1. Activity Reporting.

Activity 497-2014

Scaling up partnerships to influence agricultural development and food security agenda in a changing climate

Status	On going	Milestone	4.1.4 2014 (1)
Start date	2012 Mar	End date	2015 Dec

Description: In order to influence the national and regional agenda on agricultural development and food security, the regional program will focus on scaling up local, national and regional partnerships. This will include increased CGIAR engagement in the science-policy dialogue to ensure science effectively informs national and regional policies by targeting key policy and decision makers. In addition, the regional program will continue to enhance the capacity of the African Group of Negotiators (AGN), civil society and government agencies to effectively engage in policy development and international negotiations. Other activities will include active engagement and participation in key regional and Africa-wide events and conferences related to climate change, agriculture and food security (e.g. AMCEN and CCDA).

Status: On going. In 2014 CCAFS continued to work with the Common Market for Eastern and Southern Africa (COMESA) and the United Nations Economic Commission for Africa through the African Climate Policy Center (ACPC) to strengthen the capacity of the African Group of Negotiators to integrate agriculture into the United Nations Framework Convention on Climate Change (UNFCCC) discussions. The first activity that CCAFS/COMESA/ACPC were engaged in was a joint workshop on Africa's Agriculture in a Changing Climate: Enhancing the Up-Take of Climate Smart Agriculture that was held between 12-14 Feb 2014 in Arusha, Tanzania. A new partner was brought on board, the East Africa Community (EAC). During this meeting, 69 delegates (UNFCCC focal points and the Ministry of Agriculture) from 21 African countries in East, Central and Southern Africa were represented. The major outcome of this workshop was endorsement of and voluntary commitment for the Climate-smart agriculture (CSA) Alliance for Africa to spearhead uptake of CSA practices in the continent. In addition, a working group on CSA chaired by the United Republic of Tanzania was established that will be supported by three sub-committees namely; (1) Political and Enabling Environment (Co- Conveners: Uganda, Seychelles and Food, Agriculture and Natural Resources Policy Analysis Network); (2) CSA Knowledge (Co-Conveners: Malawi, Ethiopia and the Regional Strategic Analysis and Knowledge Support System) and (3) Public and Private Investments (Co-Conveners: Kenya, South Africa and the Southern African Confederation of Agricultural Unions) with CCAFS-East Africa providing secretariat for CSA Alliance for Africa. After the first meeting in Arusha, a follow up partnership meeting on CSA Alliance: Building Climate Change Resilience in Africa was held on May 30, 2014 in Bonn, Germany. CCAFS, COMESA and the World Bank Group, Climate

Change Unit partnered and brought together 35 UNFCCC focal points from 28 African countries. The meeting discussed how to strengthen Africa's voice in the Global CSA Alliance and how to advance CSA in Africa as an adaptation, mitigation and risk management strategy and identify financial opportunities for up scaling. Outcome of the meeting was voluntary commitment of African countries for the CSA Alliance for Africa and consensus to develop a framework for the African CSA and a compendium of existing CSA best approaches in Africa. This is in progress and will be completed in 2015.

A third engagement was held on June 8 2014 in Bonn, Germany as a side event. Title of the side event was Advancing Readiness to fastrack CSA in Africa: The side event was co-sponsored by the World Bank Group, FAO, COMESA, ACPC, NEPAD, FARA, NORAD, NOVIB-OXFAM, AUC and SACAU. A total of 80 participants attended to discuss the role of science in informing the integration of CSA into national development policies and programmes.

The last engagement was a side event carried out in December 2014 during COP20 in Lima Peru in partnership with Kenya's Ministry of Environment, Water and Natural Resources, the International Center for Tropical Agriculture and University of Copenhagen. Titled, Climate-smart agriculture innovations to increase food security and rural incomes under climate change, the event attracted over 150 participants including 20 Kenyan Members of Parliament and Senators. The meeting discussed how to leverage policy, technical and financial support to scale-up the adoption of CSA practices in smallholder farming systems.

Gender Component: In all the workshops above, issues of gender and climate change are often included in the discussions. In particular, during the meeting on May 30 in Bonn, a presentation on Gender perspectives on agriculture and climate change in Africa was done by COMESA.

Additionally, a research consultancy funded by UNECA/ACPC was initiated during this meeting to identify and highlight best and good practice examples of CSA with strong gender dimensions from Eastern, Northern, Central, Western and Southern Africa. The study is expected to deliver the following outputs: a) a policy brief on gender dimensions of Africa's agriculture in a changing climate, b) identify at least two best or good practice examples of CSA with strong gender dimensions and 3) develop modalities on enhancing Africa's engagement in gender issues at UNFCCC and other international fora. The study is part of the continual technical support provided to African Group of Negotiators (AGN) by CCAFS, ACPC and COMESA and will cover all the sub-regions of Africa. These documents will be finalized in 2015.

Objectives:

1. Improve knowledge sharing and strengthen the Regional Learning Partnership (RLP), including exploring opportunities of using other knowledge sharing platforms (e.g. Rockefeller CENA platform)
2. Provide technical support to the African Group of Negotiators (AGN) in order to fully contribute to the UNFCCC work program on agriculture
3. To enhance communication of CCAFS research outputs within the region, including knowledge management.

Deliverables:

Description	Type	Year	Status	Justification
Existing partnerships strengthened and new partnerships developed	Research report (i.e. workshop report, consultant's report, discussion paper, project report, student thesis, etc.)	2014	On going	CCAFS and partners will continue to offer support to the development of the alliance.
Active communication of CCAFS research through websites, blogs, videos, events, quarterly newsletter, and other channels; including media visit to CCAFS climate-smart villages (CSVs)	Social media outputs (including web sites, blogs, wikis, linkedin group, facebook, yammer, etc.)	2014	Complete	
Technical paper on impacts of climate change on agriculture as a resource for the AGN	Book chapters	2014	Complete	The case studies to support the technical papers have been completed and published as a CTA/CCAFS Booklet and CCAFS Working paper 86. The technical papers are currently being finalized and will be ready for submission for peer review by February 28, 2015.
1 national platform supported in Kenya to foster science-policy dialogue in support of the implementation of the Kenya Climate Change Action Plan.	Platforms - Data Portals for dissemination	2014	On going	CANA is a learning, information sharing and dissemination platform, and will continuously enhance communication amongst several stakeholders in Africa.

Description	Type	Year	Status	Justification
CSA Alliance: Building Climate Change Resilience in Africa - 26 African countries are participating in a voluntary CSA Alliance for Africa that is aimed to trigger policy changes and increase investments that can transform Africa's agriculture in a changing climate.	Workshop	2014	On going	Outcome of the meeting was a request to prepare a framework for the African CSA Alliance and a compendium of existing CSA best approaches in Africa. This is on-going and will be completed in 2015
Advancing Readiness to fastrack CSA in Africa - side event held during the SBSTA in Bonn, Germany in June 2014.	Workshop	2014	Complete	
Climate-smart agriculture innovations to increase food security and rural incomes under climate change. This was an official UNFCCC side event held on December 8, 2014 in Lima Peru during COP20. CCAFS also launched the Climate and Agriculture Network for Africa (CANA)	Workshop	2014	Complete	

Partners:

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Location(s):

Regions: East Africa (EA),

Activity 476-2014

Using climate analogues to enhance knowledge sharing and adaptation in agriculture

Status	Complete	Milestone	1.1.1 2014
Start date	2012 Aug	End date	2014 Dec

Description: In 2012 and 2013, the project activities focused on building regional and national capacity on using climate scenarios and analogues in designing adaptation strategies in agriculture. A regional and two national (Ethiopia and Kenya) training workshops were conducted, including a farmer-to-farmer exchange visit in Tanzania under the Farms of the Future project in collaboration with Theme 1. In 2014, an additional farmer-to-farmer exchange of knowledge visit in one site in Kenya will be undertaken, synthesis of lessons learnt from the farmer exchange visits through case studies, including identification of social and cultural barriers to adoption of climate-smart agriculture (CSA) technologies and practices.

Status: Complete. This activity builds on previous capacity enhancement initiatives from 2012 on "Using Climate Scenarios and Analogues for Designing Adaptation Strategies in Agriculture" in East Africa. In collaboration with CCAFS Theme 1, Bioversity and Agricultural Research Institute (ARI) - Mlingano, a national training workshop was held in Dar es Salaam, Tanzania in July, 2014. Twenty six (26) experts working on climate change and related fields from various institutions in Tanzania that included the National Research and Extension Services (NARES), Universities, Government Ministries and Authorities, including 10 women were trained on the use of Climate Scenarios and Analogues tool for Designing Adaptation Strategies. Unlike previous training workshops - where rainfall and temperature were the only key variables, soils and socio-economic factors were added as variables in the 2014 training. As a way forward, the participants will be using the Analogue Tool to inform the development of national and local level adaptation plans through their respective institutions, including training other researchers in their institutions.
As part of the Farms of the Future (FoTF) project, a farmer-to-farmer exchange visit was undertaken with farmers from two villages in Nyando CCAFS site in Kenya in November 2014. The visit was organized in collaboration with CCAFS Theme 1, the Kenya Agricultural and Livestock Research Institute (KALRO) - Kibos, and the Ministry of Agriculture - Kericho and Kisumu Counties, World Neighbors and VI-Agroforestry. During the visit 16 farmers and seven stakeholders from Agricultural Innovation Systems (AIS) visited different learning sites in six counties in western Kenya and the Rift Valley (Homabay, Migori, Kisumu, Nakuru, Baringo, Uashin Gishu and Nandi). The farmers and AIS stakeholders were exposed to a wide range of ongoing community adaptation and risk management strategies in eight learning sites to enhance knowledge exchange and learning opportunities about CSA practices or technologies that might strengthen their resilience and adaptive capacity. These included soil moisture conservation strategies (e.g. bench terracing reinforced with stone gabions), soil fertility improvement techniques, production of drought resistant crops (sweet potato and cassava), dairy cow and dairy goat feed management, agricultural crop value addition processes and

collective marketing, poultry production and collective marketing, post-harvest loss reduction for animal feeds, establishment and management of fruits orchards (e.g. mango, citrus and watermelon), agroforestry, production and management of animal feeds, sustainable intensification and organic farming, and establishment of community finance bank. Feedback workshops (attended by over 200 farmers) were conducted in December, where farmers and stakeholders who participated in the visit shared their experiences through video and oral testimonials with the rest of the community members. A draft article assessing the effectiveness of farmer-to-farmer learning for enhancing adoption of climate smart agriculture and adaptation learning, identify potential adaptation and diversification pathways is ready to be submitted to a journal in 2015.

Gender Component: Of the 26 Tanzanian nationals trained on the use of Climate Scenarios and Analogues tool for Designing Adaptation Strategies, more then one-third (10) were women, while the rest (16) were men.

More than half of the 16 farmers (56%)who took part in farmer-to-farmer exchange visit were women. The composition of the women included differences in age, social standings and literacy levels. Inclusion of more women in the exchange visit is critical because the impacts of climate variability are rapidly changing the composition and structure of households and gender responsibilities are undergoing transformation. Women are increasingly becoming more responsible for household food security and therefore, their increased number in the exchange visit ensures that the CSA practices and technologies learned are adopted and shared amongst other women.

Objectives:

1. Enhance knowledge exchange and community adaptation learning by exposing communities to their potential future climate
2. Identify and document the social and cultural barriers to adoption of CSA technologies and practices
3. Evaluate the effectiveness of farmer-to-farmer exchange visits and knowledge-sharing mechanisms and pathways for enhancing adaptation learning
4. Identify and document farmer learning and knowledge dissemination pathways that can enhance adoption of CSA practices

Deliverables:

Description	Type	Year	Status	Justification
1 national training workshop on using Climate Scenarios and Analogues for Designing Adaptation Strategies in Agriculture	Capacity	2014	Complete	
Video testimonials and blogs of the farmer-to-farmer exchanges	Social media outputs (including web sites, blogs, wikis, linkedin group, facebook, yammer, etc.)	2014	Complete	
Synthesis report on lessons from the exchange visits, including social and cultural barriers to adoption of CSA practices	Research report (i.e. workshop report, consultant's report, discussion paper, project report, student thesis, etc.)	2014	Complete	Paper has been written and now we are in the process of internal peer-review, after which the paper will be submitted to a journal

Partners:

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Location(s):

Countries: Kenya, Tanzania, Uganda,

Benchmark Site: Nyando (Katuk Odeyo), Usambara (Lushoto),

Activity 459-2014

Supporting agricultural sector adaptation strategies to identify and pilot Climate Smart Agriculture priority actions at national level

Status	On going	Milestone	1.3.2 2014
Start date	2013 Jun	End date	2015 Dec

Description: Future food security in East Africa depends on agriculture's continued productivity despite its vulnerability to the projected impacts of climate change. CCAFS will work with other CGIAR centres to support the piloting of Climate Smart Agriculture (CSA) priority actions in Kenya, including the finance and investments, knowledge and capacity building, and policies and legal frameworks priority actions for creating an enabling environment for CSA in line with the National Climate Change Action Plan (NCCAP). CCAFS will provide leadership to and support a consortium of key government, research and private sector partners to develop a program of action for piloting specific priorities and key activities in targeted counties. The program will also extend the national adaptation planning to a second country in EA (Uganda) and strengthen the national learning partnerships for CSA in Kenya and Uganda.

Status: On going. In Kenya, the regional program continued to build on the engagement activities initiated in 2013 with the Ministry of Environment, Water and Natural Resources (MEWNR) and the Ministry of Agriculture, Livestock and Fisheries (MoALF) and other key stakeholders from government, non-governmental organizations, international and national research institutions and the private sector. Following a side event held in June 2013 in Bonn during the 38th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA), the regional program has been supporting the identification of priority actions for agriculture in the National Climate Change Action Plan (NCCAP). In 2014, the regional program in collaboration with the Center for International Forestry Research (CIFOR) and the International Livestock Research Institute (ILRI) developed an approach to support decision making processes that target climate-smart agricultural interventions. To test this method, a survey was conducted with 32 experts drawn from NGOs, universities, research institutions and the private sector, focusing on preferences on potential vulnerability indicators in the context of climate change and climate-smart intervention options. The process has resulted in the development of a spatially explicit database which will be used to inform the county selection process. The database contains environmental, livelihood and economic variables, both quantitative and qualitative, organized into 3 different sections (one for each variable type), and spatially referenced at county level. With regard to supporting national policy processes for climate change in Kenya, the regional program supported the peer review process of ensuring the Kenya Climate Change Bill and the National Climate Change Policy meet quality standards. A key output of the engagement with MEWNR was the joint hosting of a side event during the 20th session of the Conference of the Parties (COP 20) of the United Nations Framework Convention on Climate Change (UNFCCC) in Lima, which was attended by over 20 Members of parliament and senators from Kenya.

In addition, we finalized a CCAFS Working Paper reviewing policies related to agriculture, food security, food systems and climate change adaptation, including key institutions and actors in East Africa. In Uganda, CCAFS EA and the Climate Change Department, Ministry of Water and Environment (CCD-MWE) initiated the process of identifying priority actions for agriculture in the National Adaptation Plan of Action (NAPA). Three consultative workshops were held, which brought together stakeholders from government, research institutions, civil society, farmer organizations and private sector. The meetings identified key thematic areas for partnership and collaboration and also discussed key investment areas for the agricultural sector informed by the NAPA. As a result of the consultations, stakeholders emphasized the need to undertake an inventory of the ongoing agriculture related adaptation and mitigation projects in Uganda, including the development of a comprehensive communication strategy which could be used to share the lessons emerging from the pilot projects. In 2015, the regional program will continue to support these activities.

Gender Component: In the survey undertaken in Kenya to develop the decision support tool, 32 experts drawn from NGOs, universities, research institutions and the private sector were interviewed. Out of this 15 were female respondents. One of the key issues highlighted in the draft Terms of Reference for undertaking the inventory in Uganda is identifying the types of activities, monitoring and evaluation strategies under each project and target beneficiaries including activities that targeted women and other vulnerable groups.

Objectives:

1. To build national capacity on designing adaptation strategies, including approaches and methods for evaluating cost and benefits of adaptation strategies.
2. To initiate discussions with various stakeholders on how to take forward the agriculture priority actions in the Kenya National Climate Change Action Plan (NCCAP) and to support the piloting of the actions.
3. To extend the national agricultural sector adaptation planning to a second country (Uganda).

Deliverables:

Description	Type	Year	Status	Justification
Increased CGIAR engagement to support piloting of at least 2 CSA priority actions in Kenya	Workshop	2014	On going	In 2014 the activity focused on developing the prioritization tool through a participatory process that entailed consultations with stakeholders from government,NGOs, research, private sector and academic institutions. In 2015, the tool will be tested on a real case in order to inform decision making processes on identifying CSA innovations, practices and investments at county level.
A series of stakeholder consultations and a National Adaptation Planning Workshop for Agriculture in 1 country to identify CSA priority actions.	Workshop	2014	On going	In 2014, activities focused on establishing key partnerships and building rapport with the key agencies implementing the NAPA pilot projects and CSA practices in Uganda. The process also centered on identifying what the priorities and gaps are in the country. In 2015, the regional program will support the implementation of the recommendations on undertaking an inventory of the adaptation and mitigation actions being undertaken in the agriculture sector.
Database to inform the targeting of climate-smart pilot projects in Kenya and identification of counties	Data	2014	On going	Building and updating the database is a continuous process. Also in 2015 the database will be used to test a real case together with government.

Description	Type	Year	Status	Justification
The working paper reviews the various policies, institutions and actors related to climate change adaptation, food security, food system and agricultural development in East Africa—focusing on Ethiopia, Kenya, Tanzania and Uganda - initially commissioned in 2012.	Working Paper	2014	Complete	

Partners:

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Location(s):

Countries: Kenya, Uganda,

Activity 487-2014

Participatory testing of a portfolio of promising climate change adaptation, risk management and mitigation technologies and interventions in CCAFS Climate Smart Villages

Status	On going	Milestone	4.1.2 2014
Start date	2012 Jan	End date	2015 Dec

Description: Through participatory action research (PAR) in collaboration with local communities, national and international research organizations, and NGOs, this initiative will test on-farm and evaluate a portfolio of promising climate change adaptation, risk management and mitigation technologies and interventions in CCAFS Climate Smart Villages (CSVs). Specific interventions in 2014 will include sustainable land and water management, agroforestry integrating fruit trees, drought tolerant legume and cereal varieties, root crops, integrating work at the CSV into local district planning, strengthening existing farmer experimentation networks and partnerships, and a gender scoping to identify CSA practices that are likely to benefit women farmers.

Status: On going. This activity builds on participatory action research initiatives from 2012 through 2013. Across the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) learning sites in East Africa, various partners are working with farmers to test a portfolio of CSA technologies and practices within the CCAFS Climate Smart Villages (CSVs) in order to improve the adaptive capacity of rural communities, increase incomes and achieve greater food security.
In the Hoima CSVs, the Zonal Agricultural Research and Development Institute (ZARDI Bulindi) is working with over 200 farmers from seven villages who are members of two umbrella farmer groups, Kyabigambire Farmers Association and Bagonza Kukora Joint Farmer Group. The two groups have an innovation fund of USD 15,000. About 100 farmers are involved in promoting soil and water conservation that integrates agroforestry with fruit trees. A total of 15km of water retention ditches have been established to control soil erosion and retain water for crops. The 100 farmers have grown a total of 3,000 resilient mango and pawpaw trees and 20,000 agroforestry trees from the World Agroforestry Centre (ICRAF) germplasm. A total of six tree nurseries with a capacity of raising 50,000 tree seedlings per season have been established to ensure a steady supply of seedlings. Another 100 farmers were involved in evaluating two cassava varieties from the International Institute of Tropical Agriculture (IITA) and two sweet potato varieties from the International Potato Center (CIP) that have resistance to diseases and grow faster.
In the Lushoto CSVs, CIP is testing six Irish potato varieties with 100 farmers, and Bioversity is promoting two resilient bean varieties. These will be multiplied through umbrella farmer groups. In partnership with Selian Agricultural Research Institute (SARI) 400 farmers constructed a total of 80 km of flat terraces for control of erosion. These terraces are reinforced by a total of 85,000 agroforestry trees developed by ICRAF. Technical support from Tanzania Forestry Research Institute (TAFORI) has led to expansion of six tree nurseries that can raise 100,000 seedlings in a season. The farmer groups have formed three village savings and credit cooperative societies with an

Innovation Fund of USD 30,000 for investments in agricultural activities.

In Nyando CSVs, Kenya Agricultural and Livestock Research Organisation (KALRO) is testing resilient pigeon pea and sorghum varieties from the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), and promoting soil and water conservation integrated with fodder and fruit trees from ICRAF. A total of 300 farmers are involved and 10 km of terraces and 8 km of stone bands in rocky landscapes have been established to control erosion. The terraces are integrated with 75 water harvesting pans that provide water for irrigation in dry seasons. About 3 hectares of resilient napier and vetiver grass fodder have been established for multiplication, and a total of 3,000 resilient mango trees and 3,000 tissue culture bananas have been grown to better utilize available soil moisture. The International Livestock Research Institute (ILRI) spearheaded the development of feeds and breeding of resilient Red Maasai sheep and Gala goats. A total of 1,500 breeds were tagged for monitoring within the community. Four smart farms were established by ViAgroforestry as one approach to dealing with the challenges of degraded land, declining land size and seasonal rainfall variability. Smart farms have greenhouses combined with drip irrigation lines and mini-earth dams that save water and enable regular production. The smart farms generate an income of USD 4,000 per year per farm. Three umbrella farmer groups have an Innovation Fund capital of about USD 35,000, where farmers borrow to invest in agricultural activities, having better access to a community input supply shop. A total of 3,500 farmers participated in knowledge sharing events through village learning days, training at the Kisumu Agricultural Society of Kenya Fair and farmer exchange visits. Maseno University and Kenya Meteorological Services have established a climate information service for on-farm decision making involving 700 farmers.

In Wote CSVs, ICRISAT and KALRO worked with 400 farmers to evaluate resilient sorghum -cowpea and green gram intercrop innovations. Scaling up the crop enterprises is being done through two umbrella farmer groups that have an Innovation Fund capital of USD 10,000. Knowledge exchange involving 1,500 farmers took place through village learning events.

Gender Component: The membership of all farmers groups in the CSVs consists of about 60% women. The women farmers have access to the Innovation Fund for investing in agricultural activities to boost their income. In the farmer learning events organized in 2014, about 70% of all participants were women, and therefore able to gain knowledge on resilient farming practices. For example, in the farmer learning events in Nyando, 2,500 out of the 3,500 participants were women. In addition a total of 280 Nyando CSVs women farmers were trained on climate-smart agriculture at the Kisumu Agricultural Society of Kenya Fair. Their understanding of resilient agricultural practices and tools that they can use on their farms increased, and they were also linked to a women micro-finance scheme. Within the CSVs, women are leading some of the crop demonstrations where they teach the local community about improved agronomic practices and new resilient crop varieties like pigeon peas.

Objectives:

1. To scale-up on-farm testing of a portfolio of promising adaptation, risk management and mitigation technologies and practices such as water management, agro-forestry, sustainable land management in at least three CCAFS sites.

2. To undertake trainings and farmer learning events on climate smart agriculture practices.
3. To document lessons learnt and identify interventions that are likely to benefit women farmers.

Deliverables:

Description	Type	Year	Status	Justification
Case study reports on promising CSA technologies and interventions	Reference material (booklets and training manuals for extension agents, etc.)	2014	On going	The report on promising CSA technologies for adaptation to climate change in East Africa is now undergoing final editing after gathering the relevant data from the CSVs
Accelerated uptake of CSA through the district and county adaptation plans in Kenya	Other	2015	Incomplete	
Capacity enhancement and strengthened farmer experimentation networks through farmer learning events and fairs	Capacity	2014	Complete	
Video testimonials in partnership with the media and blogs on CCAFS website	Articles for media or news (radio, TV, newspapers, newsletters,etc.)	2014	Complete	

Partners:

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Location(s):

Benchmark Site: Nyando (Katuk Odeyo), Makueni (Wote), Albertine Rift (Hoima), Usambara (Lushoto), Borana (Yabero),

Regions: East Africa (EA),

Activity 880-2014

Supporting the Policies and Institutions for Climate-resilient Food Systems flagship trials in East Africa

Status	On going	Milestone	4.2.2 2014 (1)
Start date	2014 Jan	End date	2015 Dec

Description: This activity will assess and respond to demand for decision tools to promote innovative financing and credit provision to increase government and private sector investments in CSA linked to NAP, starting with Kenya. Links to milestone 1.3.2 (2014).

Status: On going. The IITA PACCA project was able to initiate a learning alliance of national level platform with multiple stakeholders. This alliance is intended to serve as the focal point for the implementation of policy engagement actions and will develop a policy engagement strategy. In Tanzania, we participated in the national workshop by the ministry of agriculture, food and cooperatives on consultations with and training of district officials in developing climate resilient district development plans. In Uganda, we advanced plans for a study on the successful NAPA projects that will inform the agriculture sector adaptation plan that is under development. We also completed the CANA project http://ccafs.cgiar.org/blog/introducing-africa%E2%80%99s-bridge-between-science-and-policy#.VQf0XOGgw80, providing a platfrom where the work of PACCA and all other national platforms will be pooled and featured as a consolidated platform for driving the science and policy dialogue around planning for adaptation and mitigation in East and Southern Africa. The platform will feature resources, live casts, discussions, webinars, audio and media content for advancing co-generation of adaptation knowledge and shared learning on climate change, agriculture and food security. This will also feature resources and discussions on gender mainstreaming in agriculture.

Gender Component: Not defined

Objectives:

1. Work with government and private sector to develop decision tools that promote innovative financing and investments for Climate Smart Agriculture as part of the national adaptation

planning.

Deliverables:

Description	Type	Year	Status	Justification
A report providing national-scale, multi-dimensional assessment of priority areas for CSA, where government and private sector can co-invest	Peer-reviewed journal articles	2014	On going	

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Location(s):

Countries: Kenya,

Activity 530-2014

Participatory evaluation of promising risk management innovations and enhancing CSA through innovative partnerships, decision support tools and climate information services

Status	On going	Milestone	2.1.3 2014
Start date	2013 Jun	End date	2016 May

Description: The project seeks to evaluate promising risk management innovations in 2 sites in EA, synthesis of lessons and opportunities for scaling-out and also to enhance climate risk management and adaptation to climate change for rain-fed agriculture through innovative partnerships, decision support tools, climate information services and communication strategies.

Status: On going. Through a research initiative which began in 2013, Maseno University continued its work focusing on “Enhancing climate-smart agriculture through innovative partnerships, decision support tools and climate information services in Nyando CSVs”. The university partnered with Kenya Meteorological Services, county agricultural extension officers, agricultural researchers, agrodealers, mobile phone provides and local media to help farmers access climate information to inform their decision making at farm level. Together with the agrodealer, they initiated a process of sending downscaled seasonal weather forecasts through mobile phone messages to 700 farmers. The forecasts were followed by advisories on crop and livestock interventions, and availability of farm inputs. They also installed 100 rain gauges and trained farmers to take records in Kericho and Kisumu Counties that were later digitized. The data was used in crop modeling to inform farmers the options of climate risk management; including start of the season, length of growing period, and occurrence of extreme climate events. A total of 100 farmers were trained on the use of tailored climate information products in order to improve farm level decision making. A draft farmer training manual has been developed that will be useful in helping farmers get a better understanding of climate change and variability in their local setting, and also helping farmers correctly interpret forecasts for decision making on-farm

Gender Component: The project works with established farmer groups which comprise of male and female farmers including the youth to help farmers understand historical climate risks in their environment and how to optimize farm productivity under prevailing conditions. Female farmers constitute over 60% of the membership of the farmer groups in Nyando, and participate in all farmer climate information training events. Development of climate information services and communication strategies address the needs of both male and female farmers and the youth.

Objectives:

1. To build partnerships between farmers, researchers, extension agents, national meteorological services, agro-dealers and media to strengthen farmers’ capacity to manage agricultural climate risks and adapt to climate change.

2. To apply decision support tools to enhance farm-level decision making, climate risk assessment and analysis of coping and adaptation options.
3. To promote wider use of decision support tools by making it easy to access and process input data from various sources.
4. To identify gaps in climate services and develop new products that meet the needs of farmers.
5. To develop communication strategies that enhance farmers' capacity to manage climate-related risks.

Deliverables:

Description	Type	Year	Status	Justification
Synthesis report	Research report (i.e. workshop report, consultant's report, discussion paper, project report, student thesis, etc.)	2014	On going	The team needs to collect more data from the Nyando CSVs before submitting a CCAFS working paper on the role of climate information on farmer decision making, productivity and livelihoods: case study of Nyando, Kenya
Manual with guidelines for climate services delivery to farmers	Reference material (booklets and training manuals for extension agents, etc.)	2014	On going	The training manual draft is being reviewed by the CCAFS East Africa communications team for alignment with the CCAFS publications guidelines
Policy brief, Journal publication	Research report (i.e. workshop report, consultant's report, discussion paper, project report, student thesis, etc.)	2014	On going	One more season of rainfall data collection from the 100 rain gauges installed in 2014 is needed in order to have sufficient data for analysis

Partners:

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5- Kenya Meteorological Department (KMD):
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Location(s):

Countries: Kenya,
Benchmark Site: Nyando (Katuk Odeyo),

2. Succinct summary of activities and deliverables by Output level.

Output: 1.1.1

Summary: In Tanzania, 26 experts working on climate change and related fields from various institutions were trained on using climate scenarios and analogues for designing adaptation strategies in agriculture in collaboration with CCAFS Theme 1, Bioversity and Agricultural Research Institute (ARI) – Mlingano. The experts were drawn from the National Research and Extension Services (NARES), Universities, Government Ministries and Authorities. The experts are expected to use the knowledge to inform the development of national and local level adaptation plans through their respective institutions, including training other researchers in their institutions. To apply the analogue the tool, a farmer-to-farmer exchange visit was undertaken with farmers from two villages in Nyando CCAFS site in Kenya as part of the Farms of the Future Project in collaboration with CCAFS Theme 1, the Kenya Agricultural and Livestock Research Institute (KALRO), and the Ministry of Agriculture (MoA), World Neighbors and VI-Agroforestry. Sixteen farmers and seven stakeholders from Agricultural Innovation Systems (AIS) visited different learning sites in six counties in western Kenya and the Rift Valley. They were exposed to a wide range of ongoing community adaptation and risk management strategies in eight learning sites to enhance knowledge exchange and learning opportunities about CSA practices and technologies to strengthen their resilience and adaptive capacity. These included soil moisture conservation strategies, soil fertility improvement techniques, production of drought resistant crops, dairy cow and dairy goat feed management, agricultural crop value addition processes and collective marketing, poultry production and collective marketing, post-harvest loss reduction for animal feeds, establishment and management of fruits orchards, agroforestry, production and management of animal feeds, sustainable intensification and organic farming, and establishment of community finance bank. A draft journal article assessing the effectiveness of farmer-to-farmer learning for enhancing adoption of climate smart agriculture and adaptation learning, identify potential adaptation and diversification pathways has been prepared.

Output: 1.3.2

Summary: In order to support the implementation of the Kenya National Climate Change Action Plan (NCCAP), the regional program in collaboration with the Center for International Forestry Research (CIFOR) and the International Livestock Research Institute (ILRI) developed a tool to support decision making processes that target climate-smart agricultural interventions. The tool has been tested through a survey conducted with 32 experts drawn from NGOs, universities, research institutions and the private sector, focusing on preferences on potential vulnerability indicators in the context of climate change and climate-smart intervention options. In addition, the regional program supported the peer review process of ensuring the Kenya Climate Change Bill and the National Climate Change Policy meet quality standards. A CCAFS Working Paper (WP 82) reviewing policies related to agriculture, food security, food systems and climate change adaptation, including key institutions and actors in East Africa was also finalized. The regional program in collaboration with the Kenya Ministry of Environment, Water and Natural Resources (MEWNR), Ministry of Agriculture, Livestock and

Fisheries (MoALF) and CCAFS Coordinating Unit organized an official side event on “Climate-smart Agriculture Innovations to Increase Food Security and Rural Incomes under Climate Change” during the 20th session of the Conference of the Parties (COP 20) of the United Nations Framework Convention on Climate Change (UNFCCC) in Lima which was attended by over 20 Members of parliament and senators. In Uganda, CCAFS EA and the Climate Change Department, Ministry of Water and Environment (CCD-MWE) initiated the process of identifying priority actions for agriculture in the National Adaptation Plan of Action (NAPA). Three consultative workshops were held, bringing together stakeholders from government, research institutions, civil society, farmer organizations and private sector. The meetings identified key thematic areas for partnership and collaboration and also discussed key investment areas for the agricultural sector informed by the NAPA. As a way forward, stakeholders proposed the CCD undertakes an inventory of adaptation and mitigation projects being implemented in the country and to document emerging lessons. A Webinar on reaching the private sector with tools and resources for climate-smart agriculture in East Africa was organized in August, 2014. The event attracted over 200 climate change and food security practitioners from the East Africa and beyond, who signed up to listen to the key speakers with 80 participants attending the online event.

Output: 2.1.3

Summary: Working with Maseno University in partnership with Kenya Meteorological Services (KMS), county agricultural extension officers, agricultural researchers, agro-dealers, mobile phone providers and local media agro-dealer, downscaled seasonal weather forecasts information were sent to 700 farmers through mobile phone messages. The forecasts were accompanied by advisories on crop and livestock interventions, and availability of farm inputs. One hundred rain gauges were installed, including training of the farmers to record climate data in Kericho and Kisumu Counties that were later digitized. The data were used in crop modeling to inform farmers the options of climate risk management, including start of the season, length of growing period, and occurrence of extreme climate events. A total of 100 farmers were trained on the use of tailored climate information products in order to improve farm level decision making. A draft training manual on “Participatory approaches for training famers on climate information” has been developed.

Output: 4.1.2

Summary: Building on participatory action research initiatives from 2012 through 2013, the regional program continued to work with various partners and farmers across the CCAFS sites in East Africa to test a portfolio of CSA technologies and practices within the CCAFS Climate Smart Villages (CSVs) in order to improve the adaptive capacity of rural communities, increase incomes and achieve greater food security. In the Hoima in Uganda, the Zonal Agricultural Research and Development Institute (ZARDI Bulindi) is working with over 200 farmers from two farmer groups (Kyabigambire Farmers Association, and Bagonza Kukora Joint Farmer Group across seven villages to promote soil and water conservation strategies, integrated with agroforestry. Six tree nurseries have been established, with a capacity of raising 50,000 tree seedlings. About 15km of water retention ditches have been established. In addition, IITA and the CIP evaluated two cassava varieties and two sweet potato varieties that are resistance to diseases and grow faster with 100 farmers.

In Lushoto in Tanzania, CIP is testing six Irish potato varieties with 100 farmers, while Bioversity is promoting two resilient bean varieties. These will be multiplied through umbrella farmer groups. In collaboration with SARI, 80km of flat terraces were constructed by 400 farmers to control soil erosion. These terraces have been reinforced by 85,000 agroforestry trees developed by ICRAF. Farmers established six tree nurseries with a capacity of raising 100,000 seedlings in a season with technical support by TAFORI.

In Nyando in Kenya, KALRO is working with 300 farmers to test resilient pigeon pea and sorghum varieties from ICRISAT, and promoting soil and water conservation integrated with fodder and fruit trees from ICRAF. To control soil erosion, 10km of terraces and 8km of stone bands in rocky landscapes have been established, and integrated with 75 water harvesting pans that provide water for crops and livestock in dry season. In addition, ILRI is leading a project on improving small ruminant breeds and feeding strategies, specifically focusing on the Red Maasai sheep and Gala goats. About 1,500 animals were tagged for monitoring within the community, including 3 hectares of resilient Napier and vetiver grass fodder established for multiplication. Four smart farms with greenhouses were established by Vi-Agroforestry to address the challenges of degraded land, declining land size and seasonal rainfall variability. To facilitate on-farm decision making, Maseno University and Kenya Meteorological Services piloted a climate information service involving 700 farmers through sms.

In order to promote investment in agriculture and improve access to farm inputs, farmers group across the CCAFS sites have set-up innovation funds. In Nyando, the farmers have also established a community input supply shop within the CSV. Knowledge sharing events through farmer learning events were also organized to strengthen the farmer experimentation networks across the sites.

Output: 4.1.4

Summary: The regional program continued to work with the Common Market for Eastern and Southern Africa (COMESA) and the African Climate Policy Center (ACPC) to strengthen the capacity of the African Group of Negotiators to integrate agriculture into the United Nations Framework Convention on Climate Change (UNFCCC) discussions through a series of workshops. These included:

• A joint workshop on Africa's Agriculture in a Changing Climate: Enhancing the Up-Take of Climate Smart Agriculture in February 2014 in Arusha, Tanzania. Sixty nine delegates (UNFCCC focal points and the Ministry of Agriculture) from 21 African countries in East, Central and Southern Africa were represented. The major outcome of this workshop was endorsement of and voluntary commitment for the Climate-smart agriculture (CSA) Alliance for Africa to spearhead uptake of CSA practices. A working group on CSA was also established to be supported by three sub-committees: Political and Enabling Environment, CSA Knowledge, and Public and Private Investments with CCAFS-East Africa providing secretariat for CSA Alliance for Africa.

• Partnership meeting on CSA Alliance: Building Climate Change Resilience in Africa in May 2014 in Bonn, Germany. CCAFS EA, COMESA and the World Bank Group - Climate Change Unit brought together 35 UNFCCC focal points from 28 African countries to discuss how to strengthen Africa's voice in the Global CSA Alliance and how to advance CSA in Africa as an adaptation, mitigation and risk management strategy and identify financial opportunities for up scaling. Outcome of the meeting was voluntary commitment of African countries for the CSA Alliance for Africa and consensus to

develop a framework for the African CSA and a compendium of existing CSA best approaches in Africa.

• A side event in June 2014 in Bonn, Germany on “Advancing Readiness to fastrack CSA in Africa”. The side event was co-sponsored by the World Bank Group, FAO, COMESA, ACPC, NEPAD, FARA, NORAD, NOVIB-OXFAM, AUC and SACAU. A total of 80 participants attended to discuss the role of science in informing the integration of CSA into national development policies and programmes.

• A side event in December 2014 during COP20 in Lima Peru in partnership with Kenya’s Ministry of Environment, Water and Natural Resources (MEWNR), the International Center for Tropical Agriculture (CIAT) and University of Copenhagen. The event which attracted over 150 participants including 20 Kenyan Members of Parliament and Senator discussed how to leverage policy, technical and financial support to scale-up the adoption of CSA practices in smallholder farming systems.

Output: 4.2.2

Summary: A gender strategy for East Africa was developed. it is intended that in 2015, the gender toolbox will be tested by partners at 1 to 2 CCAFS sites to inform the development of the local agricultural plans of adaptation (LAPAs)

3. Communications.

Media Campaigns:

In 2014, the regional program engaged both local and international journalists in documenting emerging lessons from the climate-smart villages (CSVs). A key achievement was hosting the British Broadcasting Corporation (BBC) - Africa crew at the Nyando CSV, to capture ongoing field activities and hold interviews with farmers and researchers. The content was aired on a number of days through BBC programs that include Amka na BBC and Dira ya Dunia on BBC World Service Radio. Additionally, the program engaged journalists from the Kenya Broadcasting Corporation (KBC) who aired content from Nyando during prime time news (http://ccafs.cgiar.org/media-visit-nyando-climate-smart-villages-0#.VNIIUi6xgXg)

Following these visits, CCAFS researchers were invited to live studio interviews with both BBC and KBC where they gave more insight on climate change issues and what direction the country (and Africa) needs to take. These files are available on CCAFS you tube channel.

An example of a media story from the Nyando CSV is: Kisumu Youth adopt modern agriculture methods (http://www.youtube.com/watch?x-yt-cl=85114404&v=XRcSnewkNd4&list=PLD632736EE276E119&x-yt-ts=1422579428)

The Regional Program Leader (RPL) authored articles on various media (Standard newspaper and The Africa report). Generally, over 15 media channels requested for interviews on climate change issues. These are: (Coast week, Standard, KBC, NTV, The Star, Vanguard, The Africa report, BBC, All Africa, CNBC, IPP Media, IRIN, AGRF, Global post and Science Africa).

The Newspaper reports included:

Africa needs multi-sectoral approaches to address impacts of climate change: official - (Coast Week) http://bit.ly/1j8g1xL

Arusha hosts regional workshop on African Agriculture/climate change - (IPP Media) http://bit.ly/1dQf08o

Investment essential to boost agriculture growth - (CNBC AFRICA) http://bit.ly/1kX51X7

Kenyan farmers earn carbon credits (The Star) http://bit.ly/UdoNBG

Kenya can lead on climate change adaptation (IRIN) http://bit.ly/1th1qSr

Coral reef restoration can save lives, livelihoods (IRIN) http://bit.ly/1zLhG4r

Experts on climate change take on weatherman for turning a blind eye to farmers' needs (The Starndard) bit.ly/1mjOvSy

Government optimistic over solution on climate change (KBC) bit.ly/XQt5Rq

Kenya lacks adequate climate data stations (The Star) bit.ly/1r6g3JR

Indigenous knowledge must be linked to scientific research for a green revolution in Africa (AGRF) bit.ly/1wz5eln

Why Africa's Smallholder Farmers Need Financial Support bit.ly/1vaOkJH

Africa adopts new initiative to help farmers tackle climate risks (Coastweek.com) bit.ly/1tPDQgy
Green Revolution in Africa: How to make banks listen to farmers, by World Bank chief (Vanguard) bit.ly/1Avt4kp
Africa Focus: Africa adopts new initiative to help farmers tackle climate risks (globalpost) bit.ly/1HZPDBn
Climate Change: Re-adapting agriculture (The Africa Report) bit.ly/1Aa00Od
Climate-knowledge-farmers-boosts-harvests-report (The Star) bit.ly/1w5aWZQ

Blogs:

In 2014, there was a significant increase in the number blogs published on CCAFS website from 2013 by CCAFS EA team and partners. Over 40 blogs were published highlighting ongoing field activities, science and policy news. The blogs are summarized below, including the URL:

1. Women farmers key to food security in Africa - http://ccafs.cgiar.org/blog/women-farmers-key-food-security-africa#.VLz4US6keQc
2. Addressing climate change at the policy level - http://ccafs.cgiar.org/blog/addressing-climate-change-policy-level#.VM9CFy6xgXg
3. Climate change adaptation and mitigation initiatives for agriculture in East Africa - http://ccafs.cgiar.org/blog/climate-change-adaptation-and-mitigation-initiatives-agriculture-east-africa#.VM9CUC6xgXg
4. Climate change vulnerability and risk assessment of agriculture and food security in Ethiopia: which way forward? - http://ccafs.cgiar.org/blog/climate-change-vulnerability-and-risk-assessment-agriculture-and-food-security-ethiopia-which#.VL0M0C6keQc
5. Moulding climate champions; creating food secure communities
6. http://ccafs.cgiar.org/blog/moulding-climate-champions-creating-food-secure-communities#.VL0QnS6keQc
7. Nyando's climate-smart village scientist- http://ccafs.cgiar.org/blog/nyando%E2%80%99s-climate-smart-village-scientist#.VL0Q_i6keQc
8. Gender, agriculture, climate change and policy responses in Africa - http://ccafs.cgiar.org/blog/gender-agriculture-climate-change-and-policy-responses-africa#.VL0Rri6keQc
9. Learning from communities: Natural resource management and climate change adaptation best practices - http://ccafs.cgiar.org/blog/learning-communities-natural-resource-management-and-climate-change-adaptation-best-practices#.VL0SLi6keQc
10. Improving adaptation planning in Tanzania through the climate analogue tool - http://ccafs.cgiar.org/blog/improving-adaptation-planning-tanzania-through-climate-analogue-tool#.VL0TLy6keQc
11. How do we best create climate-resilient drylands in Africa? - http://ccafs.cgiar.org/blog/how-do-we-best-create-climate-resilient-drylands-africa#.VL0TBC6keQc
12. Improving the adaptive capacity of women farmers in Western Kenya - http://ccafs.cgiar.org/blog/improving-adaptive-capacity-women-farmers-western-

kenya#.VL0TdC6keQc

13. Addressing priority adaptation measures in Uganda - http://ccafs.cgiar.org/blog/addressing-priority-adaptation-measures-uganda#.VL0Tni6keQc

14. Climate-smart agriculture: Solution to Africa's warmer climate? - http://ccafs.cgiar.org/blog/climate-smart-agriculture-solution-africa%E2%80%99s-warmer-climate#.VL0T_C6keQc

15. Improving adaptation planning in Tanzania through the climate analogue tool - http://ccafs.cgiar.org/blog/improving-adaptation-planning-tanzania-through-climate-analogue-tool#.VLzGui6keQc

16. Africa builds alliances to tackle climate change in agriculture - http://ccafs.cgiar.org/blog/africa-building-alliances-tackle-climate-change-agriculture#.VL0atC6keQc

17. Cabinet Secretary joins champion farmers in spreading knowledge on improved livestock breeds in Kenya - http://ccafs.cgiar.org/blog/cabinet-secretary-joins-champion-farmers-spreading-knowledge-resilient-livestock-breeds-kenya#.VM9fDS6xgXg

18. Farmers from climate-smart villages in Lower Nyando and Kericho can now identify adaptive measures for future climate - http://ccafs.cgiar.org/blog/farmers-climate-smart-villages-lower-nyando-and-kericho-can-now-identify-adaptive-measures#.VM9fYi6xgXh

19. Climate-smart farmer combats dry soil with tree power - http://ccafs.cgiar.org/blog/climate-smart-farmer-combats-dry-soil-tree-power#.VM9fhC6xgXh

20. Climate change: Re-adapting African agriculture - http://ccafs.cgiar.org/research-highlight/climate-change-re-adapting-agriculture#.VL0c4y6keQc

21. Helping farmers catch their dreams, even as the climate changes - http://ccafs.cgiar.org/research-highlight/climate-change-re-adapting-agriculture#.VL0c4y6keQc

22. Introducing Africa's bridge between science and policy - http://ccafs.cgiar.org/research-highlight/climate-change-re-adapting-agriculture#.VL0c4y6keQc

23. Nyando farmers on a climate journey to spur adaptation to climate change - http://ccafs.cgiar.org/blog/nyando-farmers-journey-spur-adaptation-climate-change#.VM9h3i6xgXg

24. Reaching the private sector with tools and resources for climate-smart agriculture in East Africa - http://ccafs.cgiar.org/blog/reaching-private-sector-tools-and-resources-climate-smart-agriculture-east-africa#.VM9h-i6xgXh

25. Climate scenarios and analogues: A glimpse into past, present and future climates - http://ccafs.cgiar.org/blog/climate-scenarios-and-analogues-glimpse-past-present-and-future-climates#.VM9iXy6xgXh

26. Building climate resilience in the African agriculture sector - http://ccafs.cgiar.org/blog/building-climate-resilience-african-agriculture-sector#.VM9isi6xgXh

27. Better bean varieties for Usambara's rural poor - http://ccafs.cgiar.org/blog/better-bean-varieties-usambara%E2%80%99s-rural-poor#.VM9i6i6xgXh

28. Traditional forecasting meets science for climate risk management - http://ccafs.cgiar.org/blog/traditional-forecasting-meets-science-climate-risk-management#.VM9jFS6xgXh

29. Scaling up climate services in Tanzania - http://ccafs.cgiar.org/blog/scaling-climate-services-

tanzania#.VM9jLy6xgXh

30. Is Africa ready to take climate-smart agriculture forward? - http://ccafs.cgiar.org/blog/africa-ready-take-climate-smart-agriculture-forward#.VL0Gty6keQc

31. A Climate - Smart Agriculture Alliance for Africa - http://ccafs.cgiar.org/blog/climate-smart-agriculture-alliance-africa#.VM9jfC6xgXh

32. Assessing loss and damage from the double impact of floods and droughts in Mozambique - http://ccafs.cgiar.org/blog/assessing-loss-and-damage-double-impact-floods-and-droughts-mozambique#.VM9jmy6xgXh

33. Testing sorghum and cowpea varieties to increase farmers' production margins in East Africa - http://ccafs.cgiar.org/blog/testing-sorghum-and-cowpea-varieties-increase-farmers%E2%80%99-production-margins-east-africa#.VM9j2y6xgXh

34. Time for an exit strategy to traditional climate forecasting ? - http://ccafs.cgiar.org/blog/time-exit-strategy-traditional-climate-forecasting#.VM9j8y6xgXh

35. Getting to grips with how farmers perceive climate variability and its impacts - http://ccafs.cgiar.org/blog/getting-grips-how-farmers-perceive-climate-variability-and-its-impacts#.VM9khy6xgXh

36. How can we help farmers better understand climate information? - http://ccafs.cgiar.org/blog/how-can-we-help-farmers-better-understand-climate-information#.VM9koS6xgXh

37. Genetic erosion threatens resilience of Ethiopian Boran Cattle - http://ccafs.cgiar.org/blog/genetic-erosion-threatens-resilience-ethiopian-boran-cattle#.VM9kvy6xgXh

38. Improving potato yields for farmers in the Usambara Highlands - http://ccafs.cgiar.org/blog/improving-potato-yields-farmers-usambara-highlands#.VM9k4y6xgXh

39. The EA team also participated in a blog competition organized by the CGIAR Consortium known as "Talking Science". We contributed two blog stories which were posted on the Development Dialogues website (prepared and moderated by the CGIAR Consortium office) an online platform supporting the CGIAR Signature Event in New York City on September 25th 2014.

40. What Good is Science without Policy Action? http://dialogues.cgiar.org/blog/what-good-is-science-without-policy-action/

41. CGIAR Knowledge driving changing practices among rural farmers in East Africa - http://dialogues.cgiar.org/blog/cgiar-knowledge-driving-changing-practices-among-rural-farmers-in-east-africa/

Websites:

Apart from the over 40 blogs published on CCAFS website, all regional program activities (calendar) for the year 2014 were uploaded onto the website for all stakeholders to access. A key achievement was the launch of a new regional online learning platform during COP 20 in Lima, Peru - "The Climate and Agriculture Network for Africa (CANA)" - http://canafrica.com/ . CANA is a knowledge sharing web based platform by a network of partners drawn from the region and brings together policy makers, researchers and practitioners in climate science and agriculture who are seeking to build resilience within African agriculture. The CANA website launch video is available at: http://www.youtube.com/watch?v=OBmfPzH9tlc. Read more about CANA at

http://ccafs.cgiar.org/blog/introducing-africa%E2%80%99s-bridge-between-science-and-policy

Social Media Campaigns:

The regional program took part in a number of social media campaigns in collaboration with the CCAFS Coordinating Unit (CCU), the CGIAR consortium and partners. This mainly through the EA twitter account: https://twitter.com/cgiarclimate_EA. Such campaigns included the CGIAR Development Dialogues - http://dialogues.cgiar.org/about/ , World Environment Day, World Day to Combat Desertification and Drought among others: http://ccafs.cgiar.org/blog/how-can-researchers-and-policymakers-support-farmers-combating-drought-and-desertification#.VNB5nC6xgXg
Currently, the regional program twitter page has over 2700 twitter followers—comprising of researchers, media, and government agencies among others—a significant increase from 2013. This shows growing interest by researchers, media and government personnel in the program research outputs.

Newsletters:

Four issues of the SmartAG Partner - CCAFS East Africa quarterly newsletter were produced. The newsletter shares updates on research, policy initiatives, and field updates from the climate smart villages (CSVs). In 2014, the number of articles from other CGIAR scientists working on a number of interventions in the CSVs increased. For each issue, between 500-1000 copies were distributed to a wide group of people—researchers, government representatives and farmers—during major local, regional meetings and international meetings. Some issues were sent to CGIAR directors at ILRI and ICRAF as well as policy makers via direct mail. Consequently, the regional program was invited for discussions with government officials about ongoing work. The four newsletter issues are available at:
http://ow.ly/IsIsA
http://ow.ly/IsIx9
http://ow.ly/IsIAC
http://ow.ly/IsIFG

All the issues were accompanied by online editions that were sent out to 1,260 subscribers.
https://us2.admin.mailchimp.com/campaigns/show?id=1325433
https://us2.admin.mailchimp.com/campaigns/show?id=1325617
https://us2.admin.mailchimp.com/campaigns/show?id=1325733
https://us2.admin.mailchimp.com/campaigns/show?id=1325893#

Events:

The regional program participated in various key international and regional conferences and events, sharing CCAFS knowledge products and tools through exhibitions in collaboration with the CCAFS global communications and other CGIAR center communications teams in some cases. CCAFS products shared included policy briefs, journal papers, working papers, conference proceedings, fliers and newsletters. These events also created a platform to reach out to new partners where contacts were established with researchers and policy makers with an interest in climate change and

agriculture. We used the opportunity to invite participants to subscribe to the wealth of resources available online, and the subscriber base increased by over 500 people in 2014. Key events included:

• Regional Workshop on African Agriculture in a changing climate: Enhancing the up-take of Climate Smart Agriculture - Arusha, Tanzania, February, 2014. Workshop was co-organised by Common Market for Eastern and Southern Africa (COMESA), African Climate Policy Centre (ACPC), East African Community (EAC) and CCAFS, to consolidate, and share experiences that could inform emerging CSA global efforts and the on-going UNFCCC negotiations. CCAFS EA is leading initiatives aimed at developing technical papers on Agriculture and Climate Change in Africa: Vulnerabilities, Impact and Adaptation. This will aid the work of African negotiators in the United Nations Framework Convention on Climate Change process. Currently, the African Group of Negotiators (AGN) efforts is hampered by lack of sufficient scientific evidence and specific case studies on best practices on African Agriculture.

• Uganda NAPA stakeholder consultation meeting, April, 2014: Workshop on taking forward the implementation of the agricultural priority actions in the National Adaptation Plan of Action (NAPA) in Uganda. CCAFS EA in collaboration with the Climate Change Department at the Ministry of Water and Environment (CCD - MWE) brought together stakeholders from government, research institutions, civil society and farmers in Uganda to dialogue and identify key thematic areas for partnership and collaboration and to discuss key investment areas for the agricultural sector informed by the NAPA. Participants recommended that the CCD undertakes an inventory of climate change adaptation and mitigation agricultural projects and activities by various actors in order to align them to Uganda's NAPA and Vision 2040; and develops a communication strategy to share lessons learnt from the pilot projects.

• National Consultation for Improving Climate Services in Tanzania May 2014: CCAFS EA is a key partner in the Global Framework for Climate Services (GFCS) adaptation programme in Africa and also serves on the project steering committee to guide project activities and implementation in Tanzania and Malawi between 2014 - 2016.

• Advancing readiness to fast track climate smart agriculture in Africa, Bonn, Germany, June 2014: Side event held during the 40th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA). As a key organizer of this event, CCAFS and partners explored Africa's readiness to advance Climate-Smart Agriculture. We shared examples from CCAFS Climate-smart villages and beyond highlighting ongoing CSA interventions and sources of funding for such initiatives. Our working papers, fliers, newsletters were shared through the CCAFS booth at the meeting venue. http://ccafs.cgiar.org/blog/africa-ready-take-climate-smart-agriculture-forward

• Farmer learning events in Nyando CSVs and Makueni were held in June, 2014. Through this event, the regional program and partners promoted peer to peer learning among farmers about CSA technologies and practices. A total of 3,166 farmers visited champion farmers to exchange ideas on local adaptation practices geared towards generating higher income and improving food security under a changing climate. The majority of the participants were women (62%) while 38% were men.

• Using Climate Scenarios and Analogues for Designing Adaptation Strategies in Agriculture – Training Workshop in Dar es Salaam – Tanzania in July, 2014: Twenty six (26) Tanzanians were introduced to the CCAFS analogues tool and climate scenarios and how they can be used in designing adaptation

strategies to climate change.

• Knowledge sharing at the Kisumu Agricultural Society of Kenya Fair, Kisumu, Kenya, July 2014: Champion farmers from Nyando climate-smart villages (CSV) exhibited products and CSA technologies at the Kisumu Region Agricultural Society of Kenya Fair. The farmers interacted with the Cabinet Secretary for Agriculture, Livestock and Fisheries and discussed the importance of adopting resilient livestock breeds in a changing climate. They also spoke to 5,000 guests in five days, representing 4% of the total 122,000 guests who participated in the entire event.

• Community Based Adaptation and Resilience in East and Southern Africa's Drylands Conference, in September 2014: Co-organised by CCAFS and CARE ALP. CCAFS EA gave the opening remarks and presented a poster on: CCAFS Climate Smart Villages Approach: Experiences and Lessons from Nyando in Kenya - http://www.slideshare.net/cgiarclimate/climate-smart-villages-ccafs-east-africa-poster/1. The program had a booth to distribute publications to delegates - practitioners, researchers and policy makers - from Botswana, Ethiopia, Kenya, Malawi, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia and Zimbabwe. The event focused on generating a better understanding of how Community Based Adaptation (CBA) can contribute to an integrated approach to achieving resilient development in Africa's drylands. Results are shared here: http://www.careclimatechange.org/files/JotoAfrika15_FINAL.pdf.

• Official UNFCCC Side Event: Climate-smart agriculture innovations to increase food security and rural incomes under climate change - December, Lima, Peru. The regional program was a key organizer of this event together with the coordinating unit and other CCAFS regions. A high ranking delegation from the Kenyan Government that involved senators, members of parliament, and government officials in the Ministry of Environment, Water and Natural resources attended this event. We are working with regional governments in developing and implementing National Adaptation Plans (NAPs) as well as National Adaptation Programme of Action (NAPAs). During COP 20, we launched a regional online learning and knowledge sharing platform: Climate and Agriculture Network for Africa (CANA). The regional program publications were distributed throughout the conference. Approximately 150 participants took part in the side event.

• Climate adaptation learning journey in November 2014. Farmers from the Nyando climate-smart villages (CSVs) along with seven representatives from government and non-governmental organizations were involved in a six day climate adaptation learning journey to enable them prepare for their future climate. Analogue maps for Nyando were developed using the climate analogue tool by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Sixteen farmers took part in the journey.

• Webinar on reaching the private sector with tools and resources for climate-smart agriculture in East Africa in August, 2014: The event attracted over 200 climate change and food security practitioners from the East African region and beyond, who signed up to listen to the key speakers; 80 attended the online event. The regional program is working closely with the private sector in the region in the fight against climate change. A wrap up blog was prepared and shared with all those who had signed up for the event: http://ccafs.cgiar.org/blog/reaching-private-sector-tools-and-resources-climate-smart-agriculture-east-africa#.VNMqrS6xgXi

• Ethiopian delegates visit to CCAFS Nyando CSVs - Organized together with the USAID-CIAFS

(Capacity to Improve Agriculture and Food Security) project, representatives from the Ethiopian Federal Ministry of Agriculture and the country's Regional Bureaus of Agriculture interacted with Nyando CSV farmers and partners in order to learn CSA practices that can be replicated and scaled-out in Ethiopia.

Videos and other Multimedia:

The regional program continued to document its work through short videos and photo stories. Thirty videos were produced in 2014, and are all accessible through the East Africa playlist on our website and on you tube: http://www.youtube.com/playlist?list=PLD632736EE276E119
Some videos were prepared by the communications team while others were released by journalists and other partners through interviews with the farmers and researchers at the CSVs. For instance, following a visit by Rachel Kyte the World Bank Group Vice President and Special Envoy for Climate Change in November 2013, a team from the Worldbank visited the Nyando Climate-Smart Villages to document ongoing field work. The videos featuring John Obuom, a champion farmer and a smart farm run by a youth group highlight projects that enhance productivity and incomes, build resilience and help reduce the carbon footprint.Two videos were prepared from the visit and have been shared on you tube.

Photos were uploaded onto Flickr for use by those interested including CGIAR centers and programs under the creative commons license.
Some of our videos include:

- Government optimistic over climate change solution: Interview with James Kinyangi –KBC - https://www.youtube.com/watch?v=jaHMpSalYL0&list=PLD632736EE276E119&index=3
- Launch of the Climate and Agriculture Network for Africa - CANA video launch - https://www.youtube.com/watch?v=OBmfPzH9tlc&index=2&list=PLD632736EE276E119
- Interview by Bioversity International scientist during exchange visit to Makueni on sorghum - cowpea trials in Kenya - https://www.youtube.com/watch?v=U5KRFrytXc4&list=PLD632736EE276E119&index=6
- Nyando farmers reap benefits of modern farming – Video prepared by a journalist following a field visit - https://www.youtube.com/watch?v=48BNVJGmVEQ&list=PLD632736EE276E119&index=7
- Farmer story: crop rotation and diversification - https://www.youtube.com/watch?v=1yDuCMuV2sM&list=PLD632736EE276E119&index=8
- Plant Some Pawpaw and Lift a Goat: Surprising Ways to Combat Climate Change in Kenya – This video already has over 20,000 views on YouTube. It was prepared by a team from the World Bank through support of the regional program. http://www.youtube.com/watch?v=9cV4kvx8V6U&index=1&list=PLD632736EE276E119
- Smart Farming Helps Kenyan Farmer – World Bank - https://www.youtube.com/watch?v=Itsf6EVufik&feature=youtu.be&hootPostID=0733a6df8c50acd7a474f86156acb1ba
- Wendy Mann (FAO) talks about gaps in climate-smart agriculture implementation for Africa - https://www.youtube.com/watch?v=Tr5zPsJl3fI&index=25&list=PLD632736EE276E119

• Farms of the future exchange visit video - https://www.youtube.com/watch?v=e0oC4b0XUlo
• Fred Kossam speaks about status of agriculture in the SBSTA 40 negotiations: http://www.youtube.com/watch?v=dldot2P7RsI&list=PLD632736EE276E119&index=14
Photos:
The photos document work in the CSVs, workshops and conferences. These are archived on our shared drive as well as online Flickr account for use on CCAFS publications within CCAFS as well as the CGIAR as they are classified under the creative commons.
Examples include:
• Nyando climate-smart villages farms of the future visit to climate analogues sites - https://www.flickr.com/photos/cgiarclimate/sets/72157647471474424/
• CCAFS Official Side event COP 20 - https://www.flickr.com/photos/cgiarclimate/sets/72157647463728943/
• Food and Nutrition Security, Agriculture And Climate Change - https://www.flickr.com/photos/cgiarclimate/sets/72157649641184492/
• Visit to Lushoto, CCAFS East Africa learning site - https://www.flickr.com/photos/cgiarclimate/sets/72157647727991256/
• 2014 Annual Farmer Leaning Event in Nyando - https://www.flickr.com/photos/cgiarclimate/sets/72157645832882929/
• Media visit to Nyando Climate-Smart Villages - June 2014 - https://www.flickr.com/photos/cgiarclimate/sets/72157645431924182/

Other Communications and Outreach:

Other communication and outreach activities included:

- Regional fliers - East Africa version was updated and printed.
- Printing and distribution of CCAFS branded tshirts, caps/ hats and pens
- Sharing of regional presentations via slideshare

4. Case studies.

Case Study #1

Title: Exploring targeting options for climate-smart pilot projects in Kenya
Author: Catherine Mungai, Mariana Rufino and Patric Brandt
Type: Inter-center collaboration; Policy engagement;

Project Description:

This project builds on a series of engagement activities since 2013 with the Ministry of Environment Water and Natural Resources (MEWNR) and the Ministry of Agriculture, Livestock and Fisheries (MoALF) in Kenya, and other key stakeholders from government, non-governmental organizations, international and national research institutions and the private sector. In 2013, CCAFS EA and MEWNR What Role for the Consultative Group on International Agricultural Research (CGIAR) and National Agricultural Research System?" in Bonn during the 38th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA). Following the side-event, the MEWNR and MoALF requested for CCAFS EA support to implement the National Climate Change Action Plan (NCCAP), in the agriculture sector. This engagement culminated in the National Adaptation Event in September 2013. To support the process of implementing the Kenya NCCAP, CCAFS EA is collaborating with the Center for International Forestry Research (CIFOR) and the International Livestock Research Institute (ILRI) to develop a tool which will be used to prioritize and target climate-smart agricultural (CSA) interventions. To spearhead the development of the tool, a taskforce comprising of stakeholders from government, private sector, universities and NGOs was formed to identify the critical parameters that build the basis for developing the decision support framework.

Introduction / objectives:

To take forward the implementation of the identified agricultural priority actions during the September 2013 NAP workshop in Kenya, stakeholders agreed to develop a decision support tool to target CSA investments and practices. The tool has three objectives:
1. Integration of quantitative, spatial information (database) and qualitative expert stakeholder opinions on vulnerability indicators and CSA practices.
2. Finding consensus solutions for CSA prioritization in Kenya using a multi-criteria decision-making (MCDM) model and qualitative expert opinions.
3. Coupling consensus expert opinions and quantitative, spatial data to produce spatial indices of vulnerability and CSA suitability that aid decision-making on CSA-targeting.

Project Results:

A database containing quantitative and spatialized biophysical, livelihood and economic vulnerability variables and proxy data for CSA practices has been developed. Data was collected from publicly accessible databases and Kenyan governmental institutions. By applying vulnerability indicators that refer to the three dimensions (biophysical, livelihood and economic), the tool will be used to identify counties whose agricultural systems are more vulnerable to climate change, with an urgent need for

specific CSA interventions. To test this tool, a survey was conducted with 32 experts (including 15 females) drawn from cross-sectoral stakeholder groups to capture preferences on indicators of climate change vulnerability and CSA practices.

Following the survey, consensually weighted indices of climate change vulnerability and CSA suitability were created based on the MCDM model. With these spatial indices, specific areas of high CSA potential in Kenya—regions with high climate change vulnerability and high suitability for included CSA practices—can be identified. A stakeholder workshop was held in November 2014 where the survey results were presented. During the workshop, a validation survey was conducted and mixed group discussions on ranking the indicators and CSA-options were conducted to investigate differences between consensuses derived from the model and group interactions.

The results from the survey undertaken during the validation workshop (including 50% of the experts surveyed before) showed differences compared to the ones from the first survey. This shows that experts changed their opinions resulting in shifts of high CSA potential regions. Yet, some of these regions remained the same as in the first survey. In conclusion, created spatial indices could be used to inform decisions in CSA-targeting processes for Kenya. Changing expert opinions showed that experts need to be more thoroughly integrated and surveyed iteratively. The next step would be to work with the government to apply the tool on a real case.

Partners:

Center for International Forestry Research (CIFOR)
International Livestock Research Institute (ILRI)
Ministry of Environment Water Natural Resources (MEWNR)
Ministry of Agriculture, Livestock and Fisheries (MoALF)

Links / sources for further information:

Blog story - http://ccafs.cgiar.org/blog/tackling-climate-change-kenya-holds-first-national-adaptation-planning-meeting-agriculture#.VNe6__mUfPo

Kenya National Climate Change Action Plan 2013 – 2017 http://cdkn.org/wp-content/uploads/2013/03/Kenya-National-Climate-Change-Action-Plan.pdf

Case Study #2

Title: Bridging Science and Policy in Africa: Climate and Agriculture Network for Africa
Author: Vivian Atakos, Catherine Mungai, Solomon Kilungu and Maren Radeny
Type: Successful communications; Policy engagement;

Project Description:

This project builds on the Regional Learning Partnership (RLP) launched by the regional program in 2011 to share research findings from the CGIAR and partner organizations. A key objective of the RLP was to help mainstream research into national policies, development plans and targeted local action. As a pathway for policy engagement from local to regional scales, the RLP constituted 16 African based organizations working on agriculture, climate change and food security from Eastern and Southern Africa. In order to strengthen the RLP and build capacity for evidenceinformed policy on climate change and agriculture, an online regional learning and knowledge network platform—the Climate and Agriculture Network for Africa (CANA)—was launched in December 2014 with financial support from the Rockefeller Foundation. The platform is an initiative of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) East Africa, Common Market for Eastern and Southern Africa (COMESA), Rockefeller Foundation and Pamoja Media. While its coverage is Africa wide, CANA also facilitates national level dialogue by providing a platform for consolidating national climate change, agriculture and food security policies. The platform will create an avenue for learning and sharing knowledge on climate-smart agriculture (CSA) programs, National Adaptation Plans (NAPs), National Adaptation Programmes of Action (NAPAs), Nationally Appropriate Mitigation Actions (NAMAs) among others. At the regional and continental levels the platform will focus on building the capacity of the African Group of Negotiators (AGN) to integrate agriculture into climate change issues under the United Nations Framework Convention on Climate Change (UNFCCC) through sharing of evidence. While the platform mainly targets policy makers, it will also serve researchers, non-governmental practitioners, private sector including farmers' organizations by enabling them to share and access information on Africa's agriculture in the context of a changing climate.

Introduction / objectives:

CANA seeks to bridge the gap between science and policy by supporting timely access and sharing of information on climate change, agriculture and food security issues in Africa to influence decision making. CANA addresses specific thematic areas that include climate-smart agriculture; policies for adaptation; financing climate adaptation; gender and equity; low emissions development and building resilience to climate change. The platform is highly interactive, where researchers and policy makers and other interested persons can engage in discussions on various themes through an online forum. In addition, they can access publications, presentations, videos and pictures on African agriculture and climate change.

Project Results:

The Climate and Agriculture Network for Africa was launched in December 2014 during the 20th sessions of the Conference of Parties (CoP) to the UNFCCC in Lima, Peru. Over 150 people attended

the launch of CANA, which took place immediately after a CCAFS side event on “Climate-smart agriculture innovations to increase food security and rural incomes under climate change.” Comments from participants included:

"I look forward to making use of the platform especially to find material on how to enhance rural incomes in my country," said Mafu Nkosi from the Rural Environment and Agricultural Development, South Africa.

“This platform is a good avenue, which will help the African youth interested in taking up agriculture as a business opportunity to access important information on agriculture and climate change,”Alfred Keter, Member of Parliament from Kenya.

A key feature of CANA is a sub-page that is fully dedicated to climate-smart agriculture (CSA). The sub-page presents opportunities for innovation through adoption of appropriate CSA practices and policies that can help smallholder farmers sustain and improve their livelihoods.

CANA received 135 new users in the month of January 2015, spending on average four minutes on the site. This shows that people are taking some time to interact with the site to find out what it offers. According to Hubspot.com, an average internet user spends fewer than 15 seconds on a website. Spending four minutes therefore indicates some level of interest in the content.

Fifteen users have signed up and are already looking forward to interacting with each other and holding important discussions on the discussion forum. About 10 partner organizations have submitted content which has been shared on the platform. To increase awareness about the platform and to direct online traffic to the platform, social media pages such as Facebook, twitter have been established.

Partners:

Common Market for Eastern and Southern Africa (COMESA)
Rockefeller Foundation
Pamoja Media

Links / sources for further information:

Introducing Africa’s bridge between science and policy - http://ccafs.cgiar.org/blog/introducing-africa%E2%80%99s-bridge-between-science-and-policy#.VNhqui6xgXg

Introducing Climate and Agriculture Network for Africa (CANA) - http://www.youtube.com/watch?list=UU6KnRP9RNE3346W49oeceaA&v=OBmfPzH9tIc

Access CANA here: http://canafrica.com/

About RLP:

Informing policy makers on current agricultural and climate change research in East Africa - http://ccafs.cgiar.org/blog/informing-policy-makers-current-agricultural-and-climate-change-research-east-africa#.VNh6lS6xgXg

Bridging the research and policy gap through partnerships - http://ccafs.cgiar.org/blog/Bridging-research-policy-gap-partnerships%2520#.VNh7jy6xgXg

Case Study #3

Title: Evidence of impact: climate-smart agriculture in Africa

Author: Mary Nyasimi, Dorothy Amwata, Lewis Hove, James Kinyangi and George Wamukoya

Type: Successful communications; Capacity enhancement;

Project Description:

The vulnerability of Africa's agriculture to climate change is complex. It is shaped by biophysical, economic, socio-cultural, geographical, ecological, institutional, technological and governance processes that interact in intricate ways to reduce farmers' adaptive capacity. Women farmers with few resources are particularly vulnerable. This study was undertaken to identify the array of adaptation strategies that exist across Africa's diverse farming systems and climatic conditions. These strategies can provide the impetus for transforming Africa's agriculture. The case studies demonstrate how farmers are already adapting to climate change, what kinds of investment and how much is needed, and what local and national leadership is necessary to increase adoption and scale up. Successful case studies are broadly defined as those that identify, test and implement climate-smart agriculture (CSA) practices and institutions, counter the impacts of climate change and offer the highest returns on investments. These CSA practices offer the best chance of food security and many other benefits for the people of Africa in the long term.

Introduction / objectives:

There is need to consolidate current knowledge and approaches to equip African farmers and governments with knowledge, skills and attitudes to respond to and shape changes in agricultural and farming systems. This case study shares CSA practices and technologies that exist across Africa and have already created positive impacts for farmers. These practices have potential to be scaled-up across the continent, and yet are largely unknown outside their areas of implementation. Government planners, extension and local government staff, development professionals and practitioners, as well as civil society organizations working to support African agriculture are the target audience for the booklet.

Project Results:

Africa's agriculture must undergo transformation to meet the simultaneous challenges of climate change, food insecurity, poverty and environmental degradation. Many innovative climate-smart agriculture practices already exist in Africa with the capacity to increase productivity and build resilience. Yet they remain largely unknown at the continental, or even regional, levels. Featuring a range of inspirational case studies and strategies, this book highlights some of these practices across Africa's diverse farming systems and climatic conditions.

The case studies highlight the impacts and challenges of different approaches to climate-smart agriculture. Eight key lessons for successful climate-smart agriculture emerge from the case studies.

- Align climate-smart agriculture practices and national policy
- Enhance women's capacity to adapt
- Build effective partnerships with the private sector and universities
- Involve communities and en- courage farmers to innovate

• Address multiple challenges and scales simultaneously
• Foster political goodwill
• Capacity development is needed at all levels
• National budgetary support is important

Partners:

The CGIAR Research Program on Climate Change, Agriculture and Food Security Program (CCAFS),

The Common Market for East and Southern Africa (COMESA),
Food and Agriculture (FAO)
The Technical Centre for Agricultural and Rural Cooperation (CTA)

Links / sources for further information:

http://ccafs.cgiar.org/sites/default/files/research/attachments/climate_smart_farming_successes_Africa.pdf
http://publications.cta.int/media/publications/downloads/1815_PDF_7ey3GWo.pdf?

5. Outcomes.

Outcome #1:

Science and policy dialogue in Africa unlocks agriculture program in the UNFCCC talks

What is the outcome of the research (i.e. use of research results by non-research partners)?

By drawing on several syntheses of evidence pieces, through science and policy dialogues, CCAFS was able to build the capacity of the Africa Group of Negotiators on issues related to agriculture and to reach agreement on four key areas for scientific and technical assessments in 2015 and 2016 in the UNFCCC negotiations. Efforts were supported by COMESA, ACPC and several development agencies including the World Bank that co-organized a policy dialogue ahead of the SBSTA 40 in 2014

What outputs produced in the three preceding years resulted in this outcome?

Cooper et al, 2013. Large-scale implementation of adaptation and mitigation actions in agriculture. CCAFS Working Paper No. 50

Kissinger G, Lee D, et al., 2013. Planning climate adaptation in agriculture; Meta-synthesis of national adaptation plans in West and East Africa and South Asia. CCAFS Report No. 10.

Kissinger et al, 2014. Climate adaptation and agriculture: Solutions to successful national adaptation plans. CCAFS Policy Briefs; 9

Nyasimi M, Radeny M, Kinyangi J. 2013. Climate change adaptation and mitigation initiatives for agriculture in East Africa. CCAFS Working Paper No. 60.

What partners helped in producing the outcome?

The publication by Cooper et al. provided examples of large scale adaptation programs on CSA where changes resulted in significant adaptation gains and mitigation co-benefits. CCAFS staff facilitated the research; coordinating consultancy studies and helping to collate the data used in the meta-syntheses report no. 10 and working paper no. 60. CCAFS staff also co-organized the global consultations in Warsaw where recommendations and key messages were identified to develop policy brief no. 9 that was widely disseminated within the East Africa partner networks

Who used the output?

AGN (The African Group of Negotiators used the outputs to prepare presentations during negotiations and to share information during contact group meetings, UNFCCC submissions, side events, bilateral discussions, develop concept notes and ad-hoc committee meetings).

How was the output used?

CCAFS and COMESA used the outputs to convene side events to promote exchanges on agriculture

and food security among negotiators, many of whom do not come from agriculture ministries and well as targeted briefings, using evidence to narrow differences for instance highlighting the links between adaptation and mitigation in agriculture

What is the evidence for this outcome? Specifically, what kind of study was conducted to show the connection between the research and the outcome? Who conducted it?

SBSTA text shows AGN contribution on food security, indigenous knowledge and diversity of agriculture systems.

AGN Emails

Wendy Mann, FAO “Warmest congratulations to all African negotiators, under the leadership of Fred Kossam. A historic SBSTA conclusion thanks to the extraordinary, determined and unified efforts of the African Group’

http://ccafs.cgiar.org/fr/blog/africa-ready-take-climate-smart-agriculture-forward#.VOLUBy6gw

7. Outcome indicators.

Outcome Indicator:

Integrated adaptation strategies for agricultural and food systems inserted into policy and institutional frameworks at regional, national or sub--national level in 2 target regions. Policy makers and key stakeholders use CCAFS research outputs - guidelines, tools and methods-- to support the development of NAPAS, sector specific adaptation plans, or germplasm benefit sharing policies.

Achievements:

CCAFS together with CIFOR and ILRI are developing an approach to support decision making processes that target increased climate-smart agricultural interventions in Kenya The tool brings together stakeholder process and a database of county profiles in Kenya to map potential CSA investments emphasizing the priorities of the National Climate Change Action Plan 2013-2017

Evidence:

http://ccafs.cgiar.org/blog/exploring-targeting-options-climate-smart-agricultural-investments-kenya#.VQf6yeGgw80

Outcome Indicator:

One to five flagship risk management interventions evaluated and demonstrated by farmers and agencies at benchmark locations in three regions

Achievements:

In Tanzania, CCAFS has been working with Tanzania Meteorological Authority (TMA) and Sokoine University in the Lushoto becnhmark site, testing approaches to improve accuracy, systematic documentation of indigenous knowledge (IK) and establishment of a framework for integrating IK and TMA weather forecasting. This study finds there is need to establish an information dissemination network and entrench weather forecasting within the District Agricultural Development Programmes.

Evidence:

Title: Integrating Indigenous Knowledge with Scientific Seasonal Forecasts for Climate Risk Management in Lushoto District in Tanzania

Author: Mahoo, Henry, Mbungu, Wilfred, Yonah, Isack, Radeny, Maren, Kimeli, Phillip, Kinyangi, James

Output Type: Working Paper

https://cgspace.cgiar.org/handle/10568/56996

Outcome Indicator:

Findings and evaluation tools on mitigation and livelihoods benefits of alternative agricultural development pathways used by global agencies and decision-makers in two countries in each of the three regions

Achievements:

There was support to local level consultations in 2 counties in Kenya, with Kericho county now chosen to develop and implement a livestock Nationally Appropriate Mitigation Action (NAMAs) aiming to enhance productivity and efficiency while also reducing environmental impact of livestock. A synthesis of the state of play of livestock NAMAs that explains the steps for the Kenya process is now available.

Evidence:

CCAFS Working paper No. 105
https://cgspace.cgiar.org/bitstream/handle/10568/56828/Working%20Paper%20105%20Climate-smart%20livestock.pdf?sequence=6

Blog
http://ccafs.cgiar.org/blog/reducing-environmental-impact-rapidly-growing-livestock-sector#.VQf-1uGgw80

Outcome Indicator:

Agriculture mainstreamed into the global climate change policies, and major international food security initiatives fully incorporate climate change concerns

Achievements:

Together with COMESA, CCAFS was able to document case studies, showing how farmers are already adapting to climate change, what kinds of investment and how much is needed, and what local and national leadership is necessary to increase adoption and scale up. These studies are already informing the African group that is negotiating in the UNFCCC. They also demonstrate what CSA practices offer including food security and many other development benefits that can be mainstreamed into country policies for resilient food systems.

Evidence:

A booklet with CTA:
http://ccafs.cgiar.org/publications/evidence-impact-climate-smart-agriculture-africa-0#.VQgD7eGgw80

A CCAFS working paper No. 86
http://ccafs.cgiar.org/publications/evidence-impact-climate-smart-agriculture-africa#.VQgB_-Ggw80

8. Leveraged funds.

Leveraged funds #1

Title:

Transitioning of Climate Exchange Network for Africa to an online knowledge sharing and learning platform - the Climate and Agriculture Network for Africa (CANA)

Partner Name: Rockefeller Foundation

Budget: $50,000.00

Theme :4

Leveraged funds #2

Title:

Supporting the development of CSA country programs in 5 countries - Namibia, Botswana, Kenya, Uganda and Tanzania.

Partner Name: Common Market for Eastern and Southern Africa (COMESA)

Budget: $172,000.00

Theme :4

Leveraged funds #3

Title:

CSA Alliance: Building Climate Change Resilience in Africa, Pre- SBTSA policy dialogue

Partner Name: World Bank

Budget: $25,000.00

Theme :4

Leveraged funds #4

Title:

Africa’s Agriculture in a Changing Climate: Enhancing the Up-Take of Climate Smart Agriculture policy dialogue and support to the Climate-smart Agriculture Partnership for Africa (CSAP) secretariat

Partner Name: Common Market for Eastern and Southern Africa (COMESA)

Budget: $50,000.00

Theme :4

Leveraged funds #5

Title:

Mainstreaming Climate Smart Agriculture into the National Agricultural Investment and Food Security (NAI&FSP) in Zambia

Partner Name: The New Partnership for Africa's Development (NEPAD) Climate Change Fund

Budget: $114,000.00

Theme :1

Leveraged funds #6

Title:

Facilitating the uptake of climate smart agriculture in Swaziland through capacity building.

Partner Name: The New Partnership for Africa's Development (NEPAD) Climate Change Fund

Budget: $114,000.00

Theme :4

9. Publications.