioners, researchers, farmers, and media through different avenues such as working papers, InfoNotes, blogs, newsletters, videos, photos, and presentations in various forums leading to increased awareness of ongoing research within CSVs. Consequently, Nyando CSVs featured in German TV – ZDF. The World Bank also visited Nyando and produced a video which was shown during the African Green

Revolution Forum (AGRF) in Nairobi in September 2016 and World Bank side-event held during COP22 in Marrakech, Morocco. The CANA platform used to widely share CSV activities through webinars and discussion forums.

**Evidence documents of progress towards outcomes:\***

<https://marlo.cgiar.org/data/ccafs/projects/109/projectOutcome/CCAFS-EA%20Comms%20Report%20016.pdf>

**Annual progress towards outcome (end of 2015):** In 2015, evidence of 1-2 partners designing appropriate interventions with farmers, such as smart farms and testing business models from proven CSA packages and interventions. Nyando (western Kenya): The best practices will inform the local Kisumu and Kericho County government business plans on scaling out CSA through partnership with farmer groups, climate services organization, NGOs with agricultural programs, and private sector organizations. Wote (eastern Kenya): The emerging best practices will guide the Makueni county government agricultural adaptation plans. The scaling out will be done through partnership with farmer organizations and the private sector. Lushoto (Tanzania): The best bet options will guiding the Lushoto district agriculture development plan scaling up strategy through partnership with existing villages SACCOS (farmer organizations), agricultural NGOs and private sector players. Hoima (western Uganda): The local Hoima district government will be informed by the best practices. They will come up with a scaling out plan through farmer groups and private sector players under the district agricultural adaptation programs. Borana (southern Ethiopia): The rangeland rehabilitation best practices will inform the Arero and Yabello district government agricultural plans for scaling this out through partnership with the local pastoralist collective action groups.

**Annual progress towards outcome (end of 2017):** NA

**Annual progress towards outcome (end of 2018):**

**lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them:\*** Evidence shows that partnership with farmers and local partners is likely to lead to increased uptake of CSA interventions. Knowledge sharing through farmer learning events, demonstration hubs, including documentation and communication of emerging CSA success stories are likely to accelerate uptake of CSA technologies, practices and innovations. Partnership with local governments, the private sector and development partners is useful for up-scaling CSA practices.

## 4.2 CCAFS Outcomes

**RP EA Outcome 2019:** National Agricultural Research Institutions (KARI, NARO, ARI, EIAR), IARCs, and Ministries of Agriculture are developing and packaging appropriate CSA technologies and practices to increase agricultural productivity, enhance food security, incomes and mitigation, and build resilience; Agro-advisory services are testing and using new delivery mechanisms for CSA adoption.

**Indicator #1:** # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

2019
<p><b>Target value:</b> 4</p> <p><b>Cumulative target to date:</b> 5</p> <p><b>Target narrative:</b> 1. Best-bet options for livestock and and crop interventions in CSVs, including guidelines on variety and breed appropriateness 2. Adoption of best bet small ruminant and crop options by national agricultural research organizations, County and District governments, non-governmental organizations, and farmer groups in CCAFS sites.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> Women farmers and organized youth groups access innovation funds in their CBOs and link with the private sector to access input supplies and agro-advisories for implementing CSA</p>
2015
<p><b>Target value:</b> 0</p> <p><b>Cumulative target to date:</b> 0</p> <p><b>Target narrative:</b> 1. CCAFS science and decision support tools used to generate evidence and test options to determine the best-bet options for small ruminant interventiosn in Nyando-Kenya CSVs. 2. Generating evidence and testing options to determine the best-bet options for crop interventitosn using CCAFS science and decision support tools in Nyando, Wote, Lushoto and Hoima CSVs. 3. Start engagement with national agricultural research organizations (KALRO, NARO, Tanzania -ARI) for adopting the best bet option packages. 4. Engaging farmer groups with participation of women in generating evidence and testing options for small ruminant and crop interventions best bet options.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS outcome:</b> &lt;Not Defined&gt;</p>

2016

**Target value:** 1

**Cumulative target to date:** 1

**Target achieved:** 1.0

**Target narrative:** 1. Best-bet options for crop and small ruminant interventions in Nyando CSVs, including guidelines on variety/ breed appropriateness and management 2. Engagement with the County governments of Kericho, Kisumu, and Makueni including their agricultural extension staff for adopting and promoting the best bet option packages. 3. Engagement with the District local government authorities and the extension staff of Hoima and Lushoto for adopting and promoting the best bet option packages.

**Narrative for your achieved targets, including evidence:** The use of improved agronomic practices and improved varieties of cereals (maize and sorghum), legumes (beans, pigeon peas, green grams, and cowpeas), and root crops (Irish potatoes, sweet potatoes, and cassava) was enhanced in the CSVs. Multiplication of small ruminants increased through improved breeding and herd management. The Kericho, Kisumu and Makueni County Departments of Agriculture trained farmers on CSA mostly through field days and learning events. The District governments of Hoima and Lushoto supported the scaling up through linking farmers to markets and coordinating field days that were hosted by the SACCOS and CBOs in the respective CSVs.

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** Across the CSVs, most of the activities are implemented through the CBOs, with women constituting about 60% of the membership. Youth are also members of the CBOs. Through an innovation fund, individual groups that are part of the CBOs can access funds for investing in agricultural activities to boost their income. Similarly, about 60% of the participants in the annual farmer learning events in the CSVs were women. The women promote resilient agricultural practices through establishment of village demonstration farms for teaching other farmers on CSA practices. Youth mainly engaged in scaling up horticultural activities in "smart farms", trees nurseries.

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** Women farmers and organized youth groups use CSA knowledge to increase productivity, and strengthen smart farms as learning hubs for farmers and increase their role as seed multiplication sites for resilient crop and fodder varieties

### Major Output groups:

- F2 (before F1 - Andy): Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)
- F2 (before F1 - Andy): Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

**RP EA Outcome 2019:** Subnational and national governments adopting Climate Smart Villages models and scaling up CSA practices to other farming communities in line with Local Adaptation Plans of Agriculture (LAPAs), providing feedback to researchers and agro-advisory agencies and creating opportunities for investments through local investment partnerships for productivity and enhanced resilience.

**Indicator #1:** # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

2019

**Target value:** 4

**Cumulative target to date:** 6

**Target narrative:** 1. Business models for livestock and a crop value chains in Nyando CSVs 2. Business model in Hoima-Uganda on rural savings and microfinance investments in agriculture linked to input-output market. 3. Business model in Wote-kenya on rural savings and microfinance investments in agriculture linked to input-output market. 4. Scaling up the business models of rural savings and microfinance agricultural investments, smart farms, and small ruminants through the Kisumu and Kericho County Integrated Development Plans, and microfinance and rural savings organizations. 5. Scaling up business model of rural savings and microfinance investments in agriculture in Lushoto

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** Women farmers and organized youth groups access innovation funds in their CBOs and link with the private sector to access input supplies and agro-advisories for implementing CSA

2015

**Target value:** 1

**Cumulative target to date:** 1

**Target narrative:** 1. Map value chains for small ruminants in the Nyando-Kenya for developing business models. 2. One business model in Nyando -Kenya on rural savings and micro-finance investments in agriculture linked to input-output markets. 3. Start engagement with the County governments of Kericho and Kisumu for scaling up CSVs in Nyando-Kenya. 4. Map value chains for the horticultural smart farms with greenhouse and mini-earth dam innovations for developing a business model. 5. Start engagement with micro-finance and rural savings organizations in Nyando, Wote, Lushoto and Hoima. These will guide in the development of business plans that they will eventually adopt.

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016

**Target value:** 1

**Cumulative target to date:** 2

**Target achieved:** 1.0

**Target narrative:** 1. Business model on livestock and crop value chains 2. Engagement with the Hoima and Lushoto District governments with their extension staff for scaling up CSVs in their districts, and with the County governments of Kisumu, Kericho and Makueni for scaling up CSVs

**Narrative for your achieved targets, including evidence:** The business model for sorghum was developed in Nyando in Kericho and and Kisumu Counties involving partnership with the private sector companies - MAGOS Enterprises, and Rafiki Microfinance - and CBOs. The scaling up of CSA practices is ongoing in the Kericho, Kisumu and Makueni County governments and district governments in Lushoto and Hoima.

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** The CBOs are involved in the sorghum value chain, giving an opportunity to women and youth who constitute about 60% of the membership. The women and youth access loans from the CBO Innovation Fund for investing in agricultural activities, and benefit from training events that enhance their knowledge on improved CSA practices.

**The expected annual gender and social inclusion contribution to this CCAFS outcome:** Women farmers and organized youth groups access innovation funds in their CBOs and link with the private sector to access input supplies and agro-advisories for implementing CSA

### **Major Output groups:**

- F2 (before F1 - Andy): Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

## 4.3 Other Contributions

---

### **Contribution to other CCAFS Impact Pathways:**

NA

### **Collaborating with other CRPs**

<This project does not have a CRP selected yet.>

## 4.4 Case Studies

---

No case studies added

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

**F2 (before F1 - Andy):** Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2019 contribution towards the selected MOG:**

Modelling of CSA interventions under CC will provide additional information on how CSA options and portfolios enhance adaptive capacity.

**Brief 2019 plan of the gender and social inclusion dimension of the expected annual output:**

Particular attention will be given towards the CSA options and portfolios where women are actively involved

**F2 (before F1 - Andy):** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined>

**Brief 2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

## Major Output groups - 2016

**F2 (before F1 - Andy):** Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2016 contribution towards the selected MOG:**

Participatory testing, evaluation and promotion of crop-related CSA practices in EA. Specific interventions include promotion of drought tolerant, disease resistant, pest tolerant, faster maturing, and highly nutritious crops

**Brief summary of your actual 2016 contribution towards the selected MOG:** Crop and livestock CSA practices were tested and evaluated across CSVs. ILRI led livestock interventions (small ruminants) in Nyando. Crop related CSA interventions were tested and scaled-up in Nyando, Wote, Lushoto and Hoima, where the CBOs coordinated with local governments and linked up with private sector in the scaling-up process.

**Brief 2016 plan of the gender and social inclusion dimension of the expected annual output:**

Participatory testing involves women and organized youth groups, who will particularly spearhead village demonstrations and multiplication of seeds and planting material in the local communities

**Summary of the gender and social inclusion dimension of the 2016 outputs:** The women and youth who are members of CBOs were involved in the scaling-up process. The CBOs empowered women and you by advancing then loans from their Innovation Fund facility for agricultural investments and other non-agricultural income generating activities.

**F2 (before F1 - Andy):** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2016 contribution towards the selected MOG:** Local Adaption Plans of Action (LAPAs) will be undertaken alongside farmer experimentation in collaboration with development and research partners, as well as local community leaders

**Brief summary of your actual 2016 contribution towards the selected MOG:** A process of developing the Nyando local adaptation plan of action (LAPA) initiated and validated through workshops with all stakeholders including the CBOs, and County governments in Kericho and Kisumu, with for potential inclusion County Agricultural Development Plans. Report to be completed in 2017.

**Brief 2016 plan of the gender and social inclusion dimension of the expected annual output:** Women and organized youth groups will be involved in the development of LAPAs

**Summary of the gender and social inclusion dimension of the 2016 outputs:** The CBOs, women and youth were involved in developing and validating the draft LAPA in Nyando. Additionally, women are involved in coordinating farmers learning events, where women led demonstrations in the villages are used to teach farmers about CSA interventions.

## Major Output groups - 2015

**F2 (before F1 - Andy):** Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2015 contribution towards the selected MOG:**

Baseline data will provide overview of existing interventions in the sites

**Brief summary of your actual 2015 contribution towards the selected MOG:** Various crop-related CSA practices were tested and evaluated in CSVs, in some cases guided by climate information (Nyando and Lushoto), including indigenous knowledge. These included participatory evaluation and promotion of early maturing, pest tolerant and disease resistant varieties of root crops, legumes, and cereals, small ruminants breeding and management.

**Brief 2015 plan of the gender and social inclusion dimension of the expected annual output:**

particular attention will be given to interventions used by women and youth

**Summary of the gender and social inclusion dimension of the 2015 outputs:** Participatory testing and evaluation was spearheaded by CBOs, whose membership consists of 60% women. Also, women and youth participating in the project were the beneficiaries of loans from each CBO Innovation fund where they borrowed money for investments in agricultural and other income generating activities.

**F2 (before F1 - Andy):** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2015 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:** Draft local adaptation plan developed for Nyando, and will be validated in 2016 with the potential of inclusion in the county agricultural development plans.

**Brief 2015 plan of the gender and social inclusion dimension of the expected annual output:**

<Not Defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:** Youth and women who are members of local CBOs will be involved in validation of the draft local adaptation plan for Nyando. Similarly, the women participate in coordinating the local farmer learning events, where women led demonstrations in the villages are used for knowledge sharing.

### Major Output groups - 2014

**F2 (before F1 - Andy):** Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief 2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

**F2 (before F1 - Andy):** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined>

**Brief 2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

## 5.2 Deliverables

### D2785 - Germany ZDF video: Dieses Dorf in Kenia trotz der Dürre

#### Main Information

**Type:** Outreach products

**Subtype:** Multimedia

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

#### Deliverable dissemination

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://www.zdf.de/nachrichten/zdf-morgenmagazin/dieses-dorf-in-kenia-trotzt-der-duerre-102.html#/beitrag/video/2791464/Dieses-Dorf-in-Kenia-trotzt-der-Duerre>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

#### Deliverable Metadata

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

#### Deliverable Quality check

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

# ILRI-F2 (before F1 - Andy)-EA-P109 - Research Project

Submitted on 2017-02-18 at 09:00 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



**D1191 - Database for monitoring performance and provision of feedback on SR in smallholder systems**

**Main Information**

**Type:** Data, models and tools

**Subtype:** Database/Dataset/Data documentation

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<http://data.ilri.org/collect/nyandobreeds/>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Process of data quality assurance:** • Yes, but not documented

**Data dictionary:** • Yes, but not documented

**Are the tools used for data collection available:** • Yes, but not documented

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research	Ojango, Julie	Responsible

# ILRI-F2 (before F1 - Andy)-EA-P109 - Research Project

Submitted on 2017-02-18 at 09:00 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



Institute

<J.Ojango@cgiar.org>

**D2791 - Building adaptive capacity and improving food security in semi -arid eastern Kenya.**

**Main Information**

**Type:** Outreach products

**Subtype:** Factsheet, Project Note

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/78573>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F A I R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2793 - Changing rainfall patterns and farmers' adaptation through soil water management practices in semi-arid eastern Kenya**

**Main Information**

**Type:** Articles and Books **Subtype:** Journal Article (peer reviewed)  
**Status:** Complete **Year of expected completion:** 2016  
**New expected year:** <Not Defined>  
**Cross-cutting dimension:**  
• Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes  
**Dissemination Channel:** Other **Dissemination URL:**  
<http://dx.doi.org/10.1080/15324982.2015.1091398>  
**Open access:** Yes  
**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>  
**Description / Abstract:** <Not Defined>  
**Publication / Creation date:** <Not Defined>  
**Language:** <Not Defined>  
**Country:** <Not Defined>  
**Keywords:** <Not Defined>  
**Citation:** <Not Defined>  
**Handle:** <Not Defined>  
**DOI:** <http://dx.doi.org/10.1080/15324982.2015.1091398>  
**Creator / Authors:** <Not Defined>

**Publication Metadata**

**Volume:** 30  
**Issue:** 3  
**Pages:** 229–238  
**Journal/Publisher name:** Arid Land Research and Management  
**Indicators for journal articles:** • This article have a co-author from a developing country National Agricultural Research System (NARS)  
**Publication acknowledge:** Yes  
**Flagships contribution:**

## Deliverable Quality check

**FAIR Compliant:** **F** **A** **I** **R**

### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

D2827 - CCAFS Farms of The Future (FoTF) Farmers Video, Nyando, Kenya

**Main Information**

**Type:** Outreach products

**Subtype:** Multimedia

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://www.youtube.com/watch?v=TM6n4Bw1Nm8&t=324s>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2796 - Building local institutional capacity to implement agricultural carbon projects**

**Main Information**

**Type:** Articles and Books **Subtype:** Journal Article (peer reviewed)  
**Status:** Complete **Year of expected completion:** 2016  
**New expected year:** <Not Defined>  
**Cross-cutting dimension:** <Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes  
**Dissemination Channel:** Other **Dissemination URL:** <https://doi.org/10.1186/s40066-016-0060-x>  
**Open access:** Yes  
**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>  
**Description / Abstract:** <Not Defined>  
**Publication / Creation date:** <Not Defined>  
**Language:** <Not Defined>  
**Country:** <Not Defined>  
**Keywords:** <Not Defined>  
**Citation:** <Not Defined>  
**Handle:** <Not Defined>  
**DOI:** <Not Defined>  
**Creator / Authors:** <Not Defined>

**Publication Metadata**

**Volume:** 5  
**Issue:** 1  
**Pages:** 13  
**Journal/Publisher name:** Agriculture & Food Security  
**Indicators for journal articles:** • This article have a co-author from a developing country National Agricultural Research System (NARS)  
**Publication acknowledge:** No  
**Flagships contribution:** • CCAFS - F3 (LINI)

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2828 - Stories of success: Climate-Smart Villages in East Africa**

**Main Information**

**Type:** Reports and other publications

**Subtype:** Discussion paper/Working paper/White paper

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** No

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Deliverable Data sharing**

**Deliverable files:**

<Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

# ILRI-F2 (before F1 - Andy)-EA-P109 - Research Project

Submitted on 2017-02-18 at 09:00 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



D2798 - Private Sector Actions to Enable Climate-Smart Agriculture in Small-Scale Farming in Tanzania

**Main Information**

**Type:** Articles and Books **Subtype:** Book chapter (peer reviewed)  
**Status:** Complete **Year of expected completion:** 2016  
**New expected year:** <Not Defined>  
**Cross-cutting dimension:**  
• Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes  
**Dissemination Channel:** Other **Dissemination URL:**  
<http://www.springer.com/us/book/9783319412368>  
**Open access:** No  
**Open access restriction:** Intellectual Property Rights (confidential information)  
**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>  
**Description / Abstract:** <Not Defined>  
**Publication / Creation date:** <Not Defined>  
**Language:** <Not Defined>  
**Country:** <Not Defined>  
**Keywords:** <Not Defined>  
**Citation:** <Not Defined>  
**Handle:** <Not Defined>  
**DOI:** <Not Defined>  
**Creator / Authors:** <Not Defined>

**Publication Metadata**

**Volume:**  
**Issue:**  
**Pages:** 525-551  
**Journal/Publisher name:** Climate Change and Sustainability in Agriculture  
**Indicators for journal articles:** • This article have a co-author from a developing country National Agricultural Research System (NARS)  
**Publication acknowledge:** No

**Flagships contribution:** ● CCAFS - F2 (BEFORE F1 - ANDY)

## Deliverable Quality check

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2799 - Coping with unpredictable rainfall patterns in Nyando**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/coping-unpredictable-rainfall-patterns-nyando#.WIC2uVN95hE>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2800 - Participatory evaluation of resilient potato varieties in climate-smart villages of Lushoto in Tanzania**

**Main Information**

**Type:** Reports and other publications

**Subtype:** Discussion paper/Working paper/White paper

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/79454>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2801 - Uptake and dissemination pathways for climate-smart agriculture technologies and practices in Lushoto, Tanzania**

**Main Information**

**Type:** Reports and other publications

**Subtype:** Discussion paper/Working paper/White paper

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<https://cgspace.cgiar.org/handle/10568/73374>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Responsible

**D2802 - Nyando white goats: climate-resilient and a real-time fortune**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/nyando-white-goats-climate-resilient-and-real-time-fortune#.WIC011N95hE>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2803 - Farmers use soil and water management practices to respond to changing rainfall patterns**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**  
<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/farmers-use-soil-and-water-management-practices-respond-changing-rainfall-patterns#.WICxc1N95hE>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D628 - Strengthened farmer experimentations networks**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/promoting-farmer-farmer-learning-western-kenya#.WKX-ZPIYIsI>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
Vi Agroforestry-Kenya	Nyariwo, Wilson <wilson.nyariwo@viagroforestry.org>	Responsible

**D2804 - Potato farmers in Lushoto say 'Asante'**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/potato-farmers-lushoto-say-%E2%80%9Dasante%E2%80%99#.WICxcVN95hE>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2805 - Diversifying fodder for improved livestock productivity in Nyando**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/blog/diversifying-fodder-improved-livestock-productivity-nyando#.WIC001N95hE>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2806 - Thomson Reuters: UN drive to lift up poor farmers must focus on climate – experts**

**Main Information**

**Type:** Outreach products

**Subtype:** Multimedia

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<http://news.trust.org/item/20160210125353-gi2l9/>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** **F** **A** **I** **R**

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2807 - Improving the productivity of small livestock under a changing climate**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

<https://ccafs.cgiar.org/research-highlight/improving-productivity-small-livestock-under-changing-climate#.WICxfN95hE>

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2808 - Improving the adaptive capacity of farmers in Eastern Kenya**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** Other

**Dissemination URL:**

<https://ccafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.WKYxMvIYIs>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D2873 - Progress in achieving household food security in climate-smart villages in the Albertine Rift, western Uganda**

**Main Information**

**Type:** Outreach products

**Subtype:** Factsheet, Project Note

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

<Not Defined>

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination Channel:** CGSpace

**Dissemination URL:**

<http://hdl.handle.net/10568/79933>

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** Progress in achieving household food security in climate-smart villages in the Albertine Rift, western Uganda

**Description / Abstract:** Hoima is located in western Uganda east of Lake Albert, on a landscape that is generally undulating with relatively flat low lying area alternating with broad hills. The area has a population density of 160 persons per square kilometer, with 22% of the people living below the poverty line. The area faces land degradation and declining soil fertility. The key food crops are cassava, beans, sweet potatoes, and maize. Chicken, pigs, cows and goats are important for food and income generation. Most households get their food supplies from their own farms throughout the year. The worst months for food supplies, when more than 20% of households get their food mainly from off-farm sources and 40% of the households have food deficits are March and April, which also mark the beginning of the rains after several months of dry season. About 31% of households are food secure all year long. Another 35% suffer food deficits for 1-2 months per year. 16% of these households struggle to get enough to feed their families for 3-4 months, 9% for 5-6 months, and 10% for more than six months per year.

**Publication / Creation date:** 2017-02-01

**Language:** en

**Country:** UGANDA

**Keywords:** CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY

**Citation:** Recha J, Radeny M, Kimeli P, Hafashimana D, Masanyu J, Ssekiwoko F, Odongo W. 2016. Progress in achieving household food security in climate-smart villages in the Albertine Rift, western Uganda. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

**Handle:** <http://hdl.handle.net/10568/79933>

**DOI:** <Not Defined>

## Creator / Authors:

- Recha, - John
- Radeny, - Maren
- Kimeli, - Philip
- HAFASHIMANA, - DAVID
- masanyu, - Julius
- Ssekiwoko, - Fred
- Odongo, - William

## Deliverable Quality check

FAIR Compliant: **F** **A** **I** **R**

## Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible

**D413 - System characteristics and management practices for small ruminant production in "Climate Smart Villages" of Kenya.**

**Main Information**

**Type:** Articles and Books **Subtype:** Journal Article (peer reviewed)  
**Status:** Complete **Year of expected completion:** 2016  
**New expected year:** <Not Defined>  
**Cross-cutting dimension:**  
• Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes  
**Dissemination Channel:** Other **Dissemination URL:**  
<https://dx.doi.org/10.1017/S2078633615000417>  
**Open access:** Yes  
**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>  
**Description / Abstract:** <Not Defined>  
**Publication / Creation date:** <Not Defined>  
**Language:** <Not Defined>  
**Country:** <Not Defined>  
**Keywords:** <Not Defined>  
**Citation:** <Not Defined>  
**Handle:** <Not Defined>  
**DOI:** <Not Defined>  
**Creator / Authors:** <Not Defined>

**Publication Metadata**

**Volume:**  
**Issue:**  
**Pages:**  
**Journal/Publisher name:** Animal Genetic Resources  
**Indicators for journal articles:** <Not Defined>  
**Publication acknowledge:** No  
**Flagships contribution:** • LIVESTOCK AND FISH  
• CCAFS - F2 (BEFORE F1 - ANDY)

## Deliverable Quality check

**FAIR Compliant:** **F** **A** **I** **R**

### Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Ojango, Julie <J.Ojango@cgiar.org>	Responsible

**D414 - Farmer training and learning events**

**Main Information**

**Type:** Outreach products

**Subtype:** Blog

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

[https://ccafs.cgiar.org/news/researchers-partner-private-sector-improve-maize-production-lushoto-smart-villages#.WKX9U\\_IYIs](https://ccafs.cgiar.org/news/researchers-partner-private-sector-improve-maize-production-lushoto-smart-villages#.WKX9U_IYIs)

**Dissemination Channel:** Other

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Partners contributing to this deliverable:**

Institution	Partner	Type
SARI - Selian Agricultural Research Institute	Mafuru, January <januarymafuru@yahoo.com>	Responsible

**D671 - World Bank video: Climate-Smart Farming Helps Community in Kenya Thrive in the Face of Climate-Change**

**Main Information**

**Type:** Outreach products

**Subtype:** Multimedia

**Status:** Complete

**Year of expected completion:** 2016

**New expected year:** <Not Defined>

**Cross-cutting dimension:**

- Capacity Development

**Deliverable dissemination**

**Is this deliverable already disseminated:** Yes

**Dissemination URL:**

**Dissemination Channel:** Other

[https://www.youtube.com/watch?v=Zc\\_gknLmsNE&feature=youtu.be](https://www.youtube.com/watch?v=Zc_gknLmsNE&feature=youtu.be)

**Open access:** Yes

**License adopted:** No

**Deliverable Metadata**

**Disseminated title:** <Not Defined>

**Description / Abstract:** <Not Defined>

**Publication / Creation date:** <Not Defined>

**Language:** <Not Defined>

**Country:** <Not Defined>

**Keywords:** <Not Defined>

**Citation:** <Not Defined>

**Handle:** <Not Defined>

**DOI:** <Not Defined>

**Creator / Authors:** <Not Defined>

**Deliverable Quality check**

**FAIR Compliant:** F A I R

**Partners contributing to this deliverable:**

Institution	Partner	Type
ILRI - International Livestock Research Institute	Recha, John <j.recha@cgiar.org>	Responsible
NARO - National Agricultural Research Organization	Hafashimana, David <davidhaf2000@yahoo.com>	Other

# ILRI-F2 (before F1 - Andy)-EA-P109 - Research Project

Submitted on 2017-02-18 at 09:00 (Reporting cycle 2016)



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



SARI - Selian Agricultural Research Institute	Mafuru, January <januarymafuru@yahoo.com>	Other
KALRO - Kenya Agricultural and Livestock Research Organization	Leley, Phillip <Phillip.Leley@kalro.org>	Other

## 5.3 Project Highlights

### Project highlight 201

**Title:** Soil and water conservation through agroforestry in East Africa Climate-Smart villages



<b>Author:</b> John Recha and Philip Kimeli	<b>Subject:</b>
<b>Publisher:</b>	<b>Year reported:</b> 2016
<b>Project highlights types:</b> <ul style="list-style-type: none"> <li>• Participatory action research</li> <li>• Policy engagement</li> </ul>	<b>Is global:</b> No
<b>Start date:</b> Jan 2016	<b>End date:</b> Dec 2016
<b>Keywords:</b> Climate change adaptation; agroforestry; soil and water management; Climate-Smart villages	<b>Countries:</b> Kenya, Uganda, United Republic of Tanzania

**Highlight description:** From late 2011, CCAFS facilitated a partnership around collective action that integrates scientific applications for delivery of development outcomes that respond to climate related risk in climate-smart villages (CSVs) in East Africa. The partners include research institutions, development partners, and farmers through the community based organizations (CBOs). The partnership with Vi Agroforestry, Kenya Agricultural and Livestock Research Organization (KALRO), County governments (Kisumu, Kericho and Makueni), Uganda's National Agricultural Research Organization (NARO), Selian Agricultural Research Institute (SARI) and CGIAR centers sought to test, evaluate and promote a portfolio of CSA interventions. The CSA practices included soil and water management, integrating agroforestry. Agroforestry is one of the promising mitigation interventions across CSVs of Lushoto, Nyando and Hoima. Agroforestry has ecological and economic benefits, providing farming families with food, fuel, fodder, finance and improved soil fertility—the “five Fs”. Through integration of trees on farms and range-lands, farmers reduce their dependency on a single staple crop thereby offering them an opportunity to diversify their livelihood options. In Nyando, for example, collecting surface runoff—water that flows off land when it rains—is the most common water harvesting practice. The numbers of water harvesting pans in Nyando has increased to more than 120 water harvesting pans, with an average capacity of 50,000 litres and can supply water for up to three months. In Wote, farmers have constructed over 150 km of terraces, including 46 water harvesting pans. In Lushoto, farmers constructed about 100 km of terraces, covering over 1000

farming households. In Hoima, farmers have dug water retention ditches and trenches totaling to 35km for soil and water conservation. Farmers are trained through their CBOs and SACCOs on techniques to help prevent erosion and enhance water retention. In all cases, agroforestry trees are planted along the banks of the terraces, including grasses and stone bunds.

**Introduction / Objectives:** Land degradation through soil erosion is a major challenge in East Africa. Within Lushoto, erosion affects more than 60% of the landscape because it is hilly. This situation is exacerbated by high population density in Lushoto, increasing pressure on the land. In Nyando, soil erosion is a key challenge every rainy season, with run off forming deep gullies affecting about 40% of the landscape. In Hoima, Uganda, there is widespread soil erosion that has affected about 20% of the landscape. Agroforestry offers multiple benefits of conserving soil and improving soil fertility, with mitigation benefits (carbon sinks).

**Results:** In Lushoto, tree planting campaigns were initiated targeting at least 10% tree cover as per the policy of the local Lushoto District Council. Priority areas identified that required urgent tree cover included open areas, farmlands and road sides. Selection of tree species is often based on the needs of farmers. Most preferred tree species include *Pinus Patula* and *Eucalyptus Grandis* for wood; *Grevillea Robusta* for farm boundaries and contours; *Casuarina Cuninghamiana* for wind breaks and along roadsides; and avocados, plums and apples for fruit trees. In order to meet growing demand for tree seedlings, farmers have established 30 tree nurseries within their villages with a capacity of producing 300,000 tree seedlings each season. It is anticipated that by scaling up the interventions through local policy engagement processes, at least 100,000 farmers will have 10% tree cover on-farm in the next four years. In Nyando, over 40 tree nurseries have been established, with a capacity of producing 140,000 high quality seedlings per season. The selection of the tree species is based on the farmer needs and technical advice by the VI Agroforestry and agricultural extension staff. These trees include *Grevillea robusta*, *Markhamia lutea*, *Casuarina* spp, *Carica papaya*, and *Eucalyptus* species. These will be sold for generating income for the group; and supply the local community with high quality tree seedlings for agroforestry and woodlots. In 2016, the number of tree nurseries as well as their capacity has increased five times compared to five years ago. In Hoima, farmers have established 10 tree nurseries with a capacity of producing 100,000 seedlings per season. The farmers are also inter-cropping of fruit trees (grafted mangoes and pawpaws) with food crops, to conserve soil by reducing erosion through planting of fruit trees across contours and on terraces.

**Partners:** Kericho County Government, Kisumu County Government, Lushoto District Council, Selian Agricultural Research Institute, Sokoine University of Agriculture, Kenya Agricultural and Livestock Research Organization, National Agriculture Research Organization, Tanzania Forestry Research Institute, International Center for Tropical Agriculture (CIAT), Vi Agroforestry.

**Links / Sources for further information:** World Bank video: Climate-Smart Farming Helps a Community in Kenya Thrive in the Face of Climate-Change  
[https://www.youtube.com/watch?v=Zc\\_gknLmsNE&feature=youtu.be](https://www.youtube.com/watch?v=Zc_gknLmsNE&feature=youtu.be) Germany ZDF video: Dieses Dorf in Kenia trotz der Dürre  
<https://www.zdf.de/nachrichten/zdf-morgenmagazin/dieses-dorf-in-kenia-trotzt-der-duerre-102.html#/beitrag/video/2791464/Dieses-Dorf-in-Kenia-trotzt-der-Duerre> Blog Story: Coping with unpredictable rainfall patterns in Nyando  
<https://ccafs.cgiar.org/blog/coping-unpredictable-rainfall-patterns-nyando#.WIC2uVN95hE> Blog story: Farmers use soil and water management practices to respond to changing rainfall patterns  
<https://ccafs.cgiar.org/blog/farmers-use-soil-and-water-management-practices-respond-changing-rai>

nfall-patterns#.WICxc1N95hE Blog story: Improving the adaptive capacity of farmers in Eastern Kenya  
<https://ccafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.WICv7FN95hE>  
Recha J, Radeny M, Kimeli P, Atakos V, Kisilu R, Kinywee J. 2016. Building adaptive capacity and improving food security in semi -arid eastern Kenya. CCAFS Info Note. Copenhagen, Denmark. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).  
<https://cgspace.cgiar.org/handle/10568/78573> Recha JW, Mati BM, Nyasimi M, Kimeli PK, Kinyangi JM, Radeny M. 2016. Changing rainfall patterns and farmers' adaptation through soil water management practices in semi-arid eastern Kenya. *Arid Land Research and Management*, 30(3), 229–238.  
<http://dx.doi.org/10.1080/15324982.2015.1091398>

## 6. Activities

### A130 - Local adaptation plans, institutional innovations and business models for up scaling CSA

**Description:** Through participatory action research (PAR) in collaboration with local communities, national research organizations, and NGOs, this activity will focus on testing on-farm and evaluation of a portfolio of promising risk management CSA technologies and practices across CCAFS sites in East Africa. Specific interventions will include enhancing climate smart agriculture through decision support tools including use of CCAFS scenarios for local level adaptation planning, agro-advisories and climate services, diversification, institutional innovations for rural financing through CBOs, innovation financing, input and output markets and climate-smart farm models.

**Start date:** Jan 2015

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Recha, John <j.recha@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** CBOs, research partners, development partners, local governments and private sector scaled-up CSA interventions in Hoima, Lushoto, Nyando and Wote CSVs targeting at least 10,000 households per CSV. On-farm decision making was guided by climate information, and related agro-advisories. The CBOs accessed finances through the Innovation Fund totaling to about USD 150,000 in the CSVs. In addition the Nyando CBOs accessed micro-finance services through Rafiki Microfinance Bank. A sorghum business model was developed for Nyando site and involved private sectors players, MAGOS Enterprises and Rafiki Microfinance Bank, targeting at least 2,000 farmers. Initiated the development of local adaptation plan for Nyando, and will be completed in 2017.

**Deliverables in this activity:**

- D1360: Local Adaptation Plans for Agriculture for Nyando
- D2827: CCAFS Farms of The Future (FoTF) Farmers Video, Nyando, Kenya

### A132 - Participatory evaluation of multiple stress tolerant (drought, disease, pests) crop varieties

**Description:** The activity focuses on participatory testing and evaluation of crop-related CSA practices across CCAFS sites in EA. Specific interventions include: (i) participatory evaluation and promotion improved cassava and sweet potato in Hoima led by ZARDI-Bulindi (ii) evaluation and promotion of early maturing, pest tolerant varieties of Irish potatoes with higher nutritive value (CIP); disease resistant and pest tolerant maize varieties (SARI); disease resistant and pest tolerant bean landraces, (Bioversity) in Lushoto (iii) evaluation, dissemination and uptake of new sorghum and legume technologies integrated with improved soil and water management technologies and explore opportunities for creating farmer market linkages in Makueni (ICRISAT & KALRO Katumani) (iv) testing of drought tolerant sorghum and maize, new varieties of legume crops such as pigeon peas and cow peas, tissue culture bananas, fruit trees in on-farm arrangements that supplement improved pasture, soil and water management practices in Nyando (KALRO Kibos)

**Start date:** Jan 2015

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Recha, John <j.recha@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** In Hoima, improved cassava and sweet potatoes were scaled-up through Hoima district government and Hoima District Farmers Association targeting over 1,000 farmers who were linked to markets in Uganda. In Lushoto, scaling up of improved maize, beans and Irish potatoes, with over 800 farmers involved who are members of SACCOS under the coordination of Lushoto District Council and SARI. In addition, new Irish potato varieties tested in Lushoto and scheduled to be released through the Tanzania Official Seed Certification Institute (TOSCI) working with CIP. In Wote, Makueni County government is scaling up sorghum-legume intercrop innovations together with soil and water management technologies targeting over 5,000 farmers. In Nyando CSVs, the Kericho and Kisumu County governments are scaling up cereal-legume interventions targeting over 5,000 farmers. Farmer learning events held in Nyando and Lushoto. Emerging lessons shared through blogs, videos, Infonotes, book chapter on CSA and private sector, journals, CCAFS working papers.

**Deliverables in this activity:**

- D2785: Germany ZDF video: Dieses Dorf in Kenia trotz der Dürre
- D2791: Building adaptive capacity and improving food security in semi -arid eastern Kenya.
- D2793: Changing rainfall patterns and farmers' adaptation through soil water management practices in semi-arid eastern Kenya
- D2796: Building local institutional capacity to implement agricultural carbon projects
- D2798: Private Sector Actions to Enable Climate-Smart Agriculture in Small-Scale Farming in Tanzania
- D2800: Participatory evaluation of resilient potato varieties in climate-smart villages of Lushoto in Tanzania
- D627: Managing climate related risks through resilient crop and soil-water interventions in Climate-Smart Villages
- D2803: Farmers use soil and water management practices to respond to changing rainfall patterns
- D628: Strengthened farmer experimentations networks
- D671: World Bank video: Climate-Smart Farming Helps Community i

## A209 - Targeting small-ruminant resilient breeds for climate change adaptation and improved feeds.

**Description:** This activity focuses on sustained uptake of improved SR (sheep and goats) breeding programs under changing climatic conditions. Specific objectives include (i) Characterization of small-ruminants (sheep and goats) production environments and understanding the value drivers including costs and anticipated returns from SR within Nyando CSVs (ii) Developing appropriate genetic management strategies to enable sustainable SR production and improvement in small-holder systems. In addition, alternative small ruminant feeds from sweet potato vines (SPVS) will be explored by establishing optimal feeding levels of SPVS to small ruminants and determining animal response. In Borana, rangeland rehabilitation practices for improved livestock feed and nutrition will be piloted, including documentation of emerging livestock diseases and pests, and evolving herd management practices that improve herders' resilience.

**Start date:** Jan 2015

**End date:** Dec 2016

**Activity leader:** ILRI - International Livestock Research Institute Ojango, Julie <J.Ojango@cgiar.org>

**Status:** Complete

**Overall activity or progress made during this cycle:** Through ILRI's monitoring and management system, farmers were trained through village learning events on breed selection, flock management system, improved housing, feed development, and livestock healthcare to ensure high quality breeds. In addition, community-based animal health workers (paravets) were trained to support veterinary officers to manage livestock health. As a result of the cross breeding initiated with Red Maasai sheep and Gala goats, at least 2,500 cross-bred sheep and 15,00 cross-bred goats were added to the flock in Nyando. With the increasing preference of Galla cross-breeds, the CBOs initiated annual goat auctions in addition to the local weekly livestock market days in the key local towns. Currently, a business model is being developed for small ruminant value chain that will be linked to the private sector. The ILRI monitoring system created a database capturing the birth, growth, and health status. A journal articles - Ojango et al. 2016 also published.

### **Deliverables in this activity:**

- D413: System characteristics and management practices for small ruminant production in "Climate Smart Villages" of Kenya.
- D671: World Bank video: Climate-Smart Farming Helps Community in Kenya Thrive in the Face of Climate-Change
- D2805: Diversifying fodder for improved livestock productivity in Nyando
- D2802: Nyando white goats: climate-resilient and a real-time fortune
- D1191: Database for monitoring performance and provision of feedback on SR in smallholder systems
- D638: Business model for small ruminant value chain

## 7. Leverages

---

No leverages added