2012 Technical Report per Activity

Each Program Participant must provide a small remark against each activity/deliverable to indicate the status of the activity (2-4 sentences required per activity) using the form below. Updated data from the current partners is also required.

CCAFS Theme Led Activities
Theme 4.1. Linking Knowledge with Action

Activity No. 216

Activity title		Linking Knowledge with Action through Regional Scenario Building		
CCAFS Objective *(select from drop list)*		4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.1.1 2012
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To build capacity among three regional teams of diverse stakeholders trained in scenarios approaches		
	Objective 2	To engage with policymakers in their countries/regions and in global climate change processes		
Activity status		Partially completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		4.1.1 East Africa (EA) regional teams produced and finalized scenarios now being used in strategic planning meetings with key policymakers, private sector and NGOs. West Africa (WA) and South Asia (SA) held multi-sectoral workshops that strengthened public-private partnerships with researchers and built capacity in the regions for producing and using scenarios for linking to adaptation and mitigation policies.		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	A plausible set of scenarios to 2030 for East Africa and West Africa which examine potential development under a changing climate and differing pathways of economic development	2012	Completed	Document (*.doc, *.odt, *.pdf)
Capacity	Enhanced regional capacity to engage with key policy makers and use CCAFS research outputs to inform national adaptation and mitigation plans, regional agricultural development and food security strategies, as well as to engage with, and inform, global climate and food security processes as to critical regional interests/concerns	2012	Partially completed	Other
Reports, publications	A paper on describing the scenario process within EA and the role that credibility, salience, and legitimacy plays and was (or was not) established to make scenarios a boundary object that brings together various stakeholders.	2012	Completed	Document (*.doc, *.odt, *.pdf)
Workshops	Awareness raising within regional bodies and with national policymakers regarding climate change and regional food security issues and policy and other investment opportunities, through communication efforts associated with scenarios and vulnerability maps.	2012	Completed	Document (*.doc, *.odt, *.pdf)
Communication products	A policy brief on scenarios in East Africa	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Communication products	Video and media stories in many newspapers	2012	Completed	Video (*.avi, *.mpeg, etc)

Acronym	Name
	University of Oxford

	Contact Point Full Name	Contact Point Email
AI - Academic Institution	Joost Vervoort <joost.vervoort@eci.ox.ac.uk>	

Acronym	Name

Current Partners		Acronym	Name	Contact Point Full Name	Contact Point Email
	RO - Regional Organization	ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa	Hezron Mogaka	secretariat@asareca.org
	RO - Regional Organization	ECARD	West and Central African Council for Agricultural Research and Development	Abdulaye Jalloh	abdulaye.jalloh@coraf.org
	CRP - Challenge Research Program	RWC	Rice-Wheat Consortium for the Indo-Gangetic Plains		
	NGO_DO - Non-governmental organization/Development organization	USAID	USAID	Julie Fisher	jufischer@usaid.gov
	RO - Regional Organization	SID	Society for International Development	Ali Hersi	ahersi@sidint.org
	RO - Regional Organization		Panos Eastern Africa	Peter Okubal	info@panosea.org

Activity No. 198			
Activity title	Partnership development and strengthening; establishment of participatory action research activities with key partners in CCAFS regions/sites		
CCAFS Objective *(select from drop list)*	4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.1.2 2012
Activity objectives *(what the activity aims to achieve)* — **Objective 1**	Participatory Action Research process established in 13 sites and gender-sensitive activities related to risk management, adaptation and mitigation implemented, with engagement and communication strategies aimed at users of the knowledge generated pursued, and scaling up mechanisms in place		
Activity status	Partially completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	4.1.2 PAR established in 13 CCAFS sites by partners and under the leadership of the RPLs. New action research partners established under the social learning initiative of Theme 4 (e.g. PROLINOVA), with integration of gender-responsive research and innovation. Started Theory of Change process for all CCAFS sites leading to regional theory of change. Impact pathway technical support was provided to the regional CCAFS teams and workshops with local and regional partners held in EA and WA and plans made for a South Asia in early 2013 made.		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Capacity	Researchers from CCAFS regions engaged in outcome mapping/impact pathways exercises and identification of strategies to achieve outcomes	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Data	Gender M&E indicators collection by local partners	2012	Partially completed	Database (*.sql, *.mdb, etc)
Workshops	Policy and key partner (NGOs and gov'ts) strategy development workshops held to identify key target beneficiaries, research issues and interventions	2012	Completed	Document (*.doc, *.odt, *.pdf)

		Acronym	Name	Contact Point Full Name	Contact Point Email
	CRP - Challenge Research Program	CRP2	CGIAR Research Program on Policies, Institutions and Markets	Ruth Meinzen-Dick	r.meinzen-dick@cgiar.org

Acronym	Name

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
CRP - Challenge Research Program	CRP1.1	CGIAR Research Program on Integrated Agricultural Production Systems for Dry Areas		
CRP - Challenge Research Program	CRP1.3	CGIAR Research Program on Harnessing the Potential of Aquatic Agricultural Systems for the Poor and Vulnerable	Paula Kantor	p.kantor@cgiar.org
CRP - Challenge Research Program	CRP3.7	CGIAR Research Program on More Meat, Milk and Fish – By and For the Poor	John McDermott	j.mcdermott@cgiar.org
CRP - Challenge Research Program		CGIAR Gender and Agriculture Research Network	Jacqui Ashby	j.ashby@cgiar.org
CG - CGIAR Center	IFPRI	International Food Policy Research Institute	Agnes Quisumbing	a.quisumbing@cgiar.org
CG - CGIAR Center	ILRI	International Livestock Research Institute	polly ericksen	p.ericksen@cgiar.org
CG - CGIAR Center	CIMMYT	International Maize and Wheat Improvement Center	clare	

CG - CGIAR Center	ICRAF	World Agroforestry Centre		
		Contact Point Full Name	**Contact Point Email**	
		henry neufeldt	h.neufeldt@cgiar.org	
CG - CGIAR Center	IWMI	International Water Management Institute		
		Contact Point Full Name	**Contact Point Email**	
CG - CGIAR Center	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics		
		Contact Point Full Name	**Contact Point Email**	
		Lieven Claussens	l.claussens@cgiar.org	
organization/Development organization	CARE	CARE		
		Contact Point Full Name	**Contact Point Email**	
		Phil Franks	pfranks@careclimatechange.org	
organization/Development organization	WVI	World Vision International		
		Contact Point Full Name	**Contact Point Email**	
organization/Development organization		Oxfam America		
		Contact Point Full Name	**Contact Point Email**	

Activity No. 249					
Activity title		Development of Tools and Capacity Building in Gender-Sensitive 'Climate Smart Agriculture' Strategies			
CCAFS Objective *(select from drop list)*		4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.1.3 2012	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To identify key CCAFS gender-related research questions; refine appropriate tools/methods for research on gender and social differentiation.			
	Objective 2	To build capacity in the 3 CCAFS regions for undertaking climate change and gender-focused research.			
Activity status		Partially completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		4.1.3 A workshop for the CGIAR gender and agriculture network was held to identify opportunities for collaboration in gender-responsive research. A CCAFS Gender Technical Advisory group was established. Key gender-related research questions were established. The IMPACT survey methodology was modified (IMPACT light) and field-tested to collect gender-disaggregated agriculture information at the household level. Training and awareness on climate change and gender for nearly 2000 female leaders in several districts of Bihar.			

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Capacity	Training of 6 researcher on PAR tools and methods to conduct research on gender,	2012	Completed	Other
Reports, publications	Publish and disseminate a training guide on "Gender and Climate Change Research in	2012	Completed	Document (*.doc, *.odt, *.pdf)
Workshops	CAPRi-CCAFS workshop to strengthen the capacity of the CGIAR and partners to address	2012	Completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	CAPRi-CCAFS working paper	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	Working papers by gender grant recipients	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

	Acronym	**Name**	
NGO_DO - Non-governmental organization/Development organization	FAO	UN Food and Agriculture Organization	
	Contact Point Full Name	**Contact Point Email**	
	Marjaliisa Tapiobistrom	Marjaliisa.Tapiobistrom@fao.org	
	Acronym	**Name**	
AI - Academic Institution		Jahangirnagar University	
	Contact Point Full Name	**Contact Point Email**	
	Acronym	**Name**	
AI - Academic Institution		Makerere University	
	Contact Point Full Name	**Contact Point Email**	

Current Partners		Acronym	Name	Contact Point Full Name	Contact Point Email
	AI - Academic Institution	KU	Kathmandu University		
	NARES - National agricultural research and extension services	SARI	Savanna Agricultural Research Institute		
	NARES - National agricultural research and extension services	NaLIRRI	National Livestock Resources Research Institute		
	CRP - Challenge Research Program	CRP2	Research	Ruth Meinzen-Dick	r.meinzen-dick@cgiar.org
	CG - CGIAR Center	IWMI	International Water Management Institute		
	CG - CGIAR Center	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics		
	CG - CGIAR Center	ILRI	International Livestock Research Institute		
	CG - CGIAR Center	ICRAF	World Agroforestry Centre		
	NGO_DO - Non-governmental organization/Development organization		Pathikrit		
	Other	IUCN	International Union for Conservation of Nature		

Activity No. 250					
Activity title	Engagement and communication approaches, knowledge networks and farmers'and regional partner organizations strengthened				
CCAFS Objective *(select from drop list)*	4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.1.4 2012 (1)		
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Civil society partners (e.g. farmers' organizations) and regional economic fora inviting CCAFS to join their work and CCAFS research outputs being used to inform national and regional strategies			
Activity status	Completed				
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	4.1.4 (1) Many new partnerships were formed in 2012 and new engagement and communication approaches initiated in all 3 regions (e.g. getting all 15 centers involved in a farm TV show in East Africa, policy and capacity strengthening engagements with farmers organizations and climate smart village partners, etc.). Numerous partners were supported in climate negotiation strategies and meetings, e.g. high level engagement of policy makers and scientists in South Asia particularly on climate smart agriculture and engagement of non-traditional partners, extensive media coverage in Nepal.				
	Type	**Description**	**Year**	**Status**	**Format**

Deliverables status
(You may add any unexpected deliverable)

Workshops	Social learning and communications workshop with CG and outside partners; Regional partner workshops held, including policymakers, and CCAFS research results disseminated and informing national and regional adaptation and mitigation strategies	2012	Completed	Blogpost
Capacity	Climate negotiators trained and supported in regional and global climate change negotiations	2012	Completed	Video (*.avi, *.mpeg, etc)
Reports, publications	Review paper on social learning approaches relevant for CCAFS across CG centers; CCAFS-ICRAF working paper linking landscape health and socioeconomic data from CCAFS baselines	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Communication products	Regional strategy documents, briefs, blogs	2012	Completed	Document (*.doc, *.odt, *.pdf)

	Acronym	Name	Contact Point Full Name	Contact Point Email
CRP - Challenge Research Program	CRP5	CGIAR Research Program on Water, Land and Ecosystems		
CG - CGIAR Center	ICRAF	World Agroforestry Centre		
Other	Mediae	Private communications/TV production firm	David Campbell	David@mediae.org

Current Partners

	Acronym	Name	
CG - CGIAR Center	CIAT	Centro Internacional de Agricultura Tropical	
	Contact Point Full Name	**Contact Point Email**	

	Acronym	Name	
CG - CGIAR Center	IFPRI	International Food Policy Research Institute	
	Contact Point Full Name	**Contact Point Email**	

	Acronym	Name	
CG - CGIAR Center	IWMI	International Water Management Institute	
	Contact Point Full Name	**Contact Point Email**	

	Acronym	Name	
CG - CGIAR Center	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics	
	Contact Point Full Name	**Contact Point Email**	

CG - CGIAR Center	ILRI	International Livestock Research Institute	
	Contact Point Full Name	**Contact Point Email**	

CG - CGIAR Center	ICRAF	World Agroforestry Centre	
	Contact Point Full Name	**Contact Point Email**	

CG - CGIAR Center	WorldFish	Worldfish	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	IFFKO	Indian Farmers Fertiliser Cooperative Limited	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	EAC	East African Community	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	ECOWAS	Economic Community of West African States	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	ASARECA	Association for strengthening Agricultural Research in Eastern and Central Africa	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	CORAF	Conseil Ouest et Centre Africain pour la Recherche et le Developpement Agricoles	
	Contact Point Full Name	**Contact Point Email**	

RO - Regional Organization	INSAH	Institut du Sahel	
	Contact Point Full Name	**Contact Point Email**	

ARI - Advanced Research Institution	IIED	International Institute for Environment and Development	
	Contact Point Full Name	**Contact Point Email**	

ARI - Advanced Research Institution	IDS	Institute of Development Studies	
	Contact Point Full Name	**Contact Point Email**	

AI - Academic Institution	UBC	University of British Columbia	
	Contact Point Full Name	**Contact Point Email**	

Select a partner type.	HIMCCA	Himalayan Alliance for Climate Change		
		Contact Point Full Name	**Contact Point Email**	
Select a partner type.	NARC	Nepal Agricultural Research Council		
		Contact Point Full Name	**Contact Point Email**	
Select a partner type.		IFFCO Foundation		
		Contact Point Full Name	**Contact Point Email**	

Activity No. 251

Activity title	Landhealth and local adaptive capacity		
CCAFS Objective *(select from drop list)*	4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.1.4 2012 (2)
Activity objectives *(what the activity aims to achieve)* — **Objective 1**	Joint methods development with AFSIS (CIAT/ICRAF) team and testing with site partners, linking biophysical and socioeconomic data to better understand drivers of land degradation and food security and opportunities for climate smart agriculture action		
Activity status	Partially complete		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	4.1.4 (2) Local partners received training in land health surveillance methods in all CCAFS EA sites; data collected and is being analyzed and approaches for linking socioeconomic and biophysical data being developed.		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Communication products	Report, CCAFS/ICRAF working paper, CCAFS/AFSIS brief, blog	2012	Partially completed	Blogpost
Capacity	Local partners trained in several CCAFS sites in landhealth surveillance and socioeconomic research	2012	Completed	Database (*.sql, *.mdb, etc)
Model tools and software	Improved methods for analysis of landhealth and socioeconomic data	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
NARES - National agricultural research and extension services	NARO	National Agricultural Research Organization		
NARES - National agricultural research and extension services	KARI	Kenya Agricultural Research Institute		
CG - CGIAR Center	ICRAF	World Agroforestry Centre	Tor Vagen	t.vagen@cgiar.org
CRP - Challenge Research Program	CRP5	CGIAR Research Program on Water, Land and Ecosystems	Leigh Winoweicki	L.A.WINOWIECKI@CGIAR.ORG

2012 Technical Report per Activity

Each Program Participant must provide a small remark against each activity/deliverable to indicate the status of the activity (2-4 sentences required per activity) using the form below. Updated data from the current partners is also required.

CCAFS Theme Led Activities
Theme 4.2. Assemble Data and Tools for Analysis and Planning

Activity No. 217				
Activity title	CCAFS baselines and site characterizations--existing and new regions			
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (1)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Finalize and make available reports from household, village and organisational baseline surveys in all three target regions		
	Objective 2	Publish a journal article synthesizing the results of all baseline surveys		
	Objective 3	Make available a CCAFS report synthesizing the baseline survey results		
Activity status	Partially completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Baseline data collection at household and village levels at all 15 CCAFS, in 3 regions and 12 countries has been completed, though there were delays in South Asia due to the late determination of core sites. This resulted in the need to re-collect data at two sites. At these sites organisation baseline data collection is still ongoing. Reports for 12 sites are finalized and made available - the new site reports from the three levels will come online soon. One journal article has been published and two additional articles are being written by CCAFS, with several others being written by groups not directly involved in data collection. A household synthesis report of the baseline survey results had been completed but needs to be revised in light of the new SA core sites. A synthesis across all sites and all three levels was delayed by site changes and will be completed in 2013. Site atlases are being completed in early 2013.**			

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Data	Data from all the baseline surveys will be available on the DataVerse website	2011	Partially completed	Spreadsheet (*.xls, *.ods)
Reports, publications	A journal article and a CCAFS report will both be prepared using the data from the baseline surveys	2013	Completed	Document (*.doc, *.odt, *.pdf)
Other	Maps and site atlases	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

	Acronym	Name	Contact Point Full Name	Contact Point Email
AI - Academic Institution		University of Reading, Statistical Services Centre	Carlos Barahona	c.e.barahona@reading.ac.uk
and extension services	KARI	Kenyan Agricultural Research Institute, Katumani	Muoti Mwangangi	cmuoti71@yahoo.com
RO - Regional Organization	INSAH	Institut du Sahel	Kassoum Dieye	khassdieye@yahoo.fr
CG - CGIAR Center	ICRAF	World Agroforestry Centre, Kisumu	Joash Mango	j. mango@cgiar.org
AI - Academic Institution		Maseno University	Leah Onyango	leahonyango@gmail.com

Current Partners

	Acronym	Name	
PRI - Private Research Institution	MARIL	Managing Risk for Improved Livelihoods-Ethiopia	
	Contact Point Full Name	**Contact Point Email**	
	Solomon Desta	solomon.desta82@gmail.com	

	Acronym	Name	
ARI - Advanced Research Institution	BCAS	Bangladesh Centre for Advanced Studies	
	Contact Point Full Name	**Contact Point Email**	
	Aminur Rahman	Aminur.rahman@bcas.net	

	Acronym	Name	
ARI - Advanced Research Institution	CEAPRED	Center for Environmental and Agricultural Policy Research, Extension and Development	
	Contact Point Full Name	**Contact Point Email**	
	Krishna Shrestha	krishna.shrestha@ceapred.org.np	

	Acronym	Name	
NARES - National agricultural research and extension services	NARO	National Agricultural Research Organization - Uganda	
	Contact Point Full Name	**Contact Point Email**	
	Drake Mubiru	dnmubiru@kari.go.ug	

	Acronym	Name	
NARES - National agricultural research and extension services	SARI	Selian Agricultural Research Institute (Tanzania)	
	Contact Point Full Name	**Contact Point Email**	
	Charles Lyamchai	lyamchai@yahoo.com	

	Acronym	Name	
AI - Academic Institution		University of Dar es Salaam	
	Contact Point Full Name	**Contact Point Email**	
	Pius Yanda	pyanda@gmail.com	

	Acronym	Name	
AI - Academic Institution		Makerere University	
	Contact Point Full Name	**Contact Point Email**	
	Florence Kyazze	fbirungikyazze@agric.ac.ug	

	Acronym	Name	
and extension services	INRAN	Institut National de la Recherche Agronomique du Niger	
	Contact Point Full Name	**Contact Point Email**	
	Moussa Boureima	moussaboureima@yahoo.fr	

	Acronym	Name	
and extension services	ISRA	Institut sénégalais de recherches agricoles	
	Contact Point Full Name	**Contact Point Email**	
	Yacine Ndour	yacine.ndour@ird.fr	

Activity No. 252

Activity title	MarkSim version 2 and associated tools, development and testing; revision of MarkSim GCM with CMIP5 data	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (2)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Phase 1: Revise the FORTRAN module GCM4 to incorporate data for up to five new AR4 climate models, and to revise outputs to allow the mean of all GCM outputs to be downscaled
	Objective 2	Phase 1: Work on a point and click program the can be run in ESRI map server that will allow the use to choose a location, a time slice between 2010 and 2100, one of several climate models, and one of the three AR4 emissions scenarios, and generate a ser of daily weather files (in DSSAT format) for that location, which will then be zipped and emailed to the user
	Objective 3	Phase 2: Expand the calibration data set of daily historical rainfall data
	Objective 4	Phase 2: Model modifications and clustering of climate types with new parameter surfaces
	Objective 5	Phase 2: Produce model version to run as an EXE and DLL in the DSSAT crop modeling suite
	Objective 6	Phase 2: Produce start-of-season date surfaces for the six climate models in MarkSim GCM, plus the average, for the three emission scenarios used in the IPCC's Fourth Assessment Report
Activity status	Partially completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Work on the GCM4 module was completed, and a version of the software runs in Google Earth. A stand-alone version of MarkSim was also developed and is now available from the website. Work continues on incorporating CMIP5 climate data, whcih should be completed in 2013. during the year, it was decided to revamp the temperature simulation routines in MarkSim v2 as well as the rainfall routines. As a result of this and the amount of data checking being done on historical weather data, version 2 of MarkSim should be completed in early 2014.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Model tools and software	MarkSim2 software	2012	Partially completed	Other
Other	Software manual	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	Report on the software development process	2012	Completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
PRI - Private Research Institution		Waen Associates	Peter Jones	p.jones@cgiar.org
AI - Academic Institution		University of Reading Statistical Services Centre	Roger Stern	r.d.stern@reading.ac.uk

Activity No. 253

Activity title	Regional reports evaluating different climate models for the new target regions, from the perspective of agricultural impacts modeling	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (2)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	An outline of current trends in climate and extreme events (such as the frequency of hot and cold days and nights, heavy rainfall events, and droughts) in each region, from the middle of the twentieth century onwards, as far as this is possible.
	Objective 2	An evaluation of the CMIP coupled climate models' climatologies for the two regions, and assessment of their projections from the 2030s to the 2090s, in the light of indicators and diagnostics that are related to agricultural production impacts and food security considerations.
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Work is underway on a report for Latin America (INPE) and SE Asia (University of Oxford). To be completed in 2013, as companion reports to those already completed for A Africa, E Africa and S Asia**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	A report for each region, made available on the CCAFS website	2013	Select a status	Select a format

Current Partners		Acronym	Name	
	AI - Academic Institution		University of Cape Town	
		Contact Point Full Name	Contact Point Email	
		Jose Marengo	jose.marengo@inpe.br	
		Acronym	Name	
	AI - Academic Institution		University of Oxford	
		Contact Point Full Name	Contact Point Email	
		Richard Washington	richard.washington@ouce.ox.ac.uk	

Activity No. 254			
Activity title	Soil profile characteristics database development and refinement, for use in agricultural impact modeling work		
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Phase 1: the objective is to obtain location-specific estimates of selected top-soil and sub-soil properties and derived soil quality indicators of importance to crop production and natural resource management. In the second phase, the objectives are to complete the conversion of the WISE global soil profile data set, as well as to develop data quality control procedures for WISE soil data attributes and crop model specific soil parameters. Also, different options to convert soil texture into soil water holding characteristics will be evaluated, as well as the use of the soil database for crop model applications, uncertainties and the potential to develop generic soil profiles.	
	Objective 2	Phase 2: Complete the conversion of the WISE global soil profile data set developed by ISRIC; Develop data quality control procedures for crop model specific soil parameters	
	Objective 3	Phase 2: Explore options to develop generic soil profiles based on the current profiles of the WISE soil database	
	Objective 4	Phase 2: Explore options for applying the methodology that was developed for the WISE 3.1 database to conver the more generic Harmonized World Soil Databse (HWSDB) into a format suitable for agricultural models	
Activity status	Partially completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**The WISE conversion has been completed, a full database is available for download, and a report has been written. Work continues on generic profiles for agricultural modelling purposes, and on some uncertainty analysis to be completed in 2013, with a no-cost extension.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Other	An updated soil profile database	2012	Completed	Spreadsheet (*.xls, *.ods)
Other	A secondary soil database that contains generic soil profiles	2012	Completed	Plain text (*.txt)
Reports, publications	Documentation that describes the analytical methods that were used	2012	Completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	Uncertainty analysis of soil input selection	2012	Partially completed	Select a format
Select a data type			Select a status	Select a format
Select a data type			Select a status	Select a format
Select a data type			Select a status	Select a format

Current Partners		Acronym	Name	
	AI - Academic Institution		Washington State University	
		Contact Point Full Name	Contact Point Email	
		Gerrit Hoogenboom	gerrit.hoogenboom@wsu.edu	
		Acronym	Name	
	CG - CGIAR Center	IFPRI	International Food Policy Research Institute	
		Contact Point Full Name	Contact Point Email	
		Jawoo Koo	j.koo@cgiar.org	

Activity No. 255

Activity title	Global Mapping of Intensive Livestock Production Systems	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1** To evaluate different approaches for mapping intensive livestock production systems in the CCAFS priority areas of East Africa, West Africa and the Indo-Gangetic Plains of South Asia	
	Objective 2 To produce global maps of intensive production of all the major livestock species and types (chickens, ducks, pigs, beef and dairy cattle).	
Activity status	Partially completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Databases have been assembled, and working papers on livestock intensiciation in the CCAFS regions (cattle, chickens and pigs) and on the global pig sector (production estimates by coutnry and production system) are close to completion. The work is a little delayed, but the working papers should be published in the first half of 2013.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	A review of existing approaches to mapping intensive livestock production	2012	Completed	Document (*.doc, *.odt, *.pdf)
Data	Draft global maps of intensive production of cattle, pigs and poultry	2012	Partially completed	GIS raster (ESRI Grids, GeoTiff, etc)
Data	Relevant datasets and GIS maps assembled for East Africa, West Africa and the Indo-Gangetic Plains	2012	Completed	Database (*.sql, *.mdb, etc)
Reports, publications	A joint (FAO/CCAFS) report describing estimates of the distribution of intensive production of selected livestock species in East Africa, West Africa, and the IGP	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
ARI - Advanced Research Institution	FAO	Food and Agriculture Organization of the United Nations	Tim Robinson	tim.robinson@fao.org
CG - CGIAR Center	ILRI	International Livestock Research Institute	An Notenbaert	a.notenbaert@cgiar.org

Activity No. 256

Activity title	Refinement of global cropland extent data layers	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1** Phase 1: To integrate the best land cover information that is currently available; To build an improved land cover validation dataset by encouraging participants to contribute geo-tagged photos, validation points and existing regerence validation datasets; To build a continuting international collaboration via Geo-Wiki in the collection of data related to land cover, land-use and socioeconomic data; To link the maps and data to climate change and food security	
	Objective 2 Phase 2: It is the aim and objective to continue collecting regional and national datasets as well as the further integration of data collected from geo-wiki.org. Moreover, more and more calibration data will be collected with the geo-wiki land cover validation tool via gaming. An initial game to collect data has been developed in the LandSpotting project. Called Landspotting.org, the first beta version will be released shortly on facebook. The aim is to improve the game over the following weeks and to then develop it into a multi-mass player game. Data from the game will be integrated with existing global land cover products in order to derive improved global hybrid land cover products.	
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A hybrid land-cover product has been produced and is now being used by several organisations (e.g. IFPRI). The geo-wiki website continues to provide validation of different land-cover products.**	

Deliverables status *(You may add any unexpected deliverable)*	Type	Description	Year	Status	Format
	Other	Geo-Wiki website	2011	Completed	Other
	Reports, publications	Report on the workshop held in June 2011	2011	Completed	Document (*.doc, *.odt, *.pdf)
	Other	An improved calibrated cropland map using data collected from the geo-wiki game LandSpotting	2013	Partially completed	GIS vector (shapefiles)
	Data	The first hybrid product will be an improved hybrid land cover map over Africa with a special focus on rangelands	2012	Completed	GIS vector (shapefiles)

Current Partners		Acronym	Name	
	ARI - Advanced Research Institution	IIASA	International Institute for Applied Systems Analysis	
		Contact Point Full Name		Contact Point Email
		Steffen Fritz		fritz@iisa.ac.at

Activity No. 257

Activity title		Developing generic tools for characterizing agricultural systems for climate and global change studies (Impact Lite)
CCAFS Objective *(select from drop list)*		4.2 Assemble data and tools for analysis and planning
CCAFS Milestone No. *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*		4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	The objective of the work is to implement the IMPACT lite tool for use in characterising the dynamics of livelihood activities in diverse agricultural production systems. Specific objectives are to:
	Objective 2	Develop databases of production systems and web-based metadatabases of the data collected to facilitate data exchange amongst scientists and interested parties.
	Objective 3	Collect household level information from at least 200 households from well targeted sites in the CCAFS regions for use in studies planned by the CCAFS themes
Activity status		Completed
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**The Impact-Lite tool was developed and some 200 households have been surveyed from all 15 core CCAFS sites. The data have been clearned, and will be made publically available in 2013. Several papers are being written up that analyse the data at a regional level, and plans have been drawn up for further analysis fo the datam, including hosuehodl modelling work.**

Deliverables status *(You may add any unexpected deliverable)*	Type	Description	Year	Status	Format
	Model tools and software	An agricultural household data collection tool that can be run on a variety of different platforms, with appropriate documentation	2012	Completed	Other
	Data	A database and meta-database of new household data available on the web	2012	Completed	Database (*.sql, *.mdb, etc)
	Reports, publications	A database and meta-database of new household data available on the web	2013	Select a status	Database (*.sql, *.mdb, etc)

Current Partners		Acronym	Name	
	CG - CGIAR Center	ILRI	International Livestock Research Institute	
		Contact Point Full Name		Contact Point Email
		Mariana Rufino		m.rufino@cgiar.org

Activity No. 258

Activity title	Impact model wiki design, development and testing (AgriMod.org)	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Establish basic website
	Objective 2	Further development of website, content management and partnership building
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**The Agrimod agricultural modelling knowledge hub website has been created at www.agrimod.org but has not yet been made publically available. Underpinning structures have been designed and created and initially populated with outline text. Registration and security processes have been put in place, but need further development to protect the site and registered users.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Other	A comprehensive website with multiple features	2013	Select a status	Select a format
Reports, publications	Report on the process of building the website	2013	Select a status	Select a format

Current Partners

Acronym	Name	Contact Point Full Name	Contact Point Email
ARI - Advanced Research Institution	James Hutton Institute	Mike Rivington	mike.rivington@hutton.ac.uk

Activity No. 259

Activity title	Livestock production model intercomparison and improvement	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Identify and contact key livestock modeling groups in North America, Latin America, Europe and Australia to ascertain interest in being part of the work. The major focus should be on beef and dairy cattle, with a secondary focus on sheep and goats if time and resources allow.
	Objective 2	Draw up a protocol for the intercomparison work, and identify and obtain suitable data sets describing animal performance on a range of diets that can be used for model evaluation purposes.
	Objective 3	Oversee and facilitate the intercomparison process, with simulations run by the groups responsible for the models, if possible. Collate results from the various modeling groups as appropriate.
	Objective 4	Convene a small meeting to present and discuss the results and plan the writing up of the work
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**This work is a contribution to the AgMIP project, and involves intercomparison of some well-established livestock production models. A protocol is being drawn up, and the comparison work will be undertaken during 2013 and early 2014.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	Working Paper report and article for submission to a journal	2014	Select a status	Select a format

Current Partners

Acronym	Name	Contact Point Full Name	Contact Point Email
AI - Academic Institution	Texas A&M University	Luis Tedeschi	luis.tedeschi@tamu.edu

Activity No. 260

Activity title	Data management strategy, support tools, and creating and maintaining data portals		
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (3)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To create a data management strategy for CCAFS that will assist in handling all data collected by the program	
Activity status	Completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**The CCAFS data management strategy was completed and approved by the ISP in October. The supporting material is being finalised and will be released in the first half of 2013.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	Data management strategy	2012	Completed	Document (*.doc, *.odt, *.pdf)
Other	Support tools and data portals	2012	Completed	Select a format

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
CG - CGIAR Center		Consortium office	Michael Marus	m.marus@cgiar.org
CG - CGIAR Center	CIMMYT	International Maize and Wheat Improvement Center	Medha Devare	m.devare@cgiar.org
AI - Academic Institution		University of Reading Statistical Services Centre	Carlos Barahona	c.e.barahona@reading.ac.uk

Activity No. 261

Activity title	CCAFS Near-Term Climate Project		
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (4)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Build a consortium of international partners that can compete for large grants that address the general area of near-term climate change	
	Objective 2	Undertake exploratory research on specific issues associated with near-term climate change to provide early evidence for CCAFS science policy and joint CCAFS - Global Change research proposals	
	Objective 3	Provide preliminary analysis of CMIP5 and CORDEX modelling projection over the three current CCAFS focus regions	
Activity status	Completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A scoping workshop was held in early 2012. Personnel were recruited during the year and work on objectives 2 and 3 is underway, although a few months behind schedule.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	Working papers, journal articles, and regular reports on progress	2014	Select a status	Select a format
Reports, publications	Climate change scenario reports for each focus region	2014	Select a status	Select a format
Other	Briefing papers for each scenario report and journal article	2014	Select a status	Select a format

Current Partners		**Acronym**	**Name**	
	AI - Academic Institution		University of Cape Town	
		Contact Point Full Name	**Contact Point Email**	
		Mark New	mark.new@acdi.uct.ac.za	

Activity No. 262				
Activity title	G-Range (global rangeland model) development and testing			
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (5)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	The objective of the work is to develop and document a simplified spatially-explicit global rangeland model that responds to the main climate variables (temperature, precipitation) to be able to assess the impacts of climate change on rangelands.		
	Objective 2	With the tuned G-Range model, conduct simulations addressing scenarios regarding climate change in global rangelands given projected climate change through this century.		
	Objective 3	Prepare a manuscript suitable for publication reporting results from syntheses of simulations.		
Activity status	Completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**The development of the G-Range model was largely completed and documented. Work will continue in 2013 on testing the model with a range of different datasets, and on completing a manuscript on a global assessment of clatmie change impacts on rangelands.**			

Deliverables status *(You may add any unexpected deliverable)*	**Type**	**Description**	**Year**	**Status**	**Format**
	Reports, publications	Manusceipt suitable for publication	2012	Partially completed	Select a format
	Model tools and software	G-Range tool	2012	Completed	Other
	Data	Data layers	2012	Completed	GIS raster (ESRI Grids, GeoTiff, etc)

Current Partners		**Acronym**	**Name**	
	AI - Academic Institution	CSU	Colorado State University	
		Contact Point Full Name	**Contact Point Email**	
		Rich Conant	rich.conant@colostate.edu	
		Acronym	**Name**	
	AI - Academic Institution	CSU	Colorado State University	
		Contact Point Full Name	**Contact Point Email**	
		Randall Boone	Randall.Boone@ColoState.edu	

Activity No. 263				
Activity title	Demonstrating a generic framework and tools for modeling resilience of farm households to climate related risk			
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (5)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	The goal of the project is to develop and demonstrate a framework and tools for modeling livelihood resilience of rural households in the face of climate-related risk, and the impact of climate risk management interventions on resilience.		
	Objective 2	1. document a framework for modeling climate resilience of rural households		
	Objective 3	2. develop or adapt generic prototype bioeconomic modeling tool(s) for modeling the essential features of livelihood resilience at the farm household level		
	Objective 4	3. Collect household data sets (IMPACTlite) for Makueni (Kenya) and Borana (Ethiopia) for detailed household moeling in 2013		
Activity status	Completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A literature review was carried out that assessed existing approaches, and the prototype model was developed and applied to CCAFS benchmark site in Borana. The model is able to quantify the dynamics in time of important asset holdings of smallholder farmers. In 2013 well-grounded modelling analyses can be performed. This activity is cofunded with Theme 2.**			

Deliverables status
(You may add any unexpected deliverable)

Type	Description	Year	Status	Format
Reports, publications	Brief literature review	2012	Completed	Document (*.doc, *.odt, *.pdf)
Data	Documented ImpactLite household datasets for Makueni and Borana	2012	Completed	Database (*.sql, *.mdb, etc)
Reports, publications	Report describing approach, process and outcomes of participatory local scenario development for Makueni and Borana	2013	Select a status	Select a format
Model tools and software	Generic prototype bioeconomic modeling tool(s)	2013	Select a status	Select a format
Other	At least 1 and possibly 2 documented case studies based on CCAFS baseline survey, participatory local scenario development and if possible preliminary analysis of ImpactLite household data	2013	Select a status	Select a format
Reports, publications	Report developing and demonstrating the resilience modeling framework	2014	Select a status	Select a format

Current Partners

	Acronym	Name	
CG - CGIAR Center	ILRI	International Livestock Research Institute	
	Contact Point Full Name		**Contact Point Email**
	Mariana Rufino		m.rufino@cgiar.org

Activity No. 264

Activity title	Vulnerability assessments at sub-national level for selected countries in at least 2 CCAFS regions	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* — 4.2.1 2012 (5)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To further explore vulnerabilities to climate change and impact on food security at a subregional level
	Objective 2	To conduct a gap analysis of research on climate change and the less well-studied aspects of food security
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**In 2012 work on the vulnerability component centred on a review of adaptation indicators for food systems across the globe. In 2013 this work will continue on adapting the global map of hotspots down to subnational level in some of the CCAFS benchmark sites.**	

Deliverables status
(You may add any unexpected deliverable)

Type	Description	Year	Status	Format
Reports, publications	Report on impact of different climage change thresholds on vulnerability in one or more CCAFS target regions	2013	Select a status	Select a format
Reports, publications	Journal article providing a review of the consequences of climate change for the less well-studied components of food security	2013	Select a status	Select a format

Current Partners

	Acronym	Name	
CG - CGIAR Center	ILRI	International Livestock Research Institute	
	Contact Point Full Name		**Contact Point Email**
	Polly Ericksen		p.ericksen@cgiar.org

Activity No. 265

Activity title	Quantification of regional scenarios using global integrated models		
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (5)
Activity objectives *(what the activity aims to achieve)* — **Objective 1**	To quantify the qualitative scenarios developed in the CCAFS scenarios programme for East Africa using the IMPACT model in a participatory process, closely collaborating with the GLOBIOM team.		
Activity status	Completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**The East Africa scenarios have been quantified and written up as a report. Two papers on the scenarios process have been published or submitted, and several more are being completed.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Workshops	Workshop in Dar es Salaam to focus on quantification of key variables	2012	Completed	Other
Other	Harmonization of model input and output data	2012	Completed	Other
Reports, publications	Two papers on the scenarios process and its outputs	2012	Completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
CG - CGIAR Center	ILRI	International Livestock Research Institute	Polly Ericksen	p.ericksen@cgiar.org
CG - CGIAR Center	IFPRI	International Food Policy Research Institute	Daniel Mason-D'Croz	D.MASON-DCROZ@cgiar.org
ARI - Advanced Research Institution	IIASA	International Institute for Applied Systems Analysis	Amanda Palazzo	palazzo@iiasa.ac.at

Activity No. 266

Activity title	Review of climate change communications and social learning in climate change		
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.2 2012
Activity objectives *(what the activity aims to achieve)* — **Objective 1**	Phase 1: The objective is to review both the current approaches to climate change communications and social learning that are applicable to the developing world and to provide inputs into a strategy development process for future CCAFS engagement in this area.		
Objective 2	Phase 2: Synthesize the proposed strategic intervention (change) areas identified in the Addis Ababa workshop, fleshing these out, crystallizing their focus, aligning them with one another, extracting the promising actions and ideas needing follow up.		
Objective 3	Phase 2: Contribute to documentation, e.g. drafting a 'CCAFS brief' (co-authorship), 'position paper' (feedback and input where necessary), 'CCAFS strategy' outlining the key logic and focus of a CCAFS strategy in the area of 'communication and social learning for enhanced climate change decision-making' (feedback and input where necessary).		
Objective 4	Phase 2: Scope and carry out a systematic review of approaches and tools to better understand the impact, and ways to assess it, of social learning and knowledge sharing in climate change, food security and agriculture		
Activity status	Completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A CCAFS Working Paper (No. 22) on current approaches to climate change communications and social learning has been published. An initial workshop in Addis identified strategic intervention areas for CCAFS and resulted in several activities being initiated - Sandbox, work on social differentiation, CGIAR stocktake, Measuring impact of social learning, proposal for the 2013 CCAFS annual science meeting on social learning, etc. The CCAFS brief, a synthesis brochure and other documents are close to being completed. This is a joint T4.1 activity.**		

Deliverables status
(You may add any unexpected deliverable)

Type	Description	Year	Status	Format
Workshops	Workshop in Addis Ababa to help formulate strategy	2012	Completed	Other
Reports, publications	Systematic review of tools and approaches	2012	Completed	Document (*.doc, *.odt, *.pdf)
Data	A CCAFS brief and position paper on social learning and climate change	2012	Partially completed	Document (*.doc, *.odt, *.pdf)
Workshops	Second Workshop in Addis to take stock of CGIAR social learning activities	2012	Completed	Other
Other	CCSL Sandbox established and running: A community of practice of climate change and social learning	2012	Completed	Other
Reports, publications	Measuring impact of social learning	2012	Completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
ARI - Advanced Research Institution	IDS	Institute of Development Studies	Lars Otto Naess	L.Naess@ids.ac.uk
ARI - Advanced Research Institution	IIED	International Institute for Environment and Development	Liz Carlile	liz.carlile@iied.org
CG - CGIAR Center	ILRI	International Livestock Research Institute	Peter Ballantyne	p.ballantyne@cgiar.org
ARI - Advanced Research Institution	IDRC	International Development Research Institute	Blane Harvey	bharvey@idrc.ca
Other		Consultant	Julian Gonsalves	juliangonsalves@yahoo.com

Activity No. 267

Activity title: Agricultural land cover data for Latin America and southeast Asia in 2005 (GEOSHARE)

CCAFS Objective *(select from drop list)*: 4.2 Assemble data and tools for analysis and planning

CCAFS Milestone No. *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*: 4.2.1 2012 (3)

Activity objectives *(what the activity aims to achieve)*

Objective 1: To develop agricultural land cover data for Latin America and Southeast Asia for 2005

Activity status: Completed

Insert a small remark to indicate the status of the activity.
(2-4 sentences required per activity)

Cropland and pasture land maps for Latin America for the year 2005 were developed using a statistical data fusion technique to merge satelliet-derived land-cver classification data with nationa ladn sub-national census statistics.

Deliverables status
(You may add any unexpected deliverable)

Type	Description	Year	Status	Format
Data	Both vector (administrative level) and raster data on total cropland area and total pasture area	2012	Completed	GIS raster (ESRI Grids, GeoTiff, etc)

Current Partners		**Acronym**	**Name**	
	AI - Academic Institution		McGill University	
		Contact Point Full Name	**Contact Point Email**	
		Navin Ramankutty	navin.ramankutty@mcgill.ca	

Activity No. 268					
Activity title		Sponsoring of participants for AgMIP workshop			
CCAFS Objective *(select from drop list)*		4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2012 (3)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Phase 1: The objective was to initiate interactions between the AgMIP project and the CCAFS program at the start-up workshop of AgMIP, by enabling the participation of scientists from the CCAFS regions.			
	Objective 2	Phase 2: To identify concrete collaboration and leveraging opportunities			
Activity status		Completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**The workshop was held in October 2012 and materials from it are available at www.agmip.org. Participants from the three CCAFS regions (West Africa, East Africa and South Asia) were supported to attend and interact with AgMIP personnel.**			
Deliverables status *(You may add any unexpected deliverable)*		**Type**	**Description**	**Year**	**Status**	**Format**
		Reports, publications	Web-based workshop report	2012	Completed	Document (*.doc, *.odt, *.pdf)
Current Partners		**Acronym**	**Name**		
	AI - Academic Institution		Columbia University		
		Contact Point Full Name	**Contact Point Email**		
		Carolyn Mutter	czm2001@columbia.edu		

Activity No. 269					
Activity title		Science meeting on systems analysis tools			
CCAFS Objective *(select from drop list)*		4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2013 (5)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To discuss key systems research challenges in the CRPs – similarities and differences			
	Objective 2	To work in break out groups of 3-5 people on specific examples			
	Objective 3	To organize a workshop output – e.g. a review paper / draft manual to help other scientists working on similar challenges / possibly CN on joint trade-off analysis projects			
Activity status		Uncompleted			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**The meeting will take place 19-21 February 2013 in Wageningen, and the meeting agenda, participant invitations, invited speakers and logistics are well in hand, mostly through the services of a consutlant hired to set up the meeting.**			
Deliverables status *(You may add any unexpected deliverable)*		**Type**	**Description**	**Year**	**Status**	**Format**
		Workshops	Workshop to be held in late 2012 or early 2013	2013	Select a status	Select a format
		Reports, publications	Workshop report	2013	Select a status	Select a format
		Other	Outline of a review paper or possibly a methods manual	2013	Select a status	Select a format

Current Partners		Acronym	Name	
	CG - CGIAR Center	IITA	International Institute of Tropical Agriculture	
		Contact Point Full Name	Contact Point Email	
		Piet van Asten	p.vanasten@cgiar.org	
		Acronym	Name	
	Other		Independent Consultant	
		Contact Point Full Name	Contact Point Email	
		Lotte Klapwijk	lotteklapwijk@gmail.com	

Activity No. 270

Activity title		Household modelling development and application using the Impact-Lite databases in the CCAFS sites		
CCAFS Objective *(select from drop list)*		4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2013 (5)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To utilize the Impact-lite databases for developing household models		
Activity status		Uncompleted		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**These recruitments and the associated activity had to be put on hold because it became clear that there would funding constraints for 2013 and beyond. It is hoped that a post-doc will be recruited for the W Africa and S Asia regions to work on the Impact-Lite household data, through other mechanisms.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Other	Recruitment initiation of postdocs	2012	Select a status	Select a format

Current Partners		Acronym	Name	
	CG - CGIAR Center	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics	
		Contact Point Full Name	Contact Point Email	
		Pierre Sibiry Traore	P.TRAORE@CGIAR.ORG	
		Acronym	Name	
	CG - CGIAR Center	IWMI	International Water Management Institute	
		Contact Point Full Name	Contact Point Email	
		Pramod Aggarwal	p.k.aggarwal@cgiar.org	

Activity No. 271

Activity title		Implementing a cassava model in DSSAT, and prelmiminary work on expanding DSSAT to include crops for pigeonpea and yam; initial work on integrating MarkSimGCM into the DSSAT		
CCAFS Objective *(select from drop list)*		4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.2.1 2013 (5)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To incorporate MarkSim into DSSAT		
	Objective 2	To implement a cassava model in DSSAT		
	Objective 3	To expand DSSAT to include model for other crops		
Activity status		Partially completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**Work on objective 1 is still underway, pending the development of MarkSim v2. A stopgap solution is being put in place in the meantimg. Casssava model development and refinement is proceeding. Work on DSSAT crop models for sweetpotato, pigeon pea and yam (involving literature reviews) was also undertaken, and a no-cost extension is allowing this work to continue in 2013.**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Model tools and software	Revised DSSAT model for cassava, prototype model for pigeopea	2012	Partially completed	Other
Other	Literature review of yam research	2012	Partially completed	Select a format

Current Partners		**Acronym**	**Name**	
	AI - Academic Institution		University of Florida	
		Contact Point Full Name	**Contact Point Email**	
		Jim Jones	jwj@ufl.edu	
		Acronym	**Name**	
	AI - Academic Institution		Washington State University	
		Contact Point Full Name	**Contact Point Email**	
		Gerrit Hoogenboom	gerrit.hoogenboom@wsu.edu	
		Acronym	**Name**	
	CG - CGIAR Center	CIAT	Centro Internacional de Agricultura Tropical	
		Contact Point Full Name	**Contact Point Email**	

Activity No. 272

Activity title	Development work on a DSSAT cassava model in consultation with scientists at CIAT	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.1 2013 (5)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To create a specific cassava component for the overall CSM modelcomponent.
	Objective 2	To incorporate into the cassava component aspects of cassava physiology/agronomy that were included in a previous standalone cassava model (GUMCAS).
	Objective 3	To evaluate through sensitivity analysis, and on the basis of the evaluations refine, all algorithms included and/or added to the cassava component.
	Objective 4	To evaluate, through comparison with experimental data currently available in model readable form, the operation of the model, and on the basis of these evaluations to refine the various algorithms/parameters of the cassava component.
Activity status	Partially completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A cassava model is being developed within the framework of the Cropping System computer Model (CSM) of DSSAT. A cassava component has been developed, which incorporates aspects of cassava physiology/agronomy that were included in a previous standalone cassava model GUMCAS). The model is being thoroughly evaluated with experimental data from CIAT and elsewhere.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Model tools and software	Revised DSSAT model for cassava	2013	Partially completed	Select a format

Current Partners		**Acronym**	**Name**
	AI - Academic Institution		University of Guelph
		Contact Point Full Name	**Contact Point Email**
		L A Hunt	mthunt@sympatico.ca

Activity No. 273

Activity title	Initiation of a case study at one CCAFS site on developing approaches to support smallholder decision making, to link with both the met service work and the household modelling work	
CCAFS Objective *(select from drop list)*	4.2 Assemble data and tools for analysis and planning	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.2.2 2012
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	To improve awareness and understanding amongst smallholders of climate variability at their location and of whether there are any trends in climate that are currently evident from the information
	Objective 2	To understand what climate related information farmers want and need for improved decision making (for different types of decisions)
	Objective 3	To communicate information effectively and in ways that enable learning, interaction and exploration by farmers, and that facilitate short and longer term planning and decision making, and which can be scaled-up
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Case study has been initiated and training workshop implemented in Tanzania and Niger and engagement in Senegal initiated. The approach is receiving a lot of interest and the focus next year will be on improving it based on stakeholder feedback.**	

Deliverables status
(You may add any unexpected deliverable)

Type	Description	Year	Status	Format
Data	Literature review document	2013	Select a status	Select a format
Reports, publications	Summary report on linkages developed	2014	Select a status	Select a format
Communication products	Training materials for met staff	2014	Select a status	Select a format

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
AI - Academic Institution		University of Reading	Peter Dorward	p.t.dorward@reading.ac.uk
Select a partner type.		University of Reading	Roger Stern	r.d.stern@reading.ac.uk
and extension services		Agricultural Research Institute Hombolo	Elirehema. Y. Swai	eyswai@yahoo.com
GO - Government office/department		Tanzania Meteorological Agency	Isack B. Yonah	yonah002@yahoo.co.uk
AI - Academic Institution		Sokoine University of Agriculture	Henry Mahoo	mahoohenry@yahoo.com

2012 Technical Report per Activity

Each Program Participant must provide a small remark against each activity/deliverable to indicate the status of the activity (2-4 sentences required per activity) using the form below. Updated data from the current partners is also required.

CCAFS Theme Led Activities
Theme 4.3. Refine Frameworks for Policy Analysis

Activity No. 239				
Activity title	Development of virtual cultivars/animals/pasture systems that are resilient to climate change (in conjunction with Global Futures project work)			
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.3.1 2012 (1)	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Coordinating activities among crop breeders, crop modelers, and other scientists in developing virtual crop models of 1.maize and wheat for identified potential technologies for CIMMYT, 2. rice for identified potential technologies for IRRI (inclusion of Oryza rice modeling software in DSSAT system). 3. groundnut and sorghum for identified potential technologies for ICRISAT for the selected sites in WCA, ESA and Asia, 4. crop residues from rice, maize, and wheat (completion of process of development of a standard system for incorporating outputs of the Ruminant software into the IMPACT modeling system), 5. cassava and beans for identified potential technologies for CIAT		
	Objective 2	Representation in meetings		
	Objective 3	Preparation of working papers on simulation analyses of virtual crop models in the areas of specialization		
Activity status	Partially completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**CIMMYT, IRRI, ICRISAT, ILRI, and CIAT were funded for various modelling work within the broader framework of including climate change components, as part of the ongoing"Global Futures for Agriculture" project, (the project is principally bilaterally funded by Bill & Melinda Gates Foundation). Analytically: 1.CIMMYT-*activity completed* ; Two reports, submitted to Gates Foundation, that present short review of maize and wheat technologies that showed good promise to increase productivity of maize under existing and potential constraining factors. , 2.IRRI- *activity completed* ; The DSSAT-ORYZA linkage was accomplished. It is now possible to use the existing DSSAT simulation environment for generating large-scale simulations of rice yield predictions using the ORYZA2000 model. However, it requires additional testing in the following areas: a. DSSAT rice experiments for cultivars which have already been calibrated for ORYZA2000, such as IR72. b. Extreme environmental conditions, including drought, flood, low N, high temperatures, low temperatures, CO2 enhancement, 3.ICRISAT- *activity completed;* Evaluation of productivity potential of identified sorghum and groundnut technologies using virtual crop model (DSSAT) was completed. The breeders and physiologists were involved in this activity to calibrate the model as well as improve the simulation results. Two working papers were prepared and one journal article was published, 4.ILRI- *activity partially completed;* A system for incorporating crop residue coefficients (for rice, maize, wheat, millet and sorghum) in a global economic modeling environment has been completed. A process was developed, based on standard statistical methods; to incorporate outputs of the Ruminant software into the IMPACT modeling system. The livestock/pasture systems module is currently being tested in the larger modeling environment. 5.CIAT- *activity partially completed;* Crop modeling: Calibrated the DSSAT model for Beans. Participated in various meetings and team works aiming at improving the cassava model in DSSAT. Data collection: Partial data collection on aggregated data for SPAM database for Latin America. Climate Change Impact Assessment: Used DSSAT and IMPACT models to assess the impact of climate change on cassava and analyzed the impact of herbicide tolerance technology. Participation in workshops: Ex-ante impact evaluation of herbicide tolerant cassava, GCP21, Uganda, June 2102**			

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Model tools and software	Climate resilient virtual cultivars developed for maize, wheat, rice, groundnut, and sorghum	2012	Partially completed	Other
Model tools and software	Climate resilient animals/pasture systems model development incorporated into larger modeling environment	2012	Partially completed	Other

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
CG - CGIAR Center	CIMMYT	International Maize and Wheat Improvement Center	Bekele Shiferaw	B.SHIFERAW@cgiar.org
CG - CGIAR Center	IRRI	International Rice Research Institute	Samarendu Mohanty	s.mohanty@irri.org
CG - CGIAR Center	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics	Cynthia Bantilan	C.BANTILAN@CGIAR.ORG

		Acronym	Name
CG - CGIAR Center		CIAT	International Center for Tropical Agriculture
		Contact Point Full Name	**Contact Point Email**
		Bernardo Creamer	B.Creamer@CGIAR.ORG
		Acronym	**Name**
CG - CGIAR Center		ILRI	International Crops Research Institute for the Semi-Arid Tropics
		Contact Point Full Name	**Contact Point Email**
		Dolapo Enahoro	D.Enahoro@cgiar.org

Activity No. 240				
Activity title		Model Intercomparisons of major global models using ARC RCPs and SSPs as drivers		
CCAFS Objective *(select from drop list)*		4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.3.1 2012 (1)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Coordinating the global intercomparison work		
	Objective 2	Organizing model intercomparisons meetings, as appropriate		
	Objective 3	Preparing several thematic papers to be included in international journal		
Activity status		Partially completed		
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*		**As part of the Agricultural Model Intercomparison and Improvement Project (AgMIP), a total of 10 global economic models (seven of these are general equilibrium models while four are partial equilibrium models) have been in a global reference scenario comparison. A set of six or more simulations have been developed to expose the models to a wide range of drivers. 5 papers, for a Agricultural Economics Special Issue on Global Model Intercomparison, , and one on "Assessing uncertainty along the climate-crop-economy modeling chain", PNAS, have been prepared and are in the stage of submissions. (Please make a note, that the project was also bilaterally funded by Columbia University, and it includes several partners. Here are listed partners that maintained contracts with IFPRI)**		

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Workshops	Model intercomparisons meetings held	2012	Completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	Papers prepared for submission to a special issue in time to meet AR5 submission deadlines	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name
AI - Academic Institution	LEI	Stichting Dienst Landbouwkundig Onderzoek
	Contact Point Full Name	**Contact Point Email**
	Acronym	**Name**
PRI - Private Research Institution	AOM	Amsterdam Optimization Modeling Group
	Contact Point Full Name	**Contact Point Email**
	Acronym	**Name**
AI - Academic Institution	IDS	Insititute of Development Studies
	Contact Point Full Name	**Contact Point Email**
	Acronym	**Name**
GO - Government office/department	ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
	Contact Point Full Name	**Contact Point Email**
	Acronym	**Name**
ARI - Advanced Research Institution		International Institute for Applied Systems Analysis
	Contact Point Full Name	**Contact Point Email**

Activity No. 242

Activity title	Merging of various modeling components influencing agricultural research internventions on potato and sweet potato, 2011 funds	
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.3.1 2012 (1)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Including climate change components in the development of modeling tools to improve evaluation of ex-ante returns to research and technology development, related to potato and sweet potato
Activity status	Partially completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**An integrated bio-economic modeling framework for the ex-ante evaluation of socio-economic impacts of potato technologies consisting of a global crop modeling framework (DSSAT-SUBSTOR) and an economic model (IMPACT) has been set up and used for the evaluation of improved potato varieties (proof-of-concept). Training on the use of the global crop modeling framework on an high-performance cluster infrastructure has been received. The linkage between the crop model and the economic model has been established and is operational. A first impact study has been carried out and presented at a symposium at a major international conference for agricultural economics. Since no crop model is available for sweetpotato, work has mainly focused on potato so far.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Reports, publications	Working interactions between the various modeling components of potential agricultural research interventions for potato and sweet potato	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

Current Partners

	Acronym	Name	Contact Point Full Name	Contact Point Email
CG - CGIAR Center	CIP	Centro Internacional de la Papa	Guy Hareau	G.Hareau@cgiar.org

Activity No. 244

Activity title	Develop methods for improving CGIAR modeling capability in agroforestry and other natural resource management internvention areas. This may involve the direct enhancement of global models like IMPACT or the enhancement of othe rmodels that could be linked up (e.g. DSSAT), 2012 funds	
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.3.1 2012 (1)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Developing methods for improving CGIAR modeling capability in agro-forestry and other natural resource management intervention areas.
	Objective 2	Building up relevant global databases with which to undertake ex ante impact assessments for agroforestry and natural resource management interventions
	Objective 3	Identifying priority ex ante impact assessments and key model parameters, such as likely adoption trajectories and productivity, equity, income, and environmental service impacts
	Objective 4	Enhancement of ex ante impact assessment tools within ICRAF
Activity status	Partially completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**(Note for the Activity title: this should write 2011 funds instead of 2012 funds. Also sub-deliverables have been added below, additional to the first deliverable). In 2012, ICRAF proceeded well on data collection. Data were compiled from two areas (West Africa and East Africa). In 2013, more data will be collected in Malawi. All data compiled will help ICRAF building the model in 2014.**	

Deliverables status *(You may add any unexpected deliverable)*

Type	Description	Year	Status	Format
Model tools and software	Modeling capabilities in agro-forestry and natural resource management intervention areas are linked between DSSAT and IMPACT	2012	Partially completed	Other
Data	Data collected on agroforestry and maise yields in Malawi	2012	Completed	Spreadsheet (*.xls, *.ods)
Reports, publications	Contribution to best technologies for the CGIAR paper for Global Futures project	2013	Partially completed	Document (*.doc, *.odt, *.pdf)
Reports, publications	Paper on gender implications related to fertilizer tree	2012	Completed	Document (*.doc, *.odt, *.pdf)
Data	Soil sampling in Malawi to refine agroforestry model (maped with the 2012 data)	2013	Uncompleted	Select a format

Model tools and software	Develop models and platforms for better integrating agroforestry and NRM into CGIAR ex ante impact modeling systems	2014	Uncompleted	Select a format	

Current Partners		Acronym	Name
	CG - CGIAR Center	ICRAF	World Agroforestry Center
		Contact Point Full Name	Contact Point Email
		Frank Place	F.PLACE@cgiar.org

Activity No. 246

Activity title	Report for the United Nations Committee on Food Security (CFS) ON Food Security and Climate Change and related reports with subregional results	
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.3.1 2012 (2)
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Project leadership of the report preparation
	Objective 2	Dissemination of the report results, in international for a, policy papers and publications
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**A "Food security and climate change" report was released at FAO, in June 2012, by the High Level Panel of Experts (HLPE) of the Committee on World Food Security (CFS) . The report was presented during a special event in Rome, as well as during a special session Eighteenth Session of the Conference of the Parties, UNFCCC (COP 18) in Doha, Qatar in December, 2012.**	

Deliverables status *(You may add any unexpected deliverable)*	Type	Description	Year	Status	Format
	Reports, publications	Publication of the reports and citations in nationa and international planning/strategy documents	2012	Completed	Document (*.doc, *.odt, *.pdf)

Current Partners		Acronym	Name
	NGO_DO - Non-governmental organization/Development organization	FAO- CFS (HLPE)	Food and Agriculture Organization; Committee on World Food Security, High Level Panel of Experts (HLPE)
		Contact Point Full Name	Contact Point Email

Activity No. 247

Activity title	Completion of national and regional studies complementary to the CFS global study	
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)* 4.3.2 2012
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Comprehensive vulnerability analysis of Agriculture and Climate Change in East and Central Africa, West Africa, and Southern Africa
	Objective 2	Dissemination of results at international meetings and through publications
Activity status	Completed	
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**Three Sub-Saharan African research monographs (East Africa, West Africa, Souther Africa) covering 29 countries, were released (Country level policy briefs are available at the IFPRI website, complete reports are to be finalised in the beginning of 2013). Results were discussed during the "Agriculture, Landscapes and Livelihoods Day 5" at the Eighteenth Session of the Conference of the Parties, UNFCCC (COP 18), in Doha, Qatar in December, 2012.**	

Deliverables status *(You may add any unexpected deliverable)*	Type	Description	Year	Status	Format
	Reports, publications	reports completed and disseminated	2012	Partially completed	Document (*.doc, *.odt, *.pdf)

Current Partners		Acronym	Name
	RO - Regional Organization	FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
		Contact Point Full Name	Contact Point Email
		Sepo Hachigonta	sepo31@gmail.com
	RO - Regional Organization	Acronym	Name
		ASARECA	Association for strengthening Agricultural Research in Eastern and Central Africa
		Contact Point Full Name	Contact Point Email
		Michael Waithaka	m.waithaka@asareca.org

	RO - Regional Organization	**Acronym** (CORAF/WECARD)	**Name** West and Central African Council for Agricultural Research and Development	
		Contact Point Full Name Abdulai Jalloh	**Contact Point Email** abdulai.jalloh@coraf.org	

Activity No. 248				
Activity title	Training and workshops on modeling tools in collaborating centers and NARES			
CCAFS Objective *(select from drop list)*	4.3 Refine frameworks for policy analysis	**CCAFS Milestone No.** *(select from drop list / for further details go to CCAFS 2012 - 2015 LOGFRAME sheet)*	4.3.2 2012	
Activity objectives *(what the activity aims to achieve)*	**Objective 1**	Capacity building among CGIAR centers and NARES		
Activity status	Partially completed			
Insert a small remark to indicate the status of the activity. *(2-4 sentences required per activity)*	**As part of the IMPACT training, 4 scientists and research support staff from IWMI, IRRI, IFPRI, participated in 2 training sessions held at IFPRI headquaters. Several scientists and staff from all participating CGIAR centers in the " Global Futures for Agriculture" project, received guidance, at the Annual meeting of the project which took place in Kenya in January 2011, and maintained a working relationship with IMPACT core team, based at IFPRI. Training with NARES did not take place.**			

Deliverables status *(You may add any unexpected deliverable)*	**Type**	**Description**	**Year**	**Status**	**Format**
	Capacity	CGIAR partners in target countries to analyze effects of policy change using modeling tools	2012	Partially completed	Other

Current Partners		**Acronym**	**Name**	
	Select a partner.	**Contact Point Full Name**	**Contact Point Email**	

2012 summary report of activities and deliverables by Output level

Each Program Participant must prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives. Length is dependent on budget size so please refer to the table on the explanatory notes.

CCAFS Theme Led Activities

Theme 4. Integration for Decision Making

Theme 4. Integration for Decision Making	
Objective 4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	
Outcome 4.1: Appropriate adaptation and mitigation strategies mainstreamed into national policies in at least 20 countries, in the development plans of at least five economic areas (e.g. ECOWAS, EAC, South Asia) covering each of the target regions, and in the key global processes related to food security and climate change	
Output 4.1.1 Future economic development scenarios taking climate change into account, and vulnerability maps and analyses incorporating a changing climate and food security issues shared with decision-makers at national, regional and global levels and informing regional economic development and national food security plans and policies	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Output 4.1.1 Scenarios (http://ccafs.cgiar.org/scenarios) Activities: Scenarios building process and capacity building completed in EA, nearly complete in SA, and underway in WA. Two workshops held in EA in 2012 (for policy advisors and for non-state actors) to introduce and review the scenarios, and to develop strategies and policies based on the key future socio-economic issues presented by the scenarios. Based on recommendations from the workshop, the Society for International Development (SID), based in Nairobi, has been contracted to work with the East African Farmers Federation (EAFF) to increase their capacity to engage in East African Community (EAC) negotiations and policy setting, and to train 'policy champions' from various East African organizations to engage decision-makers about the future scenarios. Delivered: Workshop reports for EA and WA available on CCAFS and partners websites; Draft policy brief on EA scenarios submitted to CCAFS communications team; newspaper articles written by journalists; Journal article published; Policy and scenario development workshops held; Presentations made at global conferences (PUP, ESG, GCARD); multiple blogs written on scenario engagement process; radio program and cartoons published. Publications and presentations: 1. (Journal) Chaudhury, M., Vervoort, J., Kristjanson, P., Ericksen, P. and Ainslie, A. 2012. Participatory scenarios as a tool to link science and policy on food security under climate change in East Africa. Regional Environmental Change. DOI 10.1007/s10113-012-0350-1. http://cgspace.cgiar.org/handle/10568/24447 2. (workshop report) East Africa Strategic Futures Workshop for Non-State Actors http://cgspace.cgiar.org/handle/10568/21678 3. (workshop report) East Africa Strategic Futures Workshop for Policy Advisors http://cgspace.cgiar.org/handle/10568/24758 4. (presentation) Multi-Stakeholder Scenarios as a Boundary Process. Presented at Planet Under Pressure, London, March 2012. ..\..\Scenarios\Research on Scenarios (Boundary)\Presentation on Multi-Stakeholder Scenarios as a Boundary Process.pptx 5. (presentation) We're All In This Together: Shifting Paradigms on Science and Society in a Shifting Global Landscape. Presented at Planet Under Pressure, London, March 2012. http://www.planetunderpressure2012.net/pup_session.asp?19212 6. (presentation) Multi-actor scenarios to build capacity for food system governance at the sub-continental level. Presented at Earth System Governance, Lund, April 2012http://www.lund2012.earthsystemgovernance.org/LC2012-paper332.pdf 7. (presentation) No Foresight, no Food? Presented at GCARD 2, Punta Del Este, October 2012 http://www.egfar.org/sites/default/files/files/Foresight%20Briefs/Joost_Vervoort_Brief03_Final.pdf 8. (newspaper article) 'Scenarios: a tool to interrogate today and shape tomorrow'. The Observer, Sunday, 26 August 2012 (http://www.observer.ug/index.php?option=com_content&view=article&id=20580:scenarios-a-tool-to-interrogate-today-and-shape-tomorrow&catid=37:guest-writers&Itemid=66) 9. (newspaper article) 'Why Arusha meeting on agriculture was important to Africa's food security'. IPPMedia.com, Thursday Feb 21, 2013 (http://www.ippmedia.com/frontend/index.php?l=46853) 10. (blog) Joost Vervoort and Gopal Datt Bhatta. 'Future drivers for regional food security and climate adaptation explored by South Asians', 17th December 2012 (http://ccafs.cgiar.org/blog/category/scenarios) 11. (blog) Joost Vervoort and Hannah Rowlands. 'Falling sick on an empty belly? Linking the future of food security and disease', 15th November 2012 (http://ccafs.cgiar.org/blog/category/scenarios) 12. (blog) Caity Peterson. 'Thinking one step ahead at all times is difficult - but necessary!', 5th November 2012 (http://ccafs.cgiar.org/blog/category/scenarios) 13. (blog) Caity Peterson. 'Industrious ants, or lone leopards?', 29th October 2012 (http://ccafs.cgiar.org/blog/category/scenarios) 14. (blog) Moushumi Chaudhury. 'Working backwards to plan for future food security in East Africa'. 12th September 2012 (http://ccafs.cgiar.org/blog/category/scenarios)
Output 4.1.2 Evidence on, testing and communication of, successful strategies, approaches, policies, and investments contributing to improved science-informed climate change-agricultural development-food security policies and decision making	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Output 4.1.2 Linking K with A Testing of Strategies Activities: PAR process established in 15 sites and gender-sensitive activities related to risk management, adaptation and mitigation implemented with engagement and communication strategies aimed at users of the knowledge generated pursued, and scaling up mechanisms put in place. Impact pathway technical support was provided to the regional CCAFS teams and workshops with local and regional partners held in EA and WA and plans for a South Asia in early 2013 made. Delivered: Learning workshop and other meetings with CARE Int'l, EcoAgriculture, Vi, KARI and other local PAR partners on approaches and institutional strategies for gender-sensitive mitigation-related activities in CCAFS sites in East Africa, and proposal for new CARE-CCAFS CSA EA project submitted to Rockefeller. Partnership established with Mediae.org, a media company producing a regional farm reality TV reaching 7million viewers across East Africa; multiple meetings held with many CCAFS CGIAR and NARS partners to engage and involve them in these shows – videos and associated communications materials that we plan to disseminate widely through various means to NGOs and groups across EA. New partnership with PROLINNOVA, an experienced NGO working on local farmer innovation funds, established and plans made for new work in some CCAFS sites with their country platform teams. Plans for an EA farmer innovation fair were also made and a multi-partner committee established (to be held in May 2013). CCAFS regional partners in EA and site partners in Burkina Faso trained in outcomes-thinking. Publications and presentations: 1. (working paper) Neufeldt H, Kristjanson P, Thorlakson T, Gassner A, Norton-Griffiths M, Place F, Langford K. 2012. World Agroforestry Centre (ICRAF). Making climate-smart agriculture work for the poor. Nairobi, Kenya. Available at: http://worldagroforestry.org/our_products

Output 4.1.3 Analyses providing evidence of the benefits of, strategies for, and enhanced regional capacity developed in, gender and pro-poor climate change research approaches that will increase the likelihood that CCAFS-related research will benefit women and other vulnerable as well as socially differentiated groups

Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Output 4.1.3 Gender & Social Differentiation Activities: The CCAFS gender strategy was completed. A workshop for the CGIAR gender and agriculture network was held to identify opportunities for collaboration in gender-responsive research. A CCAFS Gender Technical Advisory group was established in 2012 consisting of 16 members with diverse backgrounds from gender and development to statistics. Key gender-related research questions have been established, which served as the basis for gender research carried out under T4.1 in 2012. A draft journal manuscript was produced from results of the FAO/CCAFS participatory research tool for collection of gender-differentiated qualitative data on climate smart agriculture, analogues and climate forecasting implemented by partners in Uganda, Ghana and Bangladesh, and is currently being reviewed by regional partners. The IMPACT survey methodology was modified (IMPACT light) to collect gender-disaggregated agriculture information at the household level, and will be implemented in the 12 CCAFS countries in 2013. Tools for engagement to ensure gender and pro-poor outcomes, communication approaches and tools for understanding climate change-gender relationships tested and disseminated in all CCAFS regions. Training and awareness on climate change and gender for female leaders (almost 1800) in several districts of Bihar. Delivered: CCAFS-FAO training guide published and launched; Working papers on gender and climate change published; Joint CAPRi-CCAFS working paper; Working papers and technical reports by gender grant recipients, blogs; Presentations made at global conferences (e.g. CBA6); draft journal article on participatory approaches to understanding the gender-dimensions of agriculture and climate change for smallholders; CCAFS gender strategy. Publications and presentations: 1. (working paper) Wright H, Kristjanson P, Bhatta G. 2012. Understanding Adaptive Capacity: Sustainable Livelihoods and Food Security in Coastal Bangladesh. CCAFS Working Paper No. 32. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security. Available at: http://cgspace.cgiar.org/handle/10568/24794 2. (working paper) Chaudhury M, Kristjanson. 2012. Informing Participatory Action Research on Gender and Climate Change. Working Paper 19. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available at: http://cgspace.cgiar.org/handle/10568/24448 3. (working paper) Kyazze, FB, Owoyesigire, B, Kristjanson P, Chaudhury M. 2012. Using a gender lens to explore farmers' adaptation options in the face of a changing climate: Results of a pilot study in Uganda. CCAFS Working Paper No. 26 CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available at: http://cgspace.cgiar.org/handle/10568/23017 4. (working paper) Naab, J.B. and Koranteng, H. 2012. Gender and Climate Change Research Results: Jirapa, Ghana Working Paper No. 17. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Nairobi, Kenya. Available online at: http://ccafs.cgiar.org/ 5. (guide) CCAFS and FAO (2012) Training Guide on Gender and Climate Change Research in Agriculture and Food Security for Rural Development. Nairobi & Rome: CCAFS and FAO. http://www.fao.org/climatechange/micca/75949/en/ (will be available in 3 languages) 6. (report) Ashby J, Kristjanson P, Thornton P, Campbell B, Vermeulen S, Wollenberg E. 2012. CCAFS Gender Strategy. 7. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available online at: www.ccafs.cgiar.org. 8. (5 reports) Link to all technical reports by the gender grant recipients: http://ccafs.cgiar.org/our-work/research-themes/integration-decision-making/linking-knowledge-action/gender-grants 9. 2 draft Working papers by gender grant recipients: Raut, Tall 10. (presentation) Informing Community Based Participatory Action Research on Gender and Adaptation to Climate Variability. Presented at Community Based Adaptation Conference 6, Hanoi, April 2012. ..\..\Gender\FAO\CCAFS Working Paper\Moushumi Chaudhury_CBA Presentation_20 April 2012.pdf 11. (blog) Nadia Manning-Thomas. 'Making sure both men and women benefit from climate and agriculture research', 16th November 2012 (http://ccafs.cgiar.org/blog/Making-men-women-benefit-climate-agriculture-research) 12. (blog) Cecilia Schubert. 'How farmers' gender-based differences hamper climate adaptation', 23rd August 2012 (http://ccafs.cgiar.org/blog/category/integration-decision-

Output 4.1.4 Strengthening capacities to effectively engage in global policy processes and mainstreaming risk, adaptation and mitigation strategies into national policies, agricultural development plans, and key regional and global processes related to agriculture and rural development, food security and climate change

Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Output 4.1.4 (1) Communication Activities: A new climate change and social learning (CCSL) knowledge network was established. A review of current theory and practice in social learning was conducted and published. A workshop was held to identify niches for CCAFS in the area of social learning, and a workshop to identify pathways towards institutionalization of diverse ways of doing research, to bring different stakeholders into the research process, and to understand and use different ways of measuring success. New partnerships were established, e.g. PROLINNOVA, Mediae-Shamba Shape-Up, IDS, IIED, UBC, Berkeley. We facilitated social learning in meetings sponsored by IDS and IIED. New approaches such as animated videos on a new research paradigm for CCAFS and the CG are being produced as a result of this work. We also planned CCAFS's science meeting in 2013 around social learning and will be sharing the outputs of 2012 at that meeting with scientists from all centres. High-level engagement of policy makers and scientists in South Asia particularly on climate smart agriculture and engagement of non-traditional partners such as young Members of the Parliament (almost 60) and extensive media coverage on climate change, agriculture and food security in Nepal. Delivered: Definition of social learning. Report on social differentiation in CCAFS research approaches. Endogenous social learning activities. Online platform for sharing and creating social learning ideas (http://commsl4climate. wikispaces.com/Sandbox). Working papers. Publications: 1. (working paper) Shames S, Wollenberg E, Buck LE, Kristjanson P, Masiga M and Biryahaho B. 2012. Institutional innovations in African smallholder carbon projects. CCAFS Report no. 8. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: www.ccafs.cgiar.org 2. (working paper) Harvey B, Ensor J, Carlile L, Garside B, Patterson Z, Naess LO. 2012. Climate change communication and social learning–Review and strategy development for CCAFS. CCAFS Working Paper No. 22. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen, Denmark. Available online at http://cgspace.cgiar.org/handle/10568/24456) 2. Wiki: http://ccsl.wikispaces.com 3. Yammer: yammer.com/ccsl Output 4.1.4 (2) Land Health Activities: Local institutional capacity strengthened in land health surveillance methods including soil carbon measurement in the CCAFS regions; Scoping studies undertaken on linking landscape-level land health and carbon measures with socioeconomic data from CCAFS baselines and other site studies. Delivered: Number of local scientists trained and implementing latest land health surveillance approaches; Joint CCAFS-ICRAF working paper available on both websites. Publications: 1. (book chapter) Tor-Gunnar Vågen, Finn A. Davey, and Keith D. Shepherd. 2012. Land Health Surveillance: Mapping Soil Carbon in Kenyan Rangelands. In P.K.R. Nair and D. Garrity (eds.), Agroforestry - The Future of Global Land Use, Advances in Agroforestry 9, pp. 465-462, DOI 10.1007/978-94-007-4676-3_22.

Objective 4.2 Assemble data and tools for analysis and planning

Outcome 4.2 Improved frameworks, databases and methods for planning responses to climate change used by national agencies in at least 20 countries and by at least 10 key international and regional agencies

Output 4.2.1 Integrated assessment framework, toolkits and databases to assess climate change impacts on agricultural systems and their supporting natural resources

Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Regional site and baseline characterisation: Considerable progress was made in finalising baseline data collection activities at the 15 CCAFS core sites in three regions and 12 countries. Objectives are to allow the construction and measurement of indicators of behavioural change in relation to climate change adaptation, mitigation and risk management that can be measured in repeat visits. The goal is assess what kinds of changes have occurred and whether these changes are helping households adapt to, and mitigate, climate change. The baselines at household, village and organisational levels are allowing CCAFS to explore gender and other social differences in target populations. Data collection was completed in 2012 for East Africa, West Africa, and South Asia. Most site reports are complete, and these, the data and all training materials are available via DataVerse. One paper has been published and several more are being written up, some by others not directly involved in the data collection. The work has involved a wide range of national partners in the regions, as well as several CG Centres (ILRI, ICRAF, IWMI and ICRISAT). A prototype mini-atlas was developed for the Lushoto (Tanzania) site, and these are now being completed for all 15 core sites. They contain information on a wide range of themes including climate, land use, soil type, agro-ecological zone, crop and livestock information, and poverty. They will be published in on-line and hard-copy versions in early 2013. Downscaled climate data: Several activities were undertaken in relation to downscaled climate model data for evaluating the impacts of climate change on agriculture and food systems and for assessing adaptation, mitigation and risk management options. A stand-alone version of the MarkSimGCM tool was developed, which like its Google-Earth-based precursor, can generate plausible daily weather data in a common crop-modelling format for future climate change scenarios. This tool can be run from scripts, and so can be run for many thousands of points or grid cells. A journal paper was published on the tool, which is available at ccafs-climate.org. New CMIP5 climate model data have been collated (from 17 climate models and 4 scenarios to 2100), and these are being processed. Both versions of MarkSimGCM will be updated with these new data during 2013. Work also continued on version 2 of MarkSim, which will be based on more than 50,000 stations of historical rainfall data. These tools are starting to be widely used in the agricultural modelling community. With the addition of two new CCAFS regions, two reports were commissioned from INPE (Brazil) and the University of Oxford to evaluate the ability of the climate models to reproduce the observed climate in each region (Latin America and SE Asia, respectively). The object is to establish how reliable future climate and crop growth projections might be. These will be companion reports to those already published for E Africa, W Africa and S Asia (ccafs.cgiar.org/resources/tools-maps-models-and-data/testing-climate-models-agricultural-impacts). Databases and database tools: work here contributes to much larger efforts by filling in key gaps that are of particular importance to climate change and food security work. There was theme-led activity in relation to soils (Washington State University and a 9,000 profile data set for agricultural modelling applications), agricultural systems (FAO and new maps of intensive cattle, chicken and pig production systems in the CCAFS regions), cropland extent (IIASA and crowd-sourcing technology geo-wiki.org, to produce a new hybrid cropland extent map), and rangeland extent (McGill University and the GEOSHARE project). ILRI used the household data collection tool Impact-Lite to collect detailed farming household data from about 200 households in each of the 15 CCAFS sites. These data, soon to be made publically available, will form a key resource for household modelling, as well as providing detailed systems characterisation information for all CCAFS sites. A data management strategy (DMS) was developed during the year, with guidance from Reading University, CIMMYT and the Consortium Office. Detailed guidelines to help implement the strategy are close to completion. The CCAFS DMS has already been widely disseminated (also to other CRPs), and links with other large research programs such as AgMIP and the Global Yield Gap Analysis project are being forged around data issues. Decadal / near-term climate products: A cross-theme three-year initiative is underway to work on the science of seamless weather prediction over the near term, from 3 months to 20 years into the future. The work is led by the University of Cape Town. Scoping workshop was held in 2012, and two postdocs are now working on CMIP5 and African Coordinated Regional Downscaling Experiment (CORDEX) data. A CCAFS working paper was published by researchers at the IRI on a method and software to generate
Output 4.2.2 Socially-differentiated decision aids and information developed and communicated for different stakeholders	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Activities under 4.2.2 were started through a call for proposals to review approaches to communications and social learning to support local decision-making on food security and climate change. IDS and IIED partnered on this activity and published a CCAFS Working Paper (No. 22) on current approaches to climate change communications and social learning. This work was used as a basis for an initial workshop in Addis Ababa with a diverse group of communications and knowledge management experts, as well as social and agricultural scientists. The workshop identified strategic intervention areas for CCAFS around socal learning ('change areas'). The workshop led to several activities that are documented on the Climate Change and Social Learning (CCSL) Wiki (http://ccsl.wikispaces.com/). The Sandbox, an online platform, has been established as a community of practice to explore innovative, risky ideas and provide seed funding for such ideas (this is championed by ILRI-KMIS, the knowledge management and information services). A CCAFS Working Paper on a review of social learning related activities within the CGIAR is being finalized - this work was presented and built upon during a second workshop in Addis Ababa in late 2012 (consultant, J. Gonsalves). Another CCAFS Working Paper is being finalized, examining the impacts of social learning approaches for monitoring and evaluation (IDS/IIED/IDRC). A long-term partnership agreement was initiated with Reading University to "develop participatory approaches to support farmer decision making and planning through the use of climate and weather information". Activities under 4.2.2. are collaborative efforts with Theme 4.1 - where more social learning related work was commissioned to look at social differentiation within social learning (with Flipside), piloting endogenous social learning (with Prolinnova) and working with innovative media (with Shamba Shape-Up). Also, Theme 4 is currently finalizing a written and animated CCSL narrative 'transforming food systems', a policy brief and a donor synthesis. Theme 4 also proposed to organise the 2013 CCAFS annual science meeting on social learning and this is under way.

Objective 4.3 Refine frameworks for policy analysis	
Outcome 4.3 New knowledge on how alternate policy and program options impact agriculture and food security under climate change incorporated into strategy development by national agencies in at least 20 countries and by at least 10 key international and regional agenciesat least 10 key international and regional agencies	
Output 4.3.1 Climate change impacts assessed at global and regional levels on agricultural systems (socially and gender differentiated producers and consumers, and their natural resources), national/regional economies, and international transactions and potential of international and regional policy changes to enhance adaption and support agricultural greenhouse gas emissions mitigation	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	a. As part for the ongoing work under the " Global Futures for Agriculture" project, research fellows from 7 CGIAR centers, have delivered various parts of work (as explained analytically in the Theme 4.3 Activities report), under the general framework of evaluating and prioritize research investments, focusing on evaluating promising technologies, investments, and policy reforms, and taking into consideration the effects of climate change. To achieve these goals, the project has been enhancing a coordinated suite of biophysical and socioeconomic models including IFPRI's International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT), hydrology and water supply-demand models, and the DSSAT suite of process-based crop models to assess the potential returns to a range of possible investments in new technologies and policy and programs, covering the world's most important crops, forests, and livestock. Several integrated bio-economic modeling frameworks are under various stages of development for the respected crops (wheat, maize, groundnut, sorghum, rice, cassava, beans), for livestock, and for agroforestry, that all feed into the ex-ante evaluation of socio-economic impacts of existing and promising technologies. Relevant reports have been produced for the above thematic fields. Since the benefits to investments occur in the future, the project outcomes are being also used in several ongoing CRP priority setting exercises. b. As part of the the Agricultural Model Intercomparison and Improvement Project (AgMIP), and under its global economic modeling component, key global economic modelers have participated in a cross-model scenario comparison exercise based on climate model runs and socioeconomic scenarios for the Fifth Assessment Report of the IPCC. A set of six or more simulations have been developed to expose the models to a wide range of drivers. These are constructed on three orthogonal axes of socioeconomics, climate change and biofuels policies, with a simulation timeframe extending to 2050. Under this work, 6 papers are at submission stages, which answer to the follow questions; Where are the model results the same or similar, Where and why do they differ, with examples from key crops and countries, How do the three axes (socioeconomics, climate change, bioenergy) affect demand, supply, productivity, cropland etc. The above work has also resulted in significant changes to the leading crop modeling suite (DSSAT) and to the participating 10 leading global economic models. c. Research results from previous and ongoing work have seen major use in the Food Security and Climate Change report prepared by the High Level Panel of Experts (HLPE) of the Committee on World Food Security (CFS), FAO. The report discusses key actions that governments should take at both global and national levels in the nexus of climate change and food security. It was presented during a special event in FAO, Rome, as well as during a special session of COP 18 in Doha, Qatar in December, 2012. Both events received significant attendance and coverage, with a potential to influence national policies and programs for many countries, and the decisions of the UNFCCC, as the report is further utilized.
Output 4.3.2. Analyses of the likely effects of specific adaptation and mitigation options, national policies (natural resource, trade, macroeconomic, international agreements) including gender/livelihood groups, and communicated to key local, national and regional agencies and stakeholders	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Three Sub-Saharan African research monographs (East Africa, West Africa, Souther Africa) covering 29 countries, are to be released, and summary policy briefs are already available to policy makers. The monographs discuss the impact of climate change on agriculture, with a focus on finding adaptation options for policy makers. The work has been coordinated in collaboratuion with 3 regional organizations (CORAF, ASARECA, and FANRPAN) who now use the results within several national programs. The work was also presented to a large audience of stakeholders, and received significant coverage by media, during the "Agriculture, Landscapes and Livelihoods Day 5", at COP 18, in Doha, Qatar, in December, 2012.
Output 4.3.3. Capacity built at CGIAR, NARS, and international organizations to perform global and regional analyses of the effects of policy changes using tools developed in output 4.3.1	
Prepare a succinct summary of activities and deliverables, organised by Output level of the CCAFS objectives	Several scientists, and research support staff from the CGIAR centers (Global Furtures for Agriculture Fellows, other research support staff), academic institutions (1 European), research centers (2) and international organizations (OECD), received training on the use of of the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT), that has been developed at IFPRI. This took place both during 3 formal trainings, the Global Futures Annual meeting, as well as through maintaining a working relationship with participants. As a result, rigorous capacity building took place, in how to use the IMPACT suit tools, with gender mixed participants and large regional coverage.

List of publications that acknowledge CCAFS support

(a) Each Program Participant must list all publications that acknowledge CCAFS support. Only include publications that came out in final version in the calendar year. Please do not include journal papers under review (submitted etc) or out in electronic format ahead of print, except of course for electronic-only journals.
(b) Please try to format references in the Harvard style. A clear guide can be found here: http://libweb.anglia.ac.uk/referencing/harvard.htm

(c) For journal articles, please indicate all of the references that are "green open access" with a single asterisk and those that are "gold open access" with a double asterisk. This is now a requirement from CGIAR donors. Green open access means that the authors have made a free copy available on a website. Gold open access means that the journal allows free download (either as standard practice or because the authors paid for it).
(d) For all publications that are up online, please provide a web link if possible. This will help us to advertise your work more widely.

CCAFS Theme Led Activities
Theme 4. Integration for Decision Making

Publication 1	**Type**: Journal papers	**Citation identifier**: DOI 10.1007/s10113-012-0350-1
	Citation: Chaudhury M, Vervoort J, Kristjanson P, Ericksen P, Ainslie A. 2012. Scenarios as a Boundary Process for Improved Food Security in East Africa. Regional Environmental Change 1-10. Published online 22 Sept 2012.	
Publication 2	**Type**: Journal papers	**Citation identifier**: DOI 10.1007/s12571-012-0194-2. http://www.springerlink.com/content/1876-4517/
	Citation: Kristjanson P, Neufeldt H, Gassner A, Mango J, Kyazze F, Desta S, Sayula G, Thiede B, Förch W, Thornton PK, Coe R. 2012. Are food insecure smallholder households making changes in their farming practices? Evidence from East Africa. Food Security Published Online May 25, 2012. *	
Publication 3	**Type**: Journal papers	**Citation identifier**:
	Citation: Vermeulen S J, Aggarwal P K, Ainslie A, Angelone C, Campbell B M, Challinor A J, Hansen J W, Ingram J S I, Jarvis A, Kristjanson P, Lau C, Nelson G C, Thornton P K and Wollenberg E. 2012. Options for support to agriculture and food security under climate change. Environmental Science & Policy 15, 136-144.	

	Type	Citation identifier	Citation
Publication 4	Journal papers		Vermeulen S, Zougmoré R, Wollenberg E, Thornton P K, Nelson G, Kristjanson P, Kinyangi J, Jarvis A, Hansen J, Challinor A J, Campbell B and Aggarwal P K. 2012. Climate change, agriculture and food security: a global partnership to link research and action for low-income agricultural producers and consumers. Current Opinion in Environmental Sustainability 4,1-6
Publication 5	Book chapters	http://issuu.com/world.bank.publications/docs	Puskur R, Ballantyne P, Kristjanson P. 2012. Redesigning a livestock research institute to support livestock development within an AIS approach. PP 326-330 in: Agricultural Innovation Systems: An Investment Sourcebook. World Bank Agriculture and Rural Development Series
Publication 6	Book chapters		Kristjanson P, Waters-Bayer A, Johnson N, Tipilda A, Njuki J, Baltenweck, Grace D, MacMillan D. 2012 Livestock and Women's Livelihoods: A Review of the Recent Evidence. Chapter 9 in: Quisumbing A, Meinzen-Dick R, Raney T, Croppenstedt A, Behrman JA, Peterman A (eds) Gender in Agriculture and Food Security: Closing the Knowledge Gap. Springer, forthcoming
Publication 7	Other	www.ccafs.cgiar.org	Shames S, Wollenberg E, Buck LE, Kristjanson P, Masiga M and Biryahaho B. 2012. Institutional innovations in African smallholder carbon projects. CCAFS Report no. 8. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)
Publication 8	Working papers	http://cgspace.cgiar.org/handle/10568/24794	Wright H, Kristjanson P, Bhatta G. 2012. Understanding Adaptive Capacity: Sustainable Livelihoods and Food Security in Coastal Bangladesh. CCAFS Working Paper No. 32. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security
Publication 9	Working papers	http://cgspace.cgiar.org/handle/10568/24448	Chaudhury M, Kristjanson. 2012. Informing Participatory Action Research on Gender and Climate Change. Working Paper 19. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security

Publication 10

Type	Citation identifier
Working papers	http://cgspace.cgiar.org/handle/10568/23017

Citation

Kyazze, FB, Owoyesigire, B, Kristjanson P, Chaudhury M. 2012. Using a gender lens to explore farmers' adaptation options in the face of a changing climate: Results of a pilot study in Uganda. CCAFS Working Paper No. 26 CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark

Publication 11

Type	Citation identifier
Other	http://www.fao.org/climatechange/micca/759

Citation

CCAFS and FAO. 2012. Training Guide on Gender and Climate Change Research in Agriculture and Food Security for Rural Development. Nairobi & Rome: CCAFS and FAO

Publication 12

Type	Citation identifier
Policy briefs	http://worldagroforestry.org/our_products/pu

Neufeldt H, Kristjanson P, Thorlakson T, Gassner A, Norton-Griffiths M, Place F, Langford K. 2012. World Agroforestry Centre (ICRAF). Making climate-smart agriculture work for the poor. Nairobi, Kenya

Publication 13

Type	Citation identifier
Policy briefs	

Citation

Bernier Q, Franks P, Kristjanson P, Neufeldt H, Otzelberger A, Foster K. 2012. Addressing Gender in Climate-Smart Smallholder Agriculture. ICRAF Policy Brief 13 (with CCAFS). Nairobi, Kenya. World Agroforestry Centre (ICRAF).

Publication 14

Type	Citation identifier
Policy briefs	

Citation

Vervoort, J., P. Ericksen. 2012. No foresight, no food? Regional scenarios for Africa and South Asia. GFAR policy brief.

Publication 15

Type	Citation identifier
Conference proceedings	

Citation

Vervoort, J., J. Ingram, P. Ericksen, M. Chaudhury, W. Foerch, P. Thornton, P. Kristjanson. 2012. Multi-actor scenarios to build capacity for food systems governance at the sub-continental level. Presented at the Earth System Governance conference, April 18-20 2012, Lund. Online at www.lund2012.earthsystemgovernance.org/LC2012-paper332.pdf

Publication 16

Type: Conference proceedings

Citation identifier:

Citation

Helfgott, A., J. Vervoort, J. Ravetz, R. Ramirez. 2012. We're all in this together: shifting paradigms on science and society in a shifting global landscape. Presented at Planet under Pressure, March 26-29 2012, London

Publication 17

Type: Conference proceedings

Citation identifier:

Citation

Vervoort, J., P. Ericksen, J. Ingram, W. Foerch, M. Chaudhury, P. Thornton, P. Kristjanson. 2012. Scenarios and visioning as complementary tools building capacity for governance in the face of environmental and socio-economic uncertainty. Presented as poster at Planet under Pressure, March 26-29 2012, London

Publication 18

Type: Journal papers

Citation identifier:

Citation

Challinor, A., M. Stafford Smith, P. Thornton. 2012. Use of agro-climate ensembles for quantifying uncertainty and informing adaptation. Agricultural and Forestry Meteorology 170, 2-7.

Publication 19

Type: Journal papers

Citation identifier:

Citation

Ash, A., P. Thornton, C. Stokes, C. Togtohyn. 2012. Is proactive adaptation to climate change necessary in grazed rangelands? Rangeland Ecology and Management 65, 563-568

Publication 20

Type: Journal papers

Citation identifier:

Citation

Jones, P., P. Thornton. 2012. Generated downscaled weather data from a suite of climate models for agricultural modelling applications. Agricultural Systems 114, 1-5.

Publication 21

Type: Journal papers

Citation identifier:

Citation

Claessens, L., J. Antle, J. Stoorvogel, P. Thornton, M. Herrero. 2012. Agricultural system level assessment of climate change adaptation strategies in resource-poor countries. Agricultural Systems 111, 85-95

Publication 22

Type: Journal papers

Citation identifier:

Citation

Moore, N., G. Alagarswamy, B. Pijanowski, P. Thornton, B. Lofgren, J. Olson, J. Andresen, P. Yanda, J. Qi. 2012. East African Food Security as influenced by future climate change and land use change at local to regional scales. Climatic Change 110, 823-844

Publication 23

Type: Policy briefs

Citation identifier:

Citation

Thornton, P. 2012. Recalibrating food production in the developing world: global warming will change more than just the climate. CCAFS Policy Brief No. 5. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available online at: www.ccafs.cgiar.org

Publication 24

Type: Conference proceedings

Citation identifier:

Citation

Chaves, B., GG. Hoogenboom, P. Thornton. 2012. Evaluation of comprehensive soil data bases for crop model applications. Paper 350-8, ASA, CSSA & SSSA International Annual Meetings, 21-24 October 2012, Cincinnati, Ohio. Online at http://scisoc.confex.com/scisoc/2012am/webprogram/Paper74490.html

Publication 25

Type: Policy briefs

Citation identifier:

Citation

Thornton, P. 2012. How will the world perceive livestock agriculture in relation to the impacts on, and of, climate change? ILRI External Environmental Factor Brief, July 2012, ILRI, Nairobi, Kenya. 3pp.

Publication 26

Type: Working papers

Citation identifier:

Citation

Thornton, P. L. Cramer. (editors) 2012. Impacts of climate change on the agricultural and aquatic systems and natural resources within the CGIAR's mandate. CCAFS Working Paper 23. CGIAR Research Program on Climate Change, Agriculture and Food Security. Copenhagen, Denmark. Available online at www.ccafs.cgiar.org

Publication 27

Type: Other

Citation identifier:

Citation

Thornton, P. S. Vermeulen, R. Zougmore, J. Kinyangi, P. Kristjanson. 2012. Climate change, agriculture and food security: linking research and action in East and West Africa. CLIVAR Exchanges Number 60, 29-30.

Publication 28

Type: Working papers

Citation identifier:

Citation

Thornton, P., J. Vervoort, W. Foerch, P. Ericksen, K. Kok, J. Ingram, M. Herrero, P. Kristjanson. 2012. The role of regional scenarios in CCAFS cross-scale research, planning and action toward improved food security, environments and livelihoods. Working Paper. CGIAR Research Program on Climate change, agriculture and food security (CCAFS), Copenhagen, Denmark.

Publication 29

Type: Other

Citation identifier:

Citation

See, L. S. Fritz, P. Thornton, C. Justice, I. Becker-Reshef, O. Leo, M. Herrero. 2012. Building a consolidated community cropland product. Earthzine at www.earthzine.org/2012/01/24/building-a-consolidated-community-global-cropland-map/

Publication 30

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Citation

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Publication 33

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Citation identifier:

Citation

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Type: Conference proceedings

Citation identifier:

Citation

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Type: Other

Citation identifier:

Citation

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Publication 36

Type: Other

Citation identifier:

Citation

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Type: Journal papers

Citation identifier:

Citation

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Type: Working papers

Citation identifier:

Citation

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Publication 39

Type: Working papers

Citation identifier:

Citation

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Publication 40

Type: Working papers

Citation identifier:

Citation

Quiroz, R., A. Posadas, C. Yarleque, H. Heidinger, R. Raymundo, M. Carbajal, M. Cruz, J. Guerrero, V. Mares, E. Silvestre, C. Jones, L. de Carvalho, T. Dinku. (2012). Application of non-linear techniques for daily weather data reconstruction and downscaling coarse climate data for local predictions. CCAFS Working Paper 21. CGIAR Research Program on Climate Change, Agriculture and Food Security.

Publication 41

Type: Working papers

Citation identifier:

Citation

van Weijk, M., M. Rufino, D. Enahoro, D. Parsons, S. Silvestri, R. Vadivia, M. Herrero (2012). A review on farm household modelling with a focus on climate change adaptation and mitigation. CCAFS Working Paper 20. CGIAR Research Program on Climate Change, Agriculture and Food Security

Publication 42

Type: Other

Citation identifier:

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van Wijk, M., M. Rufino, D. Enahoro, D. Parsons, S. Silvestri, R. Valdivia, M. Herrero (2012). A review of farm hosuehold modelling with a focus on climate change adaptation and mitigation. CCAFS project report. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark

Publication 43

Type: Other

Citation identifier:

Citation

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Publication 44

Type: Working papers

Citation identifier:

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Publication 45

Type: Working papers

Citation identifier:

Citation

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Publication 46

Type: Conference proceedings

Citation identifier:

Citation

Khondoker A. Mottaleb, Roderick M. Rejesus, Samarendu Mohanty, MVR Murty, Tao Li, Harold Glenn Valera and Murali Krishna Gumma. 2012. "Ex Ante Impact of a Drought Tolerant Rice Variety in the Presence of Climate Change", Selected paper prepared for presentation at the Agricultural and Applied Economics Association's 2012 AAEA Annual Meeting, Seattle, Washington, USA August 12-14, 2012. Online: http://ageconsearch.umn.edu/handle/124745.

Publication 47

Type: Working papers

Citation identifier:

Citation

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Publication 48

Type: Conference proceedings

Citation identifier:

Citation

Kleinwechter, U., G. Hareau, M. Bonierbale, M. Gastelo, and D. Harahagazwe (2012), Ex-ante evaluation of improved potato varieties for Sub-Saharan Africa, prepared presentation at the 9th Triennial Conference of the African Potato Association, 30 June – 4 July 2013, Naivasha, Kenya.

Publication 49

Type: Conference proceedings

Citation identifier:

Citation

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Publication 50

Type

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Citation identifier

Citation

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Publication 51

Type

Other

Citation identifier

Citation

Illustrative cases: The value of different ways of envisioning our futures; The Global Futures programme, G. Nelson (IFPRI), GCARD 2012, Punta del Este, Uruguay – 29 October – 1 November 2012 http://www.egfar.org/sites/default/files/files/GCARD_2012_Agenda_new_29Oct_cleaned.pdf

2012 Case studies

Number of case studies to be submitted is dependent on budget size so please refer to the table on the explanatory notes. Each case study should be about half a page, and Program Participants are expected to build a portfolio of case studies over the years that demonstrate all different types.

CCAFS Theme Led Activities
Theme 4. Integration for Decision Making

Title

Plausible futures for food security, livelihoods and environments in East Africa

Author

Theme 4.1

Type

Capacity enhancement

Date (DD/MM/YYYY)

7/2/2013

Countries

Kenya, Uganda, Tanzania, Ethiopia, Rwanda, Burundi, Ethiopia

Keywords

Future, scenarios, uncertainty, stakeholders, East Africa, governance

Photo URL

Introduction/Objectives (400 characters)

The socio-economic and institutional conditions enabling or restricting improved food security and climate change adaptation in developing regions such as Eastern Africa are complex and uncertain. What if governments, researchers, the private sector and civil society in East Africa take concerted action towards regional political and economic integration? What would be the impacts of this kind of future on food security for the region's poor who live under pressures of climate change? What new challenges would emerge? Could tensions arise from Eastern Africa's assertion of power? What about a future where political and economic fragmentation continues and people in power only focus on gains for their own narrow interests? How will these futures affect adaptation to climate change in the region? Will natural environments be diminished due to either development or overexploitation in future scenarios?

Such questions have been explored by a multi-sector stakeholder engagement process initiated by CCAFS with the following overarching objectives:

• To explore how future socio-economic and institutional contexts might shape adaptive capacity to climate change and impact food security, livelihoods and environments in Eastern Africa.
• To build the capacity of the Eastern African region for collaborative, strategic decision-making towards improved food security, livelihoods and environments under future socio-economic, institutional and environmental change.

Description of the project,procedures etc. (1100 characters)

In this initiative, CCAFS has been working with Eastern African governments, civil society and farmers' organizations, the private sector, researchers and the media, as well as regional bodies such as the East African Community (EAC), to explore how different political and socio-economic futures for Eastern Africa may affect future food security and environmental change in the region, and how this may affect Eastern Africa's vulnerability to future climate change. By developing and using scenarios in a participatory manner, plausible alternate futures were co-created. These scenarios were used to outline and test new economic development pathways, as well as climate change adaptation and mitigation-related policies and strategies with diverse actors in the region to improve Eastern African food security, environments and livelihoods.

CASE STUDY 1

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

Four scenarios were created by a diverse group of state and non-state actors participating in the process and then quantified for a number of indicators related to agriculture, food security and environments using two agricultural economic models, in collaboration with several CGIAR centres and the global change modelling community: GLOBIOM (developed by the International Institute for Applied Systems Analysis) and IMPACT (developed by the International Food Policy Research Institute). These scenarios are divided by two sets of uncertainties: 1) will Eastern Africa develop into an economically and politically integrated region or will the region be fragmented and divided?; and 2) will governments and non-state actors deal pro-actively or reactively with issues of food security and livelihoods and environmental change? Though many other key changes shape the scenarios, the combination of these uncertainties leads to the following four different, plausible futures:

• "Industrious ants" is a world where state and non-state actors are proactive and committed to regionalization. This scenario has many benefits for food security, environments and livelihoods, but new challenges emerge: there is a costly battle with corruption; the region struggles to create autonomous food security; and the emergence of East African power causes conflicts with global interests used to doing what they will in the region.

• "Herd of zebra" is a world where regional integration has developed, but the focus is mainly on industrialization and economic growth and little attention is given to food security, environments and livelihoods until crises occur.

• "Lone leopards" is a world characterized by fragmented but proactive governments and non-state actors that achieve scattered successes regarding food security, environments and livelihoods; however, there is much mistrust and instability.

• "Sleeping lions" is a world that sees self-interested governments and non-state actors turning a blind eye or profiting from regional and international exploitation of land and resources. This leads to public unrest time and time again, but never to structural change.

Some key insights emerged from these scenarios:

• The quantitative analyses indicate that even with highly proactive policies, global market pressures and changing populations will make it difficult to improve upon the current level of food security.
• Growing populations drive demand for many food products. Demand for poultry and milk increases with changing consumption patterns because of urbanization in the region.
• Foreign investments can either further damage or transform food security in Eastern Africa, depending on how they are managed by regional actors.
• In all scenarios – even the more environmentally friendly scenarios – regional policies prioritize food security and livelihoods over environmental health.
• It is, however, possible to minimize the degradation of ecosystems and still increase regional food self-sufficiency.
• Pastoralists face difficult prospects in all future scenarios and will increasingly move to other sources of income.
• In all of the scenarios, East Africa's demand outstrips production due to increasing populations and GDP. This means that in all the scenarios, East Africa will be importing many commodities.
• In all Eastern African scenarios, there is a tendency towards increased mixed and intensive agriculture and livestock among small-scale farmers.

New policies and partnerships: toward improved food security, livelihoods, environments in East Africa

To use the scenarios for better decision-making on food security, livelihoods and environments, the CCAFS programme - with regional partners like the Society for International Development (SID-EA) and PANOS Eastern Africa (PEA) media network - organized workshops with policy advisors from six Eastern African governments and with key regional non-state actors.

By starting with separate meetings with government actors and non-state actors, the process allowed each of these groups to make their strategic positions clear and to show where each group needed the other to improve the state of the environment and food security in Eastern Africa.

The participants in these workshops first outlined what future success would mean for the improvement of food security, livelihoods and environments in Eastern Africa. They then planned backwards from their desired goals, using the different scenarios as contexts, each with their specific challenges, limitations and opportunities. This adaptive planning process yielded diverse and creative strategies. It was important that these strategies be executable by collaboration between the participants and their organizations and governments. Based on the insights from the use of the scenarios in planning workshops, a large and diverse set of policy options for state and non-state actors emerged as being feasible in most or all future scenarios. Most of these featured collaborations between different national agriculture, environment and planning ministries, regional civil society and private sector platforms in the food security and environment sectors together with the East African Community and the Lake Victoria Basin Committee. The policy options also linked to on-going CCAFS research. Examples of these policies are:

• Supporting the East Africa Farmers Federation (EAFF) to have a more proactive and stronger voice in agricultural and food security policy processes, beyond being "observers" of EAC policy formulation, in order to more effectively serve their member farmers. This was supported by participants from agricultural ministries and civil society organizations.
• Setting up a permanent scenarios/strategic futures unit that reports to the EAFF and EAC and provides continuous strategic insight at the regional level in the way that the CCAFS scenarios process has done.
• Exchange programs between Eastern African agriculture ministries on:
o Farmers' schools and associations: first organize exchange programs between ministries themselves and then between the farmers' associations involved in the programs. This links to the CCAFS "Farms of the Future" program (http://ccafs.cgiar.org/our-work/research-themes/progressive-adaptation/farms-future).
o Knowledge exchange about indigenous, alternative, climate resilient crops between the ministries.
o Exchange to learn about urban/peri-urban agriculture programs between the different EAC countries.
• Developing more inclusive, multi-sector climate communication outlets between the agriculture ministries, government met offices and regional media as well as linking to on-going CCAFS efforts.
• A tree planting scheme between the agriculture ministries, the environmental ministries, the private sector and CCAFS.
• A proposal to the EAC to organise a regional ombudperson to help ensure more transparent institutions.
• Linking existing Early Warning Systems for food security to regional food reserve planning.
• A "West Wing" type TV program portraying a young dynamic woman leader of a vibrant EA federation, similar to the on-going efforts featuring agricultural researchers within the region and sharing their scientific knowledge with a vast East African rural TV audience through "Shamba Shape-up".

To help turn these robust policy options into realities, CCAFS and its partners SID and PANOS are facilitating the further development of collaborative plans between the ministries, regional bodies and non-state actors identified in the process. The initial focus for these continued engagements will be on 1) changing the role of the East Africa Farmers Federation in regional policy, 2) setting up a regional strategic futures unit for on-going support to the EAFF, the EAC and other regional bodies, 3) helping to develop knowledge exchange links between government agricultural, environmental and planning ministries and between governments in the region and 4) ensuring the usefulness of the scenarios process for national and sub-national decision-making.

Partners involved and their role (250 characters)

Diverse partners were involved in the process:

• Researchers from the CGIAR Climate Change, Agriculture and Food Security programme and the University of Oxford
• SID-EA
• PANOS
• Policy advisors from agriculture, environment, meteorology and planning departments,
• Farmers' organizations under the East African Farmers' Federation
• Private sector organizations such as the EHPEA and the Entrepreneurship & Leadership Foundation
• Regional governance bodies: the East African Community and the Lake Victoria Basin Committee
• Regional research initiatives such as ASARECA
• Regionally active NGOs such as CARE, OXFAM and CARITAS
• Regional media, represented by the PANOS development journalism network
• Intermediary civil society organizations such as the Society for International Development

Links/Sources for further information

Web address: http://ccafs.cgiar.org/scenarios
See (open access article available at the link above): Chaudhury M, Vervoort J, Kristjanson P, Ericksen P, Ainslie A. 2012. Scenarios as a Boundary Process for Improved Food Security in East Africa. Regional Environmental Change. Published online 22 Sept 2012. DOI 10.1007/s10113-012-0350-1
http://ccafs.cgiar.org/blog/industrious-ants-or-lone-leopards

Title

The Climate change and Social Learning Initiative (CCSL): Unlocking the potential of social learning

Author

Theme 4.2

Type

Innovative non-research partnerships

Date (DD/MM/YYYY)

15/02/2013

Countries

global

Keywords

outcomes, participation, social learning, learning tools, decision support

Photo URL

Introduction/Objectives (400 characters)

Challenges that can be characterized as complex, uncertain, ever evolving and complicated by a multiplicity of stakeholders and perspectives resist traditional approaches to leadership and management. They are 'wicked' problems that need non-traditional approaches to developing potential solutions. Wicked problem solving needs to be on going and flexible, and to develop collective understanding and response through consultative processes like social learning. Thus, iterative co-evolving approaches to research and engagement are not only necessary, but crucial to our success to enhancing food security in the context of climate change.

The emphasis on development outcomes within CCAFS raises incentives for alternative approaches to research and engagement. A social learning approach connects scientists and other stakeholders with communities and their knowledge. We are attempting to combine the best knowledge from the three worlds of research, development practice and the vast array of knowledge and experience available within communities themselves to strengthen networks and accelerate the learning process. Our objective is to explore the strengths and weaknesses of social learning to drive Theme 4 objectives – linking knowledge with action and exploring tools for local decisions –to move away from top-down communication processes, and to learn from innovative approaches across CGIAR.

Description of the project,, procedures etc. (1100 characters)

Late in 2011, Theme 4 issued a call for proposals to review current theory and practice of communications and social learning approaches. We received 300 proposals and a contract was awarded to researchers from IIED, IDS and the University of York. The CCAFS Working Paper describes incentives for CCAFS to support social learning and the likely challenges that we will face.

The findings were explored in a workshop in Addis Ababa in May 2012 that brought together around 30 people and 24 institutions (http://ccsl.wikispaces.com/) to discuss strategic investment opportunities for CCAFS in the area of social learning. The participants identified five areas in which CCAFS can strategically engage to catalyse change and these change areas have catalysed several of the on-going activities:
1. Document existing and past social learning processes and their results. Our first step was to create an inventory of case studies and analyze their lessons (Working Paper in early 2013 – Julian Gonsalves)
2. Promote and embed social learning within CCAFS. Our first step was to use case studies from the above inventory to build list of good practices, organize an advisory group to advise CCAFS on CCSL, and identify partners. Another review was carried out by IDS/IIED/IDRC to explore how the impact of social learning can be assessed. We have established The CCSL Sandbox, a community of practice for sharing knowledge in this area – which is also providing seed money to innovative initiatives. This includes the wiki (http://ccsl.wikispaces.com/) and a Yammer network in which 55 people with expertise in learning and communications, participatory processes, knowledge management, partner engagement and social learning, as well as agricultural and climate science, have been invited to discuss issues and approaches related to social learning. Existing or planned training and mentoring opportunities and other tools will be used to catalyze change. Theme 4 is organizing the annual CCAFS science meeting in 2013 around social learning.
3. Understand endogenous social learning processes at sites where CCAFS is working. Our first step was to evaluate where there are good opportunities for co-learning with communities and create guidelines for designing and assessing projects. For this work we engaged with Prolinnova, a network of partners engaged in promoting local innovation in agriculture and NRM (www.prolinnova.net/).
4. Understand how social differentiation is addressed in social learning processes. Our first step was to study experience with, and opportunities for, using social learning approaches to exploring social differentiation (Working Paper in early 2013 – Alison Shaw).
5. Understand how different perceptions of time scales hinder or encourage social learning. Our first step will be to craft a theory of change encompassing short- and long-term adaptation to climate change and develop frameworks for thinking about timescales in social learning projects. A first step is the CCSL narrative 'transforming food systems' which is being finalized in written and animated graph in early 2013.

A second workshop in November 2013 in Addis Ababa included another wide range of participants, including members of six CRPs, who worked to identify pathways towards institutionalization of diverse ways of doing research, to bring different stakeholders into the research process, and to understand and use different ways of measuring success of social learning and related approaches within research and engagement. They also considered how social learning links with the IDO challenge in terms of collective efforts to measure and evaluate outcomes. They identified this as an important mechanism for turning high quality cutting edge research into development outcomes, and taking more responsibility for linking knowledge with action. The meeting lead to new partnerships, e.g. PROLINNOVA, Mediae (Shamba Shape-Up), IDS, IIED, UBC, Berkeley.

We also facilitated consideration of social learning in the following venues:
• A workshop sponsored by IDS, GEF, CDKN and CCAFS in Brighton in March 2013 on "Acting on what we know and how we learn for climate and development policy"
• A donor meeting organized by IIED and CCAFS in London in March 2013 on "Climate change and social learning: supporting local decision making for climate change, agriculture and food security"
• The CCAFS annual science meeting in March 2013 on "Rethinking science, learning and partnerships to meet development outcomes: reducing poverty and improving food security in the context of climate change"

CASE STUDY 2

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

Our main outputs and results in 2012 included four working papers, a community of practice, new partnerships, stronger networks, enhanced collaboration, innovative media and rethinking research including a plan to bring social learning to the CCAFS science meeting:

• A definition of social learning was jointly developed: knowledge sharing, joint learning and co-creation of knowledge between stakeholders, for behavioral change in networks and systems, facilitated and iterative process involving dialogue, exchange, action, reflection – within the CGIAR is a step change because it is more than just a process of participation and inclusivity, it is a continuous, iterative process of co-learning and engagement across multiple levels.

• Working paper 22 that presents cases of social learning and climate change communication, and lessons they provide concerning incentives for CCAFS to support social learning approaches (Harvey B, Ensor J, Carlile L, Garside B, Patterson Z, Naess LO. 2012. Climate change communication and social learning–Review and strategy development for CCAFS. CCAFS Working Paper No. 22. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen, Denmark. Available online at http://cgspace.cgiar.org/handle/10568/24456)

• A CCAFS working paper underway reviewing social learning-related initiatives and capacities already in place at CGIAR. The aim is to identify exciting approaches and connect pockets of innovation. Available online in early 2013.

• Endogenous social learning activities being piloted at CCAFS sites in collaboration with Prolinnova network of partners and the University of Reading. This includes inviting relevant partners in multi- stakeholder platforms to build local resilience to change in a farmer-led process and developing approaches to support smallholder decision making and planning through the use of climate and weather information.

• A CCAFS working paper underway that reviews projects across CGIAR that emphasize the knowledge and needs of different social groups, such as women. Available online in early 2013.

• The Sandbox is an online community where people are actively working with social learning ideas that are bubbling up. The Sandbox acts as a safe space for nurturing and exploring innovative, risky ideas, as well as for peer review. And it is not just talk — The Sandbox offers seed funding for projects proposed on the forum. We see this as a step toward a self-organized 'community of practice' that tackles questions and assignments posted by CCAFS and others. See: http://ccsl.wikispaces.com/Sandbox. We are now 55 members on the sandbox, spanning at least 22 organisations. 24 are CGIAR members from 8 centres (CIAT, ILRI, IWMI, CIP, CIFOR, ICRAF, Bioversity, WorldFish). Sandbox outputs have included:
o 313 messages on Yammer from 30 people
o 20 documents shared
o 5 notes (sort of wiki pages) and 2 pictures
o Six news and opinion lists, three toolkits and tips, four resources for research and analysis
o Wiki access in 2012 totaled 8,746

• A CCAFS working paper underway builds on the scoping study of social learning frameworks, and further examines the impacts of social learning projects and models for monitoring and evaluation. Available online in early 2013.

• A Research Brief underway "Climate change and social learning (CCSL): Supporting local decision making for climate change, agriculture and food security" outlining our thinking around climate change and social learning. Available online in early 2013.

• A Synthesis underway "Unlocking the potential of social learning for climate change and food security – wicked problems and non-traditional solutions" highlighted CCAFS and partners' work with the CCSL initiative. Available online in early 2013

• The November 2012 workshop produced initial ideas towards developing the 'Transforming Food Systems Narrative' – a way to tell the story of how social learning can enhance research and development outcomes. In 2013 the narrative will be translated into multiple formats, including animation suitable for Youtube. The narrative includes seven points:
o People can be amazingly resourceful and innovative, given a supportive environment. Social learning draws on this untapped potential.
o Unlocking this potential requires going beyond 'business as usual' and making use of diverse partnerships, multi-way communication, cooperation and collaboration.
o If we want food security in a hotter world, we need to seize new opportunities for doing research differently. We can take participation further, to more proactive social learning through action and reflection — leading to changed behaviors.
o "Why bother?" Doing this can sharpen our edge and help us become better problem solvers of bigger, more complex problems.
o The next steps involve shifting towards partnerships for joint observation, trials, modeling and experimentation. Trying new approaches is how we learn to make this happen.
o We are asking people to embrace the idea of joint transformative learning and the co-creation of knowledge. Incentives and institutions also have to change.
o In our vision of success, more scientists are engaged in broad partnerships, producing information that is more useful and more widely used. There is more mentoring of young people, more interactive science, and we all share our knowledge more generously.

• We have begun to work with innovative media. CCAFS is partnering with Mediae, the producer of Shamba Shape Up, a Kenya-based innovative 'makeover'-style television show with an audience of 11 million (www. shambashapeup.com/). The Shamba Shape Up crew follows and assists farmers making changes in their practices and business models. CCAFS is helping to incorporate climate change messages into future episodes.

Partners involved and their role (250 characters)

ILRI KMIS
IIED
IDS
IDRC
The Mediae Company
Prolinnova
University of Reading
Consultants
Etc

Links/Sources for further information

Wiki: http://ccsl.wikispaces.com
Yammer: https://www.yammer.com/ccsl/ (invitation upon request)
Working paper 22: http://cgspace.cgiar.org/handle/10568/24456

CASE STUDY 3

Title

Baselines as a Tool for Establishing an Evidence-base for the CCAFS Theory of Change

Author

Theme 4.2

Type

Social differentiation and gender

Date (DD/MM/YYYY)

13/02/2013

Countries

Kenya, Uganda, Tanzania, Ethiopia, Ethiopia, Senegal, Mali, Burkina Faso, Ghana, Niger, India, Bangladesh, Nepal

Keywords

ɔacity building, study design, standardization, qualitative and quantitative tools, indicators, beł

Photo URL

Introduction/Objectives (400 characters)

The objective of the CCAFS baseline is to provide information by which CCAFS can monitor behavioural change at household, village and organisational levels over time at its 15 sites in the three initial target regions and 12 countries. The CCAFS baseline is the foundation of the evidence-base we need for measuring progress along the CCAFS impact pathway (i.e. towards meeting our IDOs). Development of an M+E system is a key strategy for CCAFS. The baseline data lends itself to capturing diversity in cross-site analysis rather than in-depth site characterization, and focuses on contribution rather than attribution. Baseline efforts such as this are not intended to go into depth and explore complex relationships and research questions; they are broad but not deep. Beyond measuring behavioural change over time, they are useful for generating hypotheses to explore in further in-depth research in particular locations. The baseline contains three tools, a quantitative household survey, a qualitative village survey, and a qualitative organizational survey.

In addition to M+E, the design and implementation of the CCAFS baseline survey was influenced by the other key CCAFS strategies (social learning, partnerships, capacity strengthening and gender). Thus, the baseline was standardized for implementation by research organizations in each of the CCAFS countries so as to strengthen science partnerships and increase research capacity in our network. This included a guided first level of analysis of data from each survey by our partners, published and available via the CCAFS website. To meet the need to create international public goods, we are making all survey instruments and data freely available.

Description of the project,, procedures etc. (1100 characters)

Recognizing that changes in agricultural practices leading to enhanced food security is not something that will happen in just a few years, at the outset of the program and during baseline planning, we proposed revisiting the survey households and villages after 5-10 years, to assess what changes had occurred since the baseline survey was carried out. Our goal was not to attribute these changes to the program, but to be able to assess what kinds of changes had occurred and whether these changes were helping households and communities adapt to, and mitigate, climate change.

Our ex ante theory of change (the desired changes after 5-10 years we envisioned seeing in our sites) include the following:
• The existence of some assets (or more assets) that some households did not originally own as evidence of enhanced well-being levels of these households, particularly assets that help them adapt to climate variability and change (e.g. water tanks).
• More widespread ownership of communication technologies that can be used to receive information helping them adapt; storage facilities and water harvesting/storage structures to enhance household food security.
• Evidence of increased diversification of livelihood sources and new sources of income (including by more vulnerable households), e.g. payments for ecosystem services (i.e. carbon, biodiversity); some evidence of a shift from subsistence to more market-oriented and food secure livelihood strategies.
• Evidence of crop, tree, livestock, aquaculture 'substitution' strategies and shifts in how, what and when people plant as adaptive strategies.
• Evidence of new, and more, soil, water, land management practices being implemented by more households.
• Evidence of improved food security situations in more, and in vulnerable, households and communities.
• More households (including more vulnerable ones) accessing and using advanced information about weather, pests and diseases.
• More households (and women) engaged in groups that are collectively engaged in soil, water, land management/improvement activities.
• Improved access by more households to improved seeds, agricultural markets, credit for SLM activities and insurance.
• Evidence of improved availability and quality of, as well as access to resources (e.g. natural, infrastructure, markets) of communities in general and women in particular.
• Evidence of enhanced alignment between institutional agendas and local priorities with respect to food security and NRM.
• Evidence of organizations allocating more resources specifically to climate change agendas.
• More widespread availability of information and services that support local decision making on climate change and food security.

We placed emphasis on the standardisation of tools, processes and guidance on initial analysis. With the support of the Statistical Services Centre at Reading University high investments were made in the training of local teams and technical backstopping of data collection, cleaning and analysis in order to maintain data quality and allow for cross-site comparisons. The importance of building strong partnerships to ensure high quality data collection, documentation and analysis emerged as key component of this process. Furthermore, the baseline process has been well documented, all tools, training materials, implementation guidelines and analysis guides have been made publicly available via Dataverse. Dataverse proved to be an excellent archiving tool for socio-economic data and is now being used across CCAFS to archive and make publicly available these types of datasets.

Household Survey. The objective of the household-level survey was to collect baseline information about some basic indicators of welfare, information sources, livelihood strategies (including agriculture and NRM strategies), needs and uses of climate and agricultural-related information and current risk management, and mitigation and adaptation practices. The indicators needed to have sufficient precision to be able to measure changes that occur. The various components of the survey include information on household size, type and education levels; household assets; sources of livelihood; natural resources access and management; adaptation strategies relating to crops, livestock, aquaculture, agroforestry, and land management; food security and risk; information and knowledge; and social networks.

Village Survey. The objective of the village-level survey was to collect community level information, gender-differentiated, on basic indicators of availability and quality of resources, access to these by men and women, as well as limitations and opportunities – these would allow us to monitor changes over time. High resolution satellite images were using in participatory workshops with groups of men and women. Furthermore, the aim was to understand the enabling environment that mediates certain practices and behaviours and creates constraints and opportunities for communities to respond to change. Thus, organisational landscape characterise how organisations operating at different scales engage with the community on food security and NRM and how these are interlinked to provide improved access to services and information.

Organizational Survey. The objective of the organisational level survey was to collect information on organisations working within the sites, their priorities, climate change agendas and target groups. Specifically, the organisational baseline was designed to provide indicators that allow us to monitor changes in the behaviours and practices of locally relevant organisations over time, as well as to understand the provision of information and services at the local level that informs farmers' decision making about their livelihood strategies in response to climate change.

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

To date the baseline survey has been completed in the 15 CCAFS sites in 12 countries in South Asia, West Africa and Eastern Africa. The household survey was implemented in seven villages (n=105) and 140 households per site, amounting to 105 villages and 2,100 households across all our sites. The village baseline was implemented in one village per site (n=15) with an estimated 75 gender-differentiated focus group discussions with over 1,200 participants across all CCAFS sites. The organizational baseline was implemented at the site level (n=15) and included an estimated 150 organizations. The CCAFS baseline will be implemented in the new CCAFS sites in Latin America and South East Asia in 2014.

All baseline data and associated tools (including survey instruments, guidelines, training materials, analysis guides and syntax, etc.) are freely available on the CCAFS Dataverse (http://dvn.iq.harvard.edu/dvn/dv/CCAFSbaseline). Our aim is to ensure that all baseline material is publically accessible, freely available, archived into perpetuity, and accompanied by a unique individual 'fingerprint' which allows data ownership.

In 2012, the CCAFS baseline tools and data have been downloaded from Dataverse over 2,800 times, by 217 different organisations and 158 individuals within these. Our partners, as well as over ten groups of students not directly linked to CCAFS, are using the CCAFS baseline data for further analyses and publications. Other actors are using the CCAFS baseline instruments at new sites (e.g. IUCN in Mozambique, ICRAF in Central America), supported by CCAFS and Reading University with training and technical backstopping. CCAFS teams and national partners are using the first level site reports to plan activities and catalyse additional partnerships with others (e.g. PAR).

Experimenting with Dataverse for CCAFS data management has led to it being the primary data platform for socio-economic data across the majority of CRP's and CG centres. The CCAFS baseline process and experiences have significantly contributed to the formulation of a CCAFS Data Management Strategy in 2012 (with Reading University in the lead); data management guidelines to support the strategy are being finalized in early 2013.

Through the baseline experience we have learned about the importance of strategically engaging in and supporting partnerships at multiple levels, the importance of institutional buy-in to the process, and the importance of investing in baseline design, including tools, training, technical backstopping, documentation, and data management.

The process was long, complex and expensive, and while mistakes were made, important lessons were learned in identifying indicators of behavioural change at multiple levels that can be revisited through time to evaluate program performance in the next 5-10 years. In 2013, based on these experiences, the baseline tools are being enhanced and the indicators are being compiled to directly contribute towards achieving the CCAFS IDOs.

Outputs include:
• Patti Kristjanson, Henry Neufeldt, Anja Gassner, Joash Mango, Florence B. Kyazze, Solomon Desta, George Sayula, Brian Thiede, Wiebke Förch, Philip K. Thornton and Richard Coe. 2012. Are food insecure smallholder households making changes in their farming practices? Evidence from East Africa. Food Security, Volume 4, Issue 3, pp 381-397. Available online at: http://link.springer.com/article/10.1007%2Fs12571-012-0194-z.
• Two additional journal articles are in preparation to be submitted for publication in early 2013.
• CCAFS Data Management Strategy and Guidelines
• Blogs

Partners involved and their role (250 characters)

SSC, Reading
EA: ICRAF, KARI, MARIL, SARI, NARO, Makarere University, Maseno University, University of Dar es Salaam
WA: ICRISAT, INSAH, INRAN, ISRA, INERA, CSIR-SARI, High Commission of Niger Valley Development, MRSI, IER
SA: CEAPRED, ICRISAT, ICAR, Livelihood Solutions, BCAS
Consultants

Links/Sources for further information

CCAFS Baseline: http://ccafs.cgiar.org/resources/baseline-surveys
Dataverse: http://dvn.iq.harvard.edu/dvn/dv/CCAFSbaseline

CASE STUDY 4

Title

Identifying key national and sub-national information for decision making on adaptation strategies

Author

Theme 4.3 Ioannis Vasileiou, ALL-5 website

Type	Date (DD/MM/YYYY)	Countries
Successful communications activities	3/12/2012	Context: West, East & Southern Africa, Place of the event: Qatar

Keywords

modeling, adaptation, scenario-building, national climate change adaptation policies,

Photo URL

Introduction/Objectives (400 characters)

As part of the "Agriculture, Landscapes and Livelihoods Day 5", which took place at the COP-18, in Doha, Qatar, December, 2012, the results of three Sub-Saharan African Research Monographs (East Africa, West Africa, Souther Africa) covering 29 countries, were presented by the project collaborators, and discussed with a broad audience of participants. Three regional presentations were made by the panel, covering East and Central Africa, West Africa, and Southern Africa. The presentations focused on the findings from the research monographs which studied the impact of climate change on agriculture, with a focus on finding adaptation options for policymakers.

Description of the project,procedures etc. (1100 characters)

There are three sets of high level results from the analyses undertaken for this project.
The first set of results is about the need for adaptation to climate change. It is clear from the analyses undertaken that climate change will require substantial adaptation efforts but these should be done in the context of dealing with the larger sustainable food security issues facing the countries in Sub Saharan Africa. Strong economic development, as reflected in the optimistic socioeconomic scenario, increases human well-being across a range of metrics. Climate change reduces the benefits from good economic policies and programs so adaptation efforts need to be part of sustainable development.
The second set of results is about the need for national and subnational analysis. The climate change results differ, sometimes dramatically, in the countries included in the analyses. So policy and program advice and investments must be tailored to country needs. This is perhaps most evident in the recommendations developed by the country authors. While the need for adaptation is recognized across all reports, the specifics of the adaptation needs as recognized by the country authors are quite different.
Finally, as indicated in several of the previous sections, the data needed for good analysis and national decision-making are not available. The lacunae range from climate variability through basics on natural resource conditions and change to information on economic performance and human well-being.

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

Key messages that came out of the discussions that took place during this outreach event include: -Multidisciplinary quantitative and qualitative modeling, that incorporates climate, crop and livestock and socioeconomic disciplines, is necessary to facilitate informed climate change decisions on adaptation despite uncertainties associated with climate change assessments
-National Climate change adaptation policies must be informed by localized climate and socio-economic knowledge
There is great need to collect, synthesize and transform climate, and socio-economic data and to identify and address critical data gaps in order inform climate adaptation policies
-Governments and international agencies need to invest more in developing crop varieties and improved techniques, and support extension efforts to communicate findings

Partners involved and their role (250 characters)

Presenters at the event: Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)
West and Central African Council for Agricultural Research and Development (CORAF/WECARD)
The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)
International Food Policy Research Institute (IFPRI)

Other Project Collaborators:
Potsdam Institute for Climate Impact Research (PIK)
Leibniz-Center for Agricultural Landscape Research (ZALF)
German Agency for International Cooperation (GIZ)- Bilateral Donor

Links/Sources for further information

IFPRI Research Monographs (29 countries): West/East/Southern African Agriculture and Climate Change: A Comprehensive Analysis.
http://www.agricultureday.org/roundtable-sessions/identifying-information-for-decision-making-on-adaptation/

CASE STUDY 5

Title: Stakeholder engagement and policy development through scenarios

Author: Theme 4.1

Type: Capacity enhancement

Date (DD/MM/YYYY):

Countries:

Keywords:

Photo URL:

Introduction/Objectives (400 characters)

This activity is informing and informed by ongoing research into identifying potential activities for agricultural adaptation and mitigation, food security, improved rural livelihoods and environmental governance. Close collaborating with IFPRI's IMPACT model team and IIASA's GLOBIOM team to quantify trade, food security and land use change indicators in the context of global market simulations

Description of the project,procedures etc. (1100 characters)

21 participants from NGOs, and 16 technical advisors to policy makers from ministries in the East Africa Commission (EAC) received training in, and co-developed regional environmental and socio-economic scenarios in East Africa to develop regional policies

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

Capacity of participants from NGOs and ministries from the EAC has been built to create regional environment and socio-economic scenarios in a participatory manner through training in workshops. Stakeholder engagement workshops with such participants has resulted in formulation of policies and strategies for the region, as well as potential for future partnerships between EAC partners and CCAFS. These partnerships are to be facilitated to make proposed actions a reality by CCAFS through local partner SID. Numerous communication products have been produced, such as a journal article, policy brief, report, workshop reports, conference presentations, newspaper articles, blogs, and multi-media products (e.g. cartoons, trailers, radio programs, and wikispaces).

Partners involved and their role (250 characters)

Society for International Development and Panos Eastern Africa as well as the East African Community general secretariatalong with a wide range of NGO and public sector actors.

Links/Sources for further information

http://ccafs.cgiar.org/scenarios

CASE STUDY 6

Title: New partnerships for achieving outcomes

Author: Theme 4.1

Type: Inter-center collaboration

Date (DD/MM/YYYY):

Countries:

Keywords:

Photo URL:

Introduction/Objectives (400 characters)

Description of the project,procedures etc. (1100 characters)

CCAFS T4.1 developed a new partnership with a media company in Nairobi that produces a farm reality show that reaches 11 million households across East Africa and wanted to get more science content, and particularly research results and interventions helping people deal with CC. This involved communicating and working closely with all CG centres working in East Africa to highlight appropriate technologies and techniques on the TV show Shamba Shape-up. Importantly, it involves highlighting their local NARs, NGO and government partners, so they get a lot of visibility and credit for their work. Watchers can request information, and which technologies/information generated by each show, where people asking for more information are located, their cellphone numbers, etc is all being tracked which will be key for measuring and verifying longer-run outcomes.

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

4 TV episodes filmed in 2012 with at least 8 CG/partner teams highlighted on the shows.

Partners involved and their role (250 characters)

ICRISAT and KARI – filming of improved seasonal weather forecast work undertaken with CCAFS/T2 support

Links/Sources for further information

ccafs.cgiar.org/blogs

CASE STUDY 7

Title

Household level data collection using ImpactLite in 15 CCAFS core sites

Author

Theme 4.2

Type

Capacity enhancement

Date (DD/MM/YYYY)

7/3/2013

Countries

enya, Ethiopia, Uganda, Tanzania, Niger, Senegal, Ghana, Mali, Burkina Faso, India, Nepal, Banglade

Keywords

household surveys, characterization

Photo URL

Introduction/Objectives (400 characters)

ILRI scientists developed a household survey tool and worked with multiple partners to implement it in 200 households per site, for a total of 3000 households across the regions of East Africa, West Africa, and South Asia. The objective was to characterize livelihood activities in the CCAFS sites for climate change studies. Working with multiple partners provided the opportunity to build capacity in the regions for detailed survey implementation.

Description of the project,procedures etc. (1100 characters)

The ILRI team selected partners at each site and then conducted one enumerator training per site to familiarize them with the survey tool and explain how the information was going to be used during analysis. These in-country trainings helped build the capacity of the enumerators and their institutions, which improved data collection. The partner institutes were mostly national agricultural research organizations, namely: Institut National de la Recherche Agronomique du Niger, Institut d'Economie Rurale (Mali), Savanna Agricultural Research Institute (Ghana), Institut Sénégalais de Recherches Agricoles (Senegal), and Selian Agricultural Research Institute (Tanzania). Other CGIAR centres participated by helping

Project results (be concrete as possible), innovate findings, novel outcomes and short discussion on the implication of these results (1100 characters)

The shared learning taking place throughout the project is a novel approach to capacity development across CGIAR centres and with non-CGIAR partners. Since the completion of data collection, several other CGIAR centres (IFPRI, Bioversity, ICRISAT, and ICRAF) have come to the ILRI team to request different types of support: how to conduct trainings, to share data, to handle data, to analyse data, etc.Another result is the compilation of a representative and cross-CCAFS site database of 3000 households, which multiple scientists can access. Finally, an important result is the tremendous potential for analysis using this data. In terms of characterization, this data will be used to compare the sites in terms of agreed

Partners involved and their role (250 characters)

ILRI: leading the effort
ICRAF: providing personnel and support for trainings
IWMI: providing personnel and support for trainings
IITA: providing personnel and support for trainings

Links/Sources for further information

Rufino, M.C., et al. 2013. Developing generic tools for characterizing agricultural systems for climate and global change studies (IMPACTlite - phase 2). CCAFS Progress report. Available at https://www.dropbox.com/sh/sa4uzf6mr0fy7xq/w-DlUOlSpf.
Rufino, M.C., et al. 2012. Developing generic tools for characterizing agricultural systems for climate and global change studies. CCAFS Report.
Rufino, M.C., et al. 2012. Impactlite Training Manual. CCAFS Working Document

2012 Outcome report

Frequency of reporting outcomes is dependent on budget size so please refer to the table on the explanatory notes. (max 1 page)

CCAFS Theme Led Activities
Theme 4. Integration for Decision Making

OUTCOME 1

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

Many news stories around the world focused on the impact that climate change will have on agricultural commodities and natural resources in early Nov. 2012. The overall effect of the story was to emphasize the point that climate change is a critical issue and that its impact on agriculture must be addressed, an important message leading up to the UNFCCC CoP in Doha at the end of Nov. and early Dec. 2012.

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

Working Paper 23 "Impacts of climate change on the agricultural and aquatic systems and natural resources within the CGIAR's mandate" and Policy Brief 6 "Reclibrating food production in the developing world: Global warming with change more than just the climate" were the main catalysts for the resulting news stories.

What partners helped in producing the outcome?

A total of 72 scientists from all 15 CGIAR centres contributed to the Working Paper, and Burness Communications assisted in garnering media coverage for the release of the publications.

Who used the output?

Reporters used the publications for their stories. Original news stories ran in at least 20 countries and in 9 languages. It became the 2nd most shared story on the BBC website on the day of its release and was shared more than 8,700 times on Facebook. There were 15 different interviews with 6 CCAFS individuals. There were also many visits to the CCAFS website to view the publications. The Policy Brief has received 4,202 views (as of 11 Feb. 2013), and the Working Paper has been viewed 3,052 times (also as of 11 Feb. 2013).

How was the output used?

Media companies used the reports as a basis for their news stories, which were then shared on Facebook and Twitter. It appeared on 10 wire services, 6 broadcast stations, 22 print stories, and 60 online news sources.

The release of the Working Paper coincided with GCARD2, and it served as a basis for discussions among other climate change initiatives at international, regional and national levels about the need for working together effectively to address climate change impacts in agriculture. The WP also inspired a piece in the New Agriculturalist online magazine (http://www.new-ag.info/en/focus/focusItem.php?a=2875).

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? Please provide a reference or source.

Burness Communications produced a media report detailing all the coverage received (see the report here: https://www.dropbox.com/sh/4k5ec6ew76iqwi8/YoLRNvreOk titled "CCAFS Two Reports -- 31 Oct. release -- Final report"). Statistics for the numbers of views of the WP and PB are available from the CCAFS website.

OUTCOME 2 (T4.1)

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

New participatory gender-focused action research is being designed in some CCAFS sites using the results of CCAFS gender studies to inform the design of interventions and actions aimed at benefitting rural women.

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

(Actually it has only been 2 years). New gender and climate change research in agriculture and food security for rural development tools and training materials were made freely and widely available on both CCAFS and FAO's websites. Gender-CC research teams were trained (and are now trainers themselves) and methods tested by CCAFS local partners in Bangladesh, Uganda and Ghana. 5 CC-gender studies were undertaken by CCAFS grantees based in partner NARs and University organizations in 5 countries in 3 CCAFS regions, building new gender research capacity in these institutions.

What partners helped in producing the outcome?

FAO, local NARs and University partners in 8 CCAFS countries

Who used the output?

CCAFS and FAO research, government and non-governmental partners in East Africa, West Africa and Bangladesh, including CARE Int'l, KARI, BCAS, INSAH.

How was the output used?

This research is informing the design of interventions and actions in CCAFS sites explicitly aimed at benefitting women. For example, CARE Int'l has used the results of this work to inform the design of a new, East African Climate Smart Agriculture project.

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? Please provide a reference or source.

No study has yet been carried out to show the connection between the research and the outcomes, so these outcomes are based upon discussions and in workshops with partners that are equally dedicated to having positive impacts on gender and social differentiation as is CCAFS. CARE Int'l has expressed interest in extending our current collaborative gender work in Kenya (in a CSA project) to other CCAFS countries, including Tanzania, Ethiopia, Ghana and Senegal. Other evidence is indicated by the extensive number of downloads of "Gender and Climate Change Research in Agriculture and Food Security for Rural Development Training Guide". The guide was downloaded 2,343 times between March and early October. Based on the results of the research while testing the guide, CCAFS working papers were published on gender and climate and a manuscript was drafted for submission to a peer-review journal in 2013. A presentation was also made at the Community Based Adaptation 6 conference held in Hanoi in April to highlight the research findings. The training guide has now been translated into French and Spanish. It is available at:
<http://ccafs.cgiar.org/blog/gender-climate-change-and-food-security> and <www.fao.org/climatechange/micca/gender>

Gender and Social Differentiation related activities summary report - 2012

CRPs that have presented their Gender Strategy to the Consortium in 2012 should show progress in 2013 in relation to implementing the Strategy. Therefore it is expected from Program Participants that findings of gender and social differentiation activities and their significance to be referred in this summary report. It is essential to relate progress towards outcomes to the baseline gender-differentiated conditions being used to measure change. This report should also refer specifically to what is being learnt about gender and how this knowledge is being used to inform research priority-setting and approach. If none or few of your activities integrate gender please explain why it is not relevant to your research portfolio.

CCAFS Theme Led Activities
Theme 4. Integration for Decision Making

CCAFS has made significant progress in 2012 towards integrating gender analysis across all research themes in accordance with its gender strategy. Analysis of the CCAFS village-level and organizational-level baseline work that incorporated gender was carried out by Theme 4 in 2012, and the data and reports made freely available to the world on Dataverse. Most of the centres are in the process of recruiting new gender specialists and are developing new gender-targeted work within CCAFS. Many centres were involved in the implementation of the IMPACT-Lite household farm characterization survey that has key gender components, across 13 countries and 15 CCAFS sites in 2012. The core CCAFS team has boosted its capacity in gender research with the addition of 2 internationally recruited scientists with strong gender research experience. Theme 4.1 gave grants to 5 post-doc female researchers in local partner institutions and is continuing to support publications based on the results of their research.

CCAFS catalysed collaborative research and capacity development for shared research standards and tools - IFPRI, ILRI and ICRAF all helped develop a new gender-disaggregated intra-household survey and train local partners in these new, open access intra-household gender tools. This work will be implemented in sites in 4 CCAFS regions in 2013 in Uganda, Kenya, Bangladesh (with other CRP's) and Senegal.

Theme 4.1 has also catalysed and provided technical assistance to the regional programs in the 'bottom-up' joint development (with local partners, including organizations with similar gender goals) of impact pathways with explicit gender strategies and targets in all our sites, and indicators and approaches for monitoring them.

CCAFS is working closely with all the centres through the gender network to develop a working paper series (and a special journal issue) highlighting significant CCAFS and CG gender research results. We are planning with AWARD to train some of their 'master trainers' in the new gender research methods we jointly designed and tested with FAO in 2011-2012 (participatory methods) and more quantitative intra-household tools with CCAFS's 'gender advisory group' (made up of CG, University and other gender experts) in 2012 in order to scale these out broadly with local partners across Africa.

The proposed IDO in CCAFS that is focused on gender is 'Enhanced women's access to and use of agricultural and climate-related services and information through strengthened linkages to institutions, programs and interventions beyond the village level'. In brief, the theory of change is as follows: we will help support local, national and regional partners with gender and pro-poor approaches (improved gender-disaggregated data, analyses and methods, but also communication, engagement, capacity and M&E strategies), so that research is more likely to benefit women and other vulnerable groups in CCAFS's target areas. Because we undertook comprehensive baselines (at household, village and organizational levels) in all our sites, we will be able to measure the change in this IDO in several years when we repeat these surveys with the same participants.
Key findings:
• Men and women are seeking different kinds of agricultural/weather/food security-related information.
• Women tend to associate with fewer external organizations than men (i.e. with linkages that go beyond village-level)
• Adaptation to climate change is gender-specific, and support for adaptation has to be, too. Climate change must take into account power/social inequality underlying conditions. It is not a "technology" issue, only.
• Natural resources, and the perceptions of natural resources, are social/gender-based constructions that depend on the socially defined roles that men and women play.
• Women are getting information predominantly from personal sources and men more from organizations
• Climate change information should not be limited to "weather". In every site the men have mentioned something about the start of rains but women do no mention this much at all; in five of the sites women have mentioned wanting info on types of seeds.
• Adaptive technology should not be concentrated only on "major" crops.

We are developing tools that allow us to collect qualitative and quantitative gender-disaggregated data to meet the information needs of all of CCAFS themes. In 2012 we synthesized results from the jointly developed participatory gender study in Uganda, Ghana and Bangladesh. In this pilot study participatory tools were used for a socio-economic and gender analysis of topics related to agriculture and climate change: climate smart agriculture (themes 1 and 3), climate analogue approaches (theme 1) and climate forecasting (theme 2). We found that:
• Smallholder farmers are changing their agricultural practices due, at least in part, to changes they are observing in their climates and environments.
• Although agriculture is managed at the household level, men and women have different roles and are adopting different types of changes in agricultural practices depending on their roles.
• Women are less able to adopt new practices because of financial or resource constraints, and because of male domination in receiving extension services.
• The climate analogue approach is a promising tool for increasing farmer-to-farmer learning in areas where a high degree of environmental and climatic variability means that analogue villages exist nearby.
• Overall farmers prefer to learn from neighbors who have successfully adopted new climate smart agricultural practices.
• Indigenous knowledge remains the most important source of weather and climate information.
• Important gender disparities remain in terms of women's ability to access scientific forecast information, and understand its content.
• Institutional issues related to forecast production limit the credibility and salience of seasonal forecast information.

In 2012 Centre findings on gender and climate change fell into five main categories that are providing important information regarding women: roles in decision-making, climate perceptions, risk and vulnerability, adaption and adoption, and access to technology and information. Key findings:
• Gender norms and relations are determined by culture and tradition, and play important roles in determining inequalities in resource endowment and decision-making.
• It is important to know the particular contributions of household members to family decisions, and the criteria used to make decisions.
• Male and female farmers have different perceptions about changes in climate, accounting for variations in their adaptation and coping strategies.
• Female-headed households are more likely to be food insecure, and this cannot be explained by the differences in observable endowments alone.
• Women farmers adopt new technologies and used them not only to enhance agricultural productivity, but also to reduce drudgery and generate employment opportunities through collective action.
• There are gender differences in where and how information on agricultural technologies is obtained.
• Even when they are equally aware of technological options, women appear to have less access to and uptake of production technologies.
• Women, particularly when heading households, are disadvantaged in comparison with men in access to extension, and past and current extension approaches are failing them.

Theme Leader Summary by Output - 2012

Theme Leaders will report on the same categories before, following the reporting depth of "Medium" in the explanatory notes. In addition, Theme Leaders will provide a synthesis of all Program Participant activities, arranged by Output as per the CCAFS logframe. These reports will be 3-5 pages.

Theme 4. Integration for Decision Making	
Objective 4.1 Explore and jointly apply approaches and methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels	
Outcome 4.1: Appropriate adaptation and mitigation strategies mainstreamed into national policies in at least 20 countries, in the development plans of at least five economic areas (e.g. ECOWAS, EAC, South Asia) covering each of the target regions, and in the key global processes related to food security and climate change	
Output 4.1.1 Future economic development scenarios taking climate change into account, and vulnerability maps and analyses incorporating a changing climate and food security issues shared with decision-makers at national, regional and global levels and informing regional economic development and national food security plans and policies	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	4.1.1 Scenarios Much progress has been made in East Africa in 2012 in the scenarios-related activities led by the University of Oxford team. Twenty-one participants from NGOs, and 16 technical advisors to policy makers from ministries in the East Africa Community (EAC) received training in the use of regional environmental and socio-economic scenarios for the development of policies and collaborative action plans. These planning workshops aimed at building strategic capacity for participants and their organisations and ministries, to build partnerships among state and non-state actors and to come to real collaborative actions. The workshops we led in partnership by CCAFS, Oxford, and the Society for International Development (SID) with media coverage in newspapers and on video by PANOS. Strategic planning workshops with such participants has resulted in formulation of policies and strategies for the region, as well as potential for future partnerships between EAC partners (state and non-state) and on-going CCAFS activities. These engagement workshops have been successful in that many participants felt that they had learned about new "practical, concrete" and "brain teasing" techniques such as back-casting or backwards planning. Participants mentioned that they have learned how to create strategies for the region in an "interactive" and "enlightening" manner. Participants also thought that the scenario outputs "would be useful for, and gain credibility with, planners and decision-makers seeking legitimate information before making choices". The workshops allowed potential partnerships to be identified, and for CCAFS to engage partners to take forward certain strategies for policy implementation. These plans are taken forward through facilitation by SID supported by CCAFS in a "continual engagement" process. As a result, several policy champions have been identified that CCAFS can work with in the future to create policy impact. These champions include Alais Morindat from the Tanzania Natural Resource Forum, Wivine Ntamubano, environment officer from the EAC, and Abner Ingosi who develops Kenya's food security policies for the Ministry of Agriculture, Kenya. Ms. Ntamubano in particular mentioned that the scenarios will encourage, "Work with non-state actors, and [help] consider environmental issues as key priorities not only on paper but with appropriate budget." She reported that she gained two key insights from the workshop for guiding EAC budgeting discussions – that EAC policies are heading toward one of the CCAFS scenarios and that this brings particular challenges, and that partnerships with non-state actors would be crucial under multiple scenarios. In order to increase awareness about the scenario development process and highlight policies and strategies that have been derived from the use of scenarios that could be applied by NGOs and ministries in the EAC, numerous communication products have been created about the scenario process in East Africa. Many of these products were developed in partnership with Panos Eastern Africa. Knowledge products include a journal article, policy brief, report, workshop reports, conference presentations, newspaper articles, blogs, and multi-media products (e.g. cartoons, trailers, radio programs, and wikispaces). Qualitative scenario storylines for West Africa have been developed with a strong group of state and non-state actors, and quantitative inputs for the GLOBIOM and IMPACT models have been generated with these participants in a second workshop. The scenarios are in the process now being quantified through modelling, and plans for a first policy planning workshop are underway. Oxford and CCAFS have also identified a range of key stakeholders across food systems in South Asia to move the scenario development process in South Asia forward through a workshop on 29 November – 1 December 2012. This will be followed by a scenarios quantification workshop in early 2013. The CCAFS regional scenarios are being used beyond the CCAFS regions, to engage foresight processes and research communities at the global level and in specific research projects: • The CCAFS scenarios will function as a main platform for collaboration with the new global FUTURE EARTH program that will replace the ESSP, since the scenarios explore
Output 4.1.2 Evidence on, testing and communication of, successful strategies, approaches, policies, and investments contributing to improved science-informed climate change-agricultural development-food security policies and decision making	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	4.1.2 Linking Knowledge with Action The CCAFS regions have taken the lead in facilitating implementation of participatory action research (PAR). PAR was established in the 15 CCAFS sites. Gender-sensitive activities related to risk management, adaptation and mitigation were implemented, with engagement and communication strategies aimed at users of the knowledge generated pursued and scaling-up mechanisms put in place. The milestones in this output are created primarily through joint activities within the CCAFS regions, although we are also engaging in cross theme, cross CRP and global collaborations. As a result, the outcomes in the process of evolving from this output fall into the areas of Theory of Change, Innovation and Social Learning. In East Africa, in order to develop community-level capacity for PAR and improve the implementation of site-specific research with a broad range of partners across the CCAFS sites, the regional program commissioned a study undertaken by PICO Eastern Africa. Field visits were completed in three sites - Nyando, Lushoto and Borana - where informal interviews were carried out with partners and communities. An assessment and mapping of the local partners was undertaken, highlighting some of the key partnership challenges across the sites. Findings from the study will inform on-going and future PAR activities in the region. The regional program in West Africa partnered with ICRAF and ICRISAT to undertake a PAR project to test and validate in partnership with rural communities and other stakeholders, a scalable climate-smart model for agricultural development that integrates a range of innovative agricultural risk management strategies. Following an inception and planning workshop in February 2012 for three countries - Mali, Ghana, Burkina Faso - a country work plan was developed for each of the three participating countries. National workshops involving local key stakeholders were later held in each country to refine and validate the work plans developed during the regional workshop. Activities planned in these work plans were implemented during the rainy season 2012 in and included: baseline studies, land reclamation tests, naturally assisted tree regeneration, tree planting, improved crop varieties tests, training activities (more than 50 farmers trained, 2 MSC students trained), and farmers' exchange visits (3). In South Asia the approach to PAR is to constitute self-help farmers groups, including women members, with whom several risk management strategies were piloted in 2012. This included on-farm testing of wheat and rice germplasm, mung bean incorporation in the cropping pattern, need-based nitrogen application methods, residue incorporation in the field, agro-forestry plantations, weather forecast and agro-advisories via cell phones, index-based insurance and gender empowerment are some of the key interventions in Vaishali. Zero tillage of wheat, varietal testing and evaluation of rice, wheat, potatoes and fodder, laser levelling and need-based nitrogen application in rice and wheat gave promising results in Rupandehi, Nepal. The assessment framework for understanding gendered differences in climate risk comes as a part of the 'Smart Farm' project in Bangladesh where there is a strong community buy-in to the 'Fish Ring' component of the project. There is also strong evidence of women's involvement in these projects. Conservation agriculture in Karnal is picking up. Farmer's fair day is organized twice a year in these sites to showcase the interventions to neighbouring farmers, extension agents, government institutions, private agencies and media. Technology dissemination through participatory videos has been very successful and a large number of farmers have shown their deep interest to practice these climate smart technologies in Bihar. In 2012 Theme 4.1 began providing technical expertise to the CCAFS regional programs to engage in the theory of change process through the development of impact pathways at the site and eventually at the regional levels. Workshops were implemented by the regional programs to introduce East Africa stakeholders to the concepts of outcome-thinking, and to help partners at the Burkina Faso site in West Africa design an impact pathway for their network. We also supported CCAFS in the development of IDOs for the CRP, and began the process of critically evaluating the theme 4.1 impact pathway in terms of the Theory of Change process. Key lessons so far have been the

Output 4.1.3 Analyses providing evidence of the benefits of, strategies for, and enhanced regional capacity developed in, gender and pro-poor climate change research approaches that will increase the likelihood that CCAFS-related research will benefit women and other vulnerable as well as socially differentiated groups	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	4.1.3 Gender and Social Differentiation (a) Gender Grants (http://ccafs.cgiar.org/our-work/research-themes/integration-decision-making/linking-knowledge-action/gender-grants). CCAFS supported female researchers in our three regions to undertake climate change, agriculture and food security-related research. A competitive call was extended and grants were awarded to five female researchers at the postdoctoral level. A mixture of qualitative and quantitative methods was employed by these scientists to explore the following research topics using a gender lens: adaptive capacity of livestock owners in Uganda, role of micro-finance in providing food security in Bangladesh, greenhouse gas emissions and agriculture intensification in Nepal, climate information to reduce disasters in Senegal, and climate change policy design in Burkina Faso. These researchers are based at local agricultural research institutes, universities, or NGOs and have worked closely with Theme 4.1 on CCAFS priority research areas. This is a first step in building new capacity in local partner institutions in this critical and under-invested area. The award recipient from Uganda mentioned that the grant allowed her to not only learn more about how climate change impacts smallholders, but that it allowed her to "widen her social networks" and she has been able to "meet more people which will give more opportunities to partner and collaborate with a wider range of institutions" in the future. The award recipient from Bangladesh stated "the CGIAR research program has helped me to enrich my knowledge about the hardship in the lives and livelihoods of coastal poor women. It has also helped me to explore new research fields and issues. This has had a great impact on my life as a researcher". Finally, the award recipient from Burkina Faso stated that the grant allowed her to "realize the difficulties of adaptation to climate change and the gaps due to gender issues in policies and practices". To highlight the grantees' research, blogs and interviews have been posted online along with their technical reports. The grant recipients have also produced draft working papers and articles that will be published in 2013. (b) Joint CCAFS-CAPRi workshop and papers: CCAFS and the CGIAR program on Collective Action and Property Rights (CAPRi) carried out a competitive call for papers to find the best research going on across the CG/partners. This culminated in a joint research workshop on the topic of "Institutions for Inclusive Climate Smart Agriculture" in September 2012 in Nairobi. A series of CAPRi-CCAFS working papers from this event are in process and a journal special issue is being planned. Many CCAFS and partner papers were shared as background to this event, and are available at: http://www.capri.cgiar.org/wks_0912.asp . New partnerships with innovative local institutions, e.g. GROOTS (an umbrella women's group organization working with tens of thousands of smallholders across Kenya) were another result of this initiative. (c) Gender research: The CCAFS Gender Strategy (http://ccafs.cgiar.org/our-work/research-themes/integration-decision-making/linking-knowledge-action/gender-climate-change) was finalized in February 2012. Our first step in implementation of the strategy was to institute a CCAFS Gender Technical Advisory group consisting of 16 members with diverse backgrounds including economics, social science, gender and development, veterinary medicine, food security, agro-ecology and statistics. The group finalized gender-related research questions for CCAFS. These questions serve as the basis for gender research carried out under T4.1. The "Gender and Climate Change Research in Agriculture and Food Security for Rural Development Training Guide" was launched in collaboration with the United Nations Food and Agriculture Organization (FAO) during International Women's Day in March (http://www.fao.org/climatechange/micca/gender/en/). The guide was downloaded 2,343 times between March and early October. Based on the results of the research while testing the guide, CCAFS working papers were published on gender and climate and a manuscript was drafted for submission to a peer-review journal in 2013. A presentation was also made at the Community Based Adaptation 6 conference held in Hanoi in April to highlight the research findings. The training guide is in the process of being translated into French and Spanish. The IMPACT household farm characterization tool was developed over many years, led by Mario Herrero and Carlos Quiroz of ILRI. It provides very comprehensive gender-disaggregated information at the plot level, and includes all inputs and outputs. The full approach involves many hours, in some cases more than a day, with each farm household. Thus a version called 'IMPACT light' was developed that focuses on certain components of the longer version. It involves spending several hours with each household with well-trained enumerators, and builds upon years of experience with not just IMPACT, but other

Output 4.1.4 Strengthening capacities to effectively engage in global policy processes and mainstreaming risk, adaptation and mitigation strategies into national policies, agricultural development plans, and key regional and global processes related to agriculture and rural development, food security and climate change	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	4.1.4 (1) Communication Themes 4.1 and 4.2 collaborated on a series of initiatives aimed at better understanding and exploring opportunities for social learning and social differentiation approaches within CCAFS. A new climate change and social learning (CCSL) knowledge network with a wide range of new partners for CCAFS has been formed as a result of these investments. A draft working paper was submitted by Alison Shaw entitled 'Social learning and social differentiation: Catalysing adaptive capacity for development and climate change'. It captures innovative results-oriented research taking place within various CGIAR centres and identifies what role social differentiation plays in regards to agriculture and food security practices, and what methods are being used to capture this. The report identifies how various tools, approaches, and initiatives have been implemented at various scales while identifying best practices. It also helps identify "champions" of social learning and social differentiation within and outside the CGIAR. New approaches such as animated videos on a new research paradigm for CCAFS and the CG are being produced as a result of this work. We also planned CCAFS's science meeting in 2013 around this topic and will be sharing the outputs of 2012 at that meeting with scientists from all centres. The regional programs are providing direct national and regional support to catalyse the process of engagement: (a) East Africa: As part of the Regional Learning Partnership (RLP), CCAFS in collaboration with COMESA, EAC and SADC organized post-Durban dialogue workshops on Climate Change and Agriculture in Eastern and Southern Africa, to help further articulate the African position on agriculture within the international climate change negotiations (UNFCCC). COMESA and CCAFS in partnership with other regional actors and networks (e.g. ACPC), have continued to support African group of negotiators (AGN) to communicate and deepen the understanding of agriculture and build capacity for negotiators to engage in the UNFCCC process. CCAFS held a side event at the African Ministerial Conference on Environment (AMCEN) in September and an exhibition at the Second Conference on Climate Change and Development in Africa (CCDA-II) in October. In order to respond to the need to develop projects that address needs for research, CCAFS East Africa convened a regional science workshop that brought together CGIAR and national scientists to develop thematic research activities that support climate risk management, adaptation and mitigation. At the end of the workshop, four thematic research groups were formed to work at the CCAFS sites in East Africa. An outcome mapping workshop was held as a follow-up to the regional science workshop and to integrate with the work of development partners across the sites in East Africa. The objective of the workshop was to map the output-outcome-impact pathways across the learning sites and to build stronger partnership and coordination of research and development activities among partners. Various blogs are available on the CCAFS website highlighting key outcomes of the different engagement processes above. (b) West Africa: Two regional workshops were organized in Dakar (Sep 2012) and Ouagadougou (Dec 2012) to 1) establish/strengthen national platforms and 2) to validate the work plan of each country national platform as well as the regional platform. The first workshop provided opportunities for each of the national platform (comprising representative from national agricultural research system, national agricultural/food security policy-makers, NGO, network/umbrella of farmers organizations) to come up with a state-of-the-art diagnosis on the constraints and opportunities to networking at the national level in order to mainstream climate change adaptation into national agricultural policy and development agenda, identify the key institutions and organizations to embark in the process. Following their formal setup, the national platforms were officially launched in each country through a one-day event meeting with communication outreach. A road map has been developed for the 2013 activities of each national platform.. Deliverables: 5 operational platforms established in CCAFS pilot countries; 1 report on the workshops in Senegal and Burkina Faso. (c) South Asia: CCAFS has initiated a Climate Smart Agriculture Learning Platform (CSALP) to improve communication between scientists, policy makers, political leaderships,

Outcome 4.2 Improved frameworks, databases and methods for planning responses to climate change used by national agencies in at least 20 countries and by at least 10 key international and regional agencies	
Output 4.2.1 Integrated assessment framework, toolkits and databases to assess climate change impacts on agricultural systems and their supporting natural resources	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	Regional site and baseline characterisation: Considerable progress was made in finalising baseline data collection activities at the 15 CCAFS core sites in three regions and 12 countries. Objectives are to allow the construction and measurement of indicators of behavioural change in relation to climate change adaptation, mitigation and risk management that can be measured in repeat visits. The goal is assess what kinds of changes have occurred and whether these changes are helping households adapt to, and mitigate, climate change. The baselines at household, village and organisational levels are allowing CCAFS to explore gender and other social differences in target populations. Data collection was completed in 2012 for East Africa, West Africa, and South Asia. Most site reports are complete, and these, the data and all training materials are available via DataVerse. One paper has been published and several more are being written up, some by others not directly involved in the data collection. The work has involved a wide range of national partners in the regions, as well as several CG Centres (ILRI, ICRAF, IWMI and ICRISAT). A prototype mini-atlas was developed for the Lushoto (Tanzania) site, and these are now being completed for all 15 core sites. They contain information on a wide range of themes including climate, land use, soil type, agro-ecological zone, crop and livestock information, and poverty. They will be published in on-line and hard-copy versions in 2013. Several papers are being prepared for publication, including a journal article focusing on climate change adaptation and farmers' livelihoods along the rainfall gradient across different sites in the Indo-Gangetic Plain. Downscaled climate data: Several activities were undertaken in relation to downscaled climate model data for evaluating the impacts of climate change on agriculture and food systems and for assessing adaptation, mitigation and risk management options. A stand-alone version of the MarkSimGCM tool was developed, which like its Google-Earth-based precursor, can generate plausible daily weather data in a common crop-modelling format for future climate change scenarios. This tool can be run from scripts, and so can be run for many thousands of points or grid cells. A journal paper was published on the tool, which is available at ccafs-climate.org. New CMIP5 climate model data have been collated (from 17 climate models and 4 scenarios to 2100), and these are being processed and distributed from the CIAT-based ccafs-cliamte.org website. Both versions of MarkSimGCM will be updated with these new data during 2013. Work also continued on version 2 of MarkSim, which will be based on more than 50,000 stations of historical rainfall data. These tools are starting to be widely used in the agricultural modelling community. With the addition of two new CCAFS regions, two reports were commissioned from INPE (Brazil) and the University of Oxford to evaluate the ability of the climate models to reproduce the observed climate in each region (Latin America and SE Asia, respectively). The object is to establish how reliable future climate and crop growth projections might be. These will be companion reports to those already published for E Africa, W Africa and S Asia (ccafs.cgiar.org/resources/tools-maps-models-and-data/testing-climate-models-agricultural-impacts). CIP and partners undertook studies focusing on the large-scale characteristics of the South American Monsoon System (SAMS): seasonal amplitudes, onset and cessation dates and durations. Some CMIP5 models have significantly improved their representation of the SAMS relative to earlier climate models, although not universally. Results show significant increases in seasonal amplitudes, early onsets and late cessation of the SAMS. CIP has also developed a beta version of a multifractal downscaling technique complemented by a heterogeneity filter, and this is being tested for areas in mountainous terrain. Databases and database tools: work here contributes to much larger efforts by filling in key gaps that are of particular importance to climate change and food security work. There was theme-led activity in relation to soils (Washington State University and a 9,000 profile data set for agricultural modelling applications), agricultural systems (FAO and new maps of intensive cattle, chicken and pig production systems in the CCAFS regions), cropland extent (IIASA and crowd-sourcing technology geo-wiki.org, to produce a new hybrid cropland extent map), and rangeland extent (McGill University and the GEOSHARE project). ILRI used the household data collection tool Impact-Lite to collect detailed farming household data from about 200 households in each of the CCAFS core sites. These data, soon to be made publically available, will form a key resource for household modelling, as well as providing detailed systems characterisation information for all the CCAFS sites. These data are currently being analyzed by regional teams comprising scientists from different centers and institutions, and several papers on household food security and adoption of climate smart agricultural practices will be finalised in 2013. A
Output 4.2.2 Socially-differentiated decision aids and information developed and communicated for different stakeholders	
Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	Activities under 4.2.2 were started through a call for proposals to review approaches to communications and social learning to support local decision-making on food security and climate change. IDS and IIED partnered on this activity and published a CCAFS Working Paper (No. 22) on current approaches to climate change communications and social learning. This work was used as a basis for an initial workshop in Addis Ababa with a diverse group of communications and knowledge management experts, as well as social and agricultural scientists. The workshop identified strategic intervention areas for CCAFS around socal learning ('change areas'). The workshop led to several activities that are documented on the Climate Change and Social Learning (CCSL) Wiki (http://ccsl.wikispaces.com/). The Sandbox, an online platform, has been established as a community of practice to explore innovative, risky ideas and provide seed funding for such ideas (this is championed by ILRI-KMIS, the knowledge management and information services). A CCAFS Working Paper on a review of social learning related activities within the CGIAR is being finalized - this work was presented and built upon during a second workshop in Addis Ababa in late 2012 (consultant, J. Gonsalves). Another CCAFS Working Paper is being finalized, examining the impacts of social learning approaches for monitoring and evaluation (IDS/IIED/IDRC). A long-term partnership agreement was initiated with Reading University to "develop participatory approaches to support farmer decision making and planning through the use of climate and weather information". Activities under 4.2.2. are collaborative efforts with Theme 4.1 - where more social learning related work was commissioned to look at social differentiation within social learning (with Flipside), piloting endogenous social learning (with Prolinnova) and working with innovative media (with Shamba Shape-Up). Also, Theme 4 is currently finalizing a written and animated CCSL narrative 'transforming food systems', a policy brief and a donor synthesis. Theme 4 also proposed to organise the 2013 CCAFS annual science meeting on social learning and this is under way. In 2012, there were no regional or center activities under this output.

Objective 4.3 Refine frameworks for policy analysis

Outcome 4.3 New knowledge on how alternate policy and program options impact agriculture and food security under climate change incorporated into strategy development by national agencies in at least 20 countries and by at least 10 key international and regional agenciesat least 10 key international and regional agencies

Output 4.3.1 Climate change impacts assessed at global and regional levels on agricultural systems (socially and gender differentiated producers and consumers, and their natural resources), national/regional economies, and international transactions and potential of international and regional policy changes to enhance adaption and support agricultural greenhouse gas emissions mitigation

Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	**A.** 7 CGIAR Centers (CIAT, CIMMYT, CIP, ICRAF, ICRISAT, ILRI, IRRI) were co-funded to include climate change related work, as part of their participation in "Global Futures for Agriculture", a Bill & Melinda Gates Foundation principally-funded project (See Summary by Output 4.3.1 for analytical description). Several integrated bio-economic modeling frameworks are under various stages of development for the respected crops (wheat, maize, groundnut, sorghum, rice, cassava, beans), for livestock, and for agroforestry, in the participating CGIAR centers, that all feed into the ex-ante evaluation of socio-economic impacts of existing and promising technologies. Relevant reports have been produced for the above thematic fields. Analytically: A.1. CIAT: DSSAT model was calibrated and the casava model in DSSAT was improved. Partial data collection took place on aggregated data for SPAM data base for Latin America. DSSAT and IMPACT models were used to assess the impact of climate change on cassava and analyzed the impact of herbicide tolerance technology. A.2. CIMMYT: Two reports on promising wheat and maize technologies were prepared, that showed good promise to increase productivity of maize under existing and potential constraining factors. A.3 CIP: The integrated bio-economic modeling framework for the ex-ante evaluation of socio-economic impacts of potato technologies consisting of a global crop modeling framework (DSSAT-SUBSTOR) and IMPACT has been set up and made operational. Linkages between the different modeling components have been established and the framework has been, in a proof-of-concept manner, used for the evaluation of improved potato varieties. Work on improvements of the modeling framework with the objectives of generating more reliable results has been started. These components involve assessments of the suitability of the SUBSTOR potato crop model for virtual crop modeling, assessment and improvement of the global baseline simulation for potatoes with the geospatial crop modeling framework and the improvement of the potato baseline projections with the IMPACT model. A.4. ICRAF: Modeling capabilities in agro-forestry and natural resource management intervention areas have being linked between DSSAT and IMPACT. A report on Women and Agroforestry Based Soil Fertility Management Technologies was produced. A.5. ICRISAT: The productivity potential of identified sorghum and groundnut technologies using virtual crop model (DSSAT) was evaluated. Groundnut: The net yield gain of incorporating both drought and heat tolerance in India increased to 14% at Anantapur and 16% at Junagadh under climate change. At the Samanko site in Mali, with and without climate change, yield gains from drought tolerance were limited to 4% with no benefit accruing from heat tolerance. At Sadore in Niger, yield gains were larger from drought tolerance than from heat tolerance trait under the current climate; however, the yield gains from both traits increased under climate change. At Sadore, the net benefits due to the combination of drought and heat tolerance was up to 18% and 31% under current and future climates, respectively. Sorghum: The yield increase for the longer duration cultivar was 11 to 18% at Akola, 17 to 19% at Indore and 6 to 7% at Samanko under current and future climates of the sites. At the three sites, the yield gains were larger by incorporating drought tolerance than heat tolerance under the current climate; however, under future climates the yield gains were higher by incorporating heat tolerance especially at the Akola site. Net benefits of incorporating both drought and heat tolerance increased up to 17% at Akola, 9% at Indore and 7% at Samanko under climate change. A.6 ILRI: In a study on food security and political stability, the IMPACT model and other tools of foresight analysis were applied to the assessment of alternative pathways for enhancing food security under scenarios of shocks to global livestock production systems. Short- and medium term actions were proposed to enhance food, environmental, and human health security, and to reduce potential for human conflicts over natural resources. A.7.IRRI: An ex ante impact assessment of development and dissemination of a drought tolerant rice in the presence of climate change was accomplished. Combining a bio-physical model (ORYZA2000 crop growth simulation model) with an economic model (IRRI Global Rice Model), the simulation revealed that net economic benefits outweighs the cost even under the presence of mild to harshest climate scenarios. **B.** In addition: Several CGIAR centers have contributed with additional multiple modeling work, often related to the Global Futures project, as described below: CIAT:Modeling framework for cassava, beans, rice and tropical forages is being improved to set center priorities for technology development in the face of climate change., CIMMYT: The CERES-Wheat and CERES-Maize models embedded in DSSAT have been calibrated and evaluated with benchmark varieties using CIMMYT's global yield trial datasets. The models were run at a pixel level and then later aggregated to the desired spatial scale using GIS, and vulnerability maps showing global and regional changes in yield and production of wheat and maize by 2050 have been produced. The model outputs aggregated at food production unit (FPU) level have been fed into the global IMPACT model

Output 4.3.2. Analyses of the likely effects of specific adaptation and mitigation options, national policies (natural resource, trade, macroeconomic, international agreements) including gender/livelihood groups, and communicated to key local, national and regional agencies and stakeholders

Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	Three Sub-Saharan African research monographs (East Africa, West Africa, Souther Africa) covering 29 countries, are to be released, and summary policy briefs are already available to policy makers. The monographs discuss the impact of climate change on agriculture, with a focus on finding adaptation options for policy makers. The work has been coordinated in collaboratuion with 3 regional organizations (CORAF, ASARECA, and FANRPAN) who now use the results within several national programs. The work was also presented to a large audience of stakeholders, and received significant coverage by media, during the "Agriculture, Landscapes and Livelihoods Day 5", at COP 18, in Doha, Qatar, in December, 2012. (See similar description in Summary by Output 4.3.2)

Output 4.3.3. Capacity built at CGIAR, NARS, and international organizations to perform global and regional analyses of the effects of policy changes using tools developed in output 4.3.1

Provide a synthesis of all Program Participant activities pertaining to this output as per the CCAFS logframe. These reports will be 3-5 pages long (max. 30,000 characters).	Under Theme Leader 4.3 and in collaboration with IFPRI staff, training was provided to researchers and research support staff in CGIAR centers, academic institutions and international organizations, on the use of of the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT) (See Summary by Output 4.3.3 for details). In parallel, under a FANRPAN funded-project, participants from 4 universities in Southern Africa were trained in the use of economic models in climate change analysis and climate change policy development. Participants were trained in the use of IFPRI's IMPACT model, as well as explaining the challenges of using a global trade model, and how best to downscale these global results to be applied at national, and subnational distric levels in Southern Africa.

Milestone Status Report - 2012

MILESTONE REPORT 1

Theme	Milestone	Milestone Status
Theme 4.1	4.1.1 2012	Completed

Theme Leader comments on Milestone status

Scenarios completed for three regions.

Regional Program Leader comments on Milestone status

EA:
Activity linked to the participatory action research in Theme 1 (167), Theme 2 (174) and Theme 3 (180). PICO Eastern Africa held informal interviews with partners and communities across three CCAFS sites (Nyando, Lushoto, Borana) in order to improve the implementation of site-specific research with a broad range of partners, develop critical skills for long-term facilitated community engagement, learning and development. Preliminary results were used as input into a regional PAR and outcome mapping workshop in November 2012.

SAs:
CCAFS together with Oxford University organized a scenario building workshop process in Colombo in 2012 and came up with five qualitative scnearios for South Asia. These scenarios will be further considered for detailed quantification and modeling in 2013.

MILESTONE REPORT 2

Theme	Milestone	Milestone Status
Theme 4.1	4.1.2 2012	Completed

Theme Leader comments on Milestone status

PAR implemented in all 15 sites.

Regional Program Leader comments on Milestone status

SAs:
CCAFS has set climate smart agriculture villages in key CCAFS sites in South Asia (Vaishali, Bihar and Karnal, Haryana of India, Rupandehi of Nepal and Bagerhat of Bangladesh). Several activities relating to water, residue, nitrogen management, are being implemented in these sites and participaory vidoes are being employed to upscale these activities in neighbouring region. Various centres are working in the CCAFS sites. However, still inter-centre collaboration is not up to the mark.

WA:
Relates to PAR activity on developing community based climate smart agriculture. Activity underway and expected to expand to Niger and Senegal sites in 2013

MILESTONE REPORT 3

Theme	Milestone	Milestone Status
Theme 4.1	4.1.3 2012	Completed

Theme Leader comments on Milestone status

FAO/CCAFS particpatory gender tools available in 3 languages. IMPACTlight survey implemented in 15 sites. New intra-household gender tools

Regional Program Leader comments on Milestone status

SAs:
CCAFS in partnership with local NGO engaged women leaders and farmers in Bihar of India through several round of training events in several districts of Bihar, IFPRI developed a survey instrument to collect gender-disaggregated data on climate change perceptions, impacts (on assets), and adaptation and coping responses from the gender sentinel site of CCAFS in Bangladesh and actual survey has not started.

MILESTONE REPORT 4

Theme	Milestone	Milestone Status
Theme 4.1	4.1.4 2012 (1)	Completed

Theme Leader comments on Milestone status

RPLs taking the lead in networking with decision-makers and building capacity for CSA policy.

Regional Program Leader comments on Milestone status

EA:
In 2012, the program focussed on strengthening the existing parnerships and developing new partneships at local, national, regional and global scales. As part of the regional learning partnership (RLP), CCAFS in collaboration with COMESA, EAC and SADC organized post-Durban dialogue workshops on Climate Change and Agriculture in Eastern and Southern Africa, to help further articulate the African position on agriculture within the international climate change negotiations (UNFCCC)

SAs:
High level policy engagement on climate smart agriculture was organized in Bangkok together with APAARI, a rigorous interaction with Members of Parliament in Nepal followed by a workshop on Science-Policy-People Interface on Climate Change, Agriculture and Food Security in Nepal, inaguration of Climate smart Agriculture Learning Platform for South Asia by His Excellency President of Nepal in 2012 was done by CCAFS together with local partners etc affirm that milestone has taken a proper shape in 2012.

WA:
5 national platforms established and linked with the regional platform (CORAF/WECARD). National platforms roadmaps developed and implementation to start during 2013.

MILESTONE REPORT 5

Theme	Milestone	Milestone Status
Theme 4.1	4.1.4 2012 (2)	Completed

Theme Leader comments on Milestone status

CIAT and IITA have both been training local partners across the East Africa sites, and with ICRAF working on methods to link socio-economic and

Regional Program Leader comments on Milestone status

MILESTONE REPORT 6

Theme	Milestone	Milestone Status
Theme 4.2	4.2.1 2012 (1)	Completed

Theme Leader comments on Milestone status

This is essentially complete, pending some final reports at the village and organisational levels. Some delay due to extra sites selected in E Africa and S Asia.

Regional Program Leader comments on Milestone status

EA:
Data collection for all the six sites in East Africa completed in 2012. The data are centrally stored at ILRI and a training and data collection manual has been compiled. The data will be analysed in 2013.

SAs:
All household baseline surveys have been completed in all sites, village and organizational baselines in Karnal, Haryana; and organizational baseline in Vaishali and Bagerhat are on, ICRISAT has developed pixel-wise climate data for use in models but software to process gridded data for rainfall probability, water balance and LGP has not made ready for use, Trade-off Analysis model for Multi-Dimensional impact assessment (TOA-MD) developed and adapted as an integrated assessment framework for regional analysis of climate change and adaptation impacts, IWMI prepared map of flood occurence and its duration for South Asia and regional database on agricultural statistics, historic climate parameters and crop management and updated south asia irrigation map. Substantial works have been completed to justify this milestone.

WA:
Detailed household characterization (impactlite) completed for the five WA sites. Data analysis on-going.

MILESTONE REPORT 7

Theme	Milestone	Milestone Status
Theme 4.2	4.2.1 2012 (2)	Partially completed

Theme Leader comments on Milestone status

Methods have been tested, but not really harmonised yet. A workshop is planned for 2013 to work on this and write a comparison paper. CMIP5 climate model data have been worked on and will soon be available.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 8

Theme	Milestone	Milestone Status
Theme 4.2	4.2.1 2012 (3)	Completed

Theme Leader comments on Milestone status

This milestone is essentially complete (although it could be asked, where does one stop with databases?). But soils, agricultrual systems, and cropland data sets are available, along with rangeland extent data. Centres ae providing a wide range of other databases under this activity. More broadly, the three CCAFS portals/platforms are functioning and being continually updated (ccafs-climate, AgTrials and DataVerse)

Regional Program Leader comments on Milestone status

EA:
Impact-Lite data collection for all the six sites in East Africa completed in 2012. The data are centrally stored at ILRI and a training and data collection manual has been compiled. The data will be analysed in 2013.

SA:
ICRISAT has developed pixel-wise climate data for use in models but software to process gridded data for rainfall probability, water balance and LGP has not made ready for use.
IWMI prepared maps of flood occurence and its duration for South Asia and regional database on agricultural statistics, historical climate parameters and crop management and updated South Asia irrigation map. Substantial work has been completed to justify this milestone.

MILESTONE REPORT 9

Theme	Milestone	Milestone Status
Theme 4.2	4.2.1 2012 (4)	Completed

Theme Leader comments on Milestone status

This scoping is largely complete. Work is in progress, although this is fairly speculative, it should be said. The work could be very important, and probably needs more resources to move the agenda along.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 10

Theme	Milestone	Milestone Status
Theme 4.2	4.2.1 2012 (5)	Completed

Theme Leader comments on Milestone status

A wide range of tools is now available among centres and partners, including tools to allow assessment of rangelands as specificed in the milestone. Some vulnerability assessments have been carried out at sub-national level, but there is more to do specifically for the CCAFS regions.

Regional Program Leader comments on Milestone status

SA:
Trade-off Analysis model for Multi-Dimensional impact assessment (TOA-MD) developed and adapted as an integrated assessment framework for regional analysis of climate change and adaptation impacts

MILESTONE REPORT 11

Theme	Milestone	Milestone Status
Theme 4.2	4.2.2 2012	Completed

Theme Leader comments on Milestone status

Strong partnerships have been developed, and a strategy for CCAFS's engagement in the social learning arena is well in place. Several review and scoping report have been produced, and the sandbox provides many functions for development and discussion of SL activities. Work has also started on case studies. Other region-led and centre-led activities under this objective will be pursued in 2013 and beyond.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 12

Theme	Milestone	Milestone Status
Theme 4.3	4.3.1 2012 (1)	Partially completed

Theme Leader comments on Milestone status

1.Land use modelling and IMPACT: A new land use specification has been incorporated in IMPACT, that extends the existing area equations in IMPACT to allow for efficient allocation of land across crops in each region (food production unit, FPU), separately modeling the supply and demand for land by type (rainfed and irrigated) and crop. This together with other new features were first implemented in a simplified version, designed to provide researchers with a teaching version of the model that facilitates transfer of the IMPACT model to other institutions (e.g., CGIAR centers). Toward the end of 2012, work was started to transfer the new features to a new version of the full IMPACT model, which is scheduled to replace the earlier model in the second quarter of 2013. 2.Aquaculture has not been added to the IMPACT model (WORLDFISH activity did not take place). 3. As part of the Agricultural Model Intercomparison and Improvement Project (AgMIP), a total of 10 global economic models (seven of these are general equilibrium models while four are partial equilibrium models) have been in a global reference scenario comparison. A set of six or more simulations has been developed to expose the models to a wide range of drivers. 5 papers, for a Agricultural Economics Special Issue on Global Model Intercomparison, and one on "Assessing uncertainty along the climate-crop-economy modeling chain", PNAS, have been prepared and are in the stage of submissions.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 13

Theme	Milestone	Milestone Status
Theme 4.3	4.3.1 2012 (2)	Completed

Theme Leader comments on Milestone status

A "Food security and climate change" report was released at FAO, in June 2012, by the High Level Panel of Experts (HLPE) of the Committee on World Food Security (CFS) . Research results from previous and ongoing work were incorporated in the report.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 14

Theme	Milestone	Milestone Status
Theme 4.3	4.3.2 2012	Partially completed

Theme Leader comments on Milestone status

Three Sub-Saharan African research monographs (East Africa, West Africa, Souther Africa) covering 29 countries, are to be released, and summary policy briefs are already available to policy makers. The monographs discuss the impact of climate change on agriculture, with a focus on finding adaptation options for policy makers.

Regional Program Leader comments on Milestone status

MILESTONE REPORT 15

Theme	Milestone	Milestone Status
Theme 4.3	4.3.3 2012	Partially completed

Theme Leader comments on Milestone status

Several scientists, and research support staff from the CGIAR centers (Global Furtures for Agriculture Fellows, other research support staff), academic institutions, research centers and international organizations received training on the use of of the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT), that has been developed at IFPRI. DSSAT crop model was integrated and utilized in several CGIAR centers. Capacity building among NARES did not take place.

Regional Program Leader comments on Milestone status