CCAFS CORE W1_W2 ONLY

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

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2016
Management liaison	RP EA - East Africa Region	**Mgmt. liaison contact**	Kinyangi, James <j.kinyangi@cgiar.org>
Lead organization	ILRI - International Livestock Research Institute - Kenya	**Project leader**	Recha, John <j.recha@cgiar.org>
Project type	CCAFS CORE	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP1: Climate-smart practices	RP EA: East Africa

Bilateral project(s) contributing to this project
This project does not have Bilateral projects

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

2. Partners

Partner #1 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Recha, John <j.recha@cgiar.org>	Activity 2014-132 *Leader*.
Partner	Ojango, Julie <J.Ojango@cgiar.org>	Piloting of the livestock-related interventions, specifically promoting uptake of improved small ruminant (SR) breeding programs under changing climatic conditions and expanding the smallholder feed base for small ruminants in Nyando CSVs. Activity 2014-209 *Leader*.
Partner	Goopy, John <J.goopy@cgiar.org>	Piloting of the livestock-related interventions, specifically expanding the smallholder feed base for small ruminants in Nyando CSVs. Activity 2014-209 *Partner*.
Partner	Recha, John <j.recha@cgiar.org>	Activity 2014-130 *Leader*.

Partner #2

Institution: Vi Agroforestry

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #3

Institution: Maseno University

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #4

Institution: SARI - Selian Agricultural Research Institute

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #5

Institution: NARO - National Agricultural Research Organization

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #6

Institution: KARI - Kenya Agricultural Research Institute

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #7

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

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #8

Institution: RPL EA - RPL East Africa

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kinyangi, James <j.kinyangi@cgiar.org>	RPL East Africa

Partnerships overall performance over the last reporting period: The partnership involved 5 CGIAR centers (ILRI, CIP, Bioversity, ICRISAT, CIMMYT), national agricultural research institutions (KARI, NARO, SARI), Maseno University), private sector through MARIL and Magos enterprises and development partners (Vi Agroforestry and World Neighbours). The partners mainly worked with the farmers through community based organizations (CBOs) pilot various CSA technologies and practices related to crops, small ruminants, livestock feeds and rangeland rehabilitation, including developing institutional innovations and business models for up CSA.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Through participatory action research (PAR) in collaboration with local communities, the partnership tested on-farm and evaluated a portfolio of promising risk management CSA technologies and practices. With reduced funds, the focus going forward would be on documentation of successful CSA technologies and linking farmers to markets. Through the process,   research reports have been prepared on on promising risk management technologies and interventions, and farmer experimentation networks have been   strengthened.

3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	East Africa
CCAFS Site	-0.269	-0.269	Nyando
CCAFS Site	-1.809	-1.809	Makueni
CCAFS Site	1.535	1.535	Albertine Rift
CCAFS Site	-4.79	-4.79	Usambara
CCAFS Site	4.957	4.957	Borana

4. Outcomes

4.1 Project outcome narrative

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

Annual progress towards outcome (end of 2015): In 2015, evidence of 1-2 partners designing appropriate interventions with farmers, such as smart farms and testing business models from proven CSA packages and interventions.

Nyando (western Kenya): The best practices will inform the local Kisumu and Kericho County government business plans on scaling out CSA through partnership with farmer groups, climate services organization, NGOs with agricultural programs, and private sector organizations.
Wote (eastern Kenya):   The emerging best practices will guide the Makueni county government agricultural adaptation plans. The scaling out will be done through partnership with farmer organizations and the private sector.

Lushoto (Tanzania): The best bet options will guiding the Lushoto district agriculture development plan scaling up strategy through partnership with existing villages SACCOS (farmer organizations), agricultural NGOs and private sector players.
Hoima (western Uganda): The local Hoima district government will be informed by the best practices. They will come up with a scaling out plan through farmer groups and private sector players under the district agricultural adaptation programs.
Borana (southern Ethopia): The rangeland rehabilitation best practices will inform the Arero and Yabello district government agricultural plans for scaling this out through partnership with the   local   pastoralist   collective   action   groups.

Annual progress towards project outcome in the current reporting cycle (2015): In Nyando, the Kisumu County government partnered with the private sector (Magos enterprises) and Rafiki Microfinance to develop a sorghum business plan, with a scaling out component through partnership with local CBOs. In addition, the champion farmers and the smart farms in the CSVs hosted the annual farmer field day in June 2015 where over 5,000 farmers from the region attended and displayed Nyando CSA products through the County department of agriculture stall in the Annual Kisumu Agricultural Trade Fair. The Kericho County government has partnered with the CBO in promoting the small ruminants (Galla goats) and integrating it in the county development plans through the annual goat auction in the CSV. The emerging cereal-legume inter-crop innovations in Wote CSVs have been adopted and promoted by the Makueni County government for climate change adaptation plans. The county government is exploring cost-effective ways to work with the farmer groups to scale out the innovations.

In the Lushoto, the Lushoto District Council, SARI, CIAT are working together to promote on-farm multiplication of improved seeds as a strategy of helping farmers adapt to the changing climate, through the existing village SACCOS (farmer organizations). The maize, bean and Irish potato multiplication targets to provide at least 1,500 farmers with faster maturing, drought tolerant, and disease resistant varieties. Building up from CCAFS research work in the Hoima CSVs, the Hoima district government has initiated scaling up by linking the newly formed farmer groups with the private sector players through the Hoima District Farmers Association. The farmer groups hold village demonstrations and learning events targeting other farmers, in order to have a critical number of farmers that produce high quality products for the market.

Communication and engagement activities have contributed to achieving your Project outcomes: Documentation and dissemination of CSA success stories to policy makers, practitioners, researchers, farmers, and media through different avenues e.g. working papers, info notes, commentaries (Nature), blogs, newsletters, videos, photos, and presentations in various forums led to increased awareness of the ongoing research within the CSVs. Subsequently, Nyando CSVs featured in the Greenpeace report on building environmental resilience, GGCA booklet "Stories of Gender and Climate Change. The CSVs also hosted visits by policy makers from Rwanda, Ethiopia and media (BBC, France24), CBA9 participants including IPCC Chair. The Climate and Agriculture Network for Africa (CANA) was used to share CSV activities.

Evidence documents of progress towards outcomes: CCAFS EA communications report_2015.pdf

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

Annual progress towards outcome (end of 2017): NA

Annual progress towards outcome (end of 2018): <Not defined>

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: While our theory of change has not changed, evidence shows that continued collaboration with farmers through the CBOs may lead to increased uptake of CSA interventions. Learning events in the different experimentation plots and champion farmers will enhance sharing of success stories. Up-scaling and out-scaling of interventions will require enhanced collaboration with government, development partners, donors and the private sector.Communication of emerging CSA success stories will also enhance CSA uptake   and   out-scaling.

4.2 Contribution to CCAFS Outcomes

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

Indicator #1: FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

2019	
Target value: 4	**Cumulative target to date:** 5
Target narrative: 1. Best-bet options for livestock and and crop interventions in CSVs, including guidelines on variety and breed appropriateness 2. Adoption of best bet small ruminant and crop options by national agricultural research organizations, County and District governments, non-governmental organizations, and farmer groups in CCAFS sites.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Women farmers and organized youth groups access innovation funds in their CBOs and link with the private sector to access input supplies and agro-advisories for implementing CSA	

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 1.0
Target narrative: 1. CCAFS science and decision support tools used to generate evidence and test options to determine the best-bet options for small ruminant interventiosn in Nyando-Kenya CSVs. 2. Generating evidence and testing options to determine the best-bet options for crop interventitosn using CCAFS science and decision support tools in Nyando, Wote, Lushoto and Hoima CSVs. 3. Start engagement with national agricultural research organizations (KALRO, NARO, Tanzania -ARI) for adopting the best bet option packages. 4. Engaging farmer groups with participation of women in generating evidence and testing options for small ruminant and crop interventions best bet options.		
Narrative for your achieved targets, including evidence: The ILRI research team in Nyando worked on improving the SR breeding and management program by strengthening the capacity of men and women farmers to manage SR. It is anticipated that the ongoing documentation process across the CSVs will produce case study reports on promising crop-related CSA technologies and interventions for enhancing farmer capacity to adapt to climate change. The NARES in the region are promoting at least three CSA practices in each site. Across the sites, umbrella CBOs consisting of about 60% women are also actively involved in testing and evaluating crop related interventions.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		

2015
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Women constitute about 60% of the membership of all CBOs in the CSVs. Through the CBOs the women and youth farmers have access to the Innovation Fund for investing in agricultural activities to boost their income. Similarly, about 60% of the participants in farmer learning events were women. The women promote resilient agricultural practices through establishment of village demonstration farms where the other farmers can learn about CSA practices while the youth are mainly engaged in promoting the horticultural activities in the "smart farms".

2016	
Target value: 1	**Cumulative target to date:** 1
Target narrative: 1. Best-bet options for crop and small ruminant interventions in Nyando CSVs, including guidelines on variety/ breed appropriateness and management 2. Engagement with the County governments of Kericho, Kisumu, and Makueni including their agricultural extension staff for adopting and promoting the best bet option packages. 3. Engagement with the District local government authorities and the extension staff of Hoima and Lushoto for adopting and promoting the best bet option packages.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Women farmers and organized youth groups use CSA knowledge to increase productivity, and strengthen smart farms as learning hubs for farmers and increase their role as seed multiplication sites for resilient crop and fodder varieties	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

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

Indicator #1: FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate

smart approaches along the value chain, using CCAFS science

2019	
Target value: 4	**Cumulative target to date:** 6

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

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

2015		
Target value: 1	**Cumulative target to date:** 1	**Target achieved:** 1.0

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

Narrative for your achieved targets, including evidence: A baseline survey was done for small ruminants in Nyando, which will be used for developing SR business model. The business model for sorghum is being developed where the Kisumu County government, private sector organizations including Rafiki Microfinance,MAGOS enterprises and CBOs are involved. This will be scaled up into other administrative divisions of Kisumu and neighboring Counties.

The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Maseno University provided Nyando farmers including the youth and women with mobile phone messaging services for on-farm planning and decision making. The youth and women are involved in managing horticultural "smart farms". Smart farms consist of greenhouses and open spaces fitted with water harvesting structures and drip supply lines. The ongoing sorghum business model development involves women who constitute 60% of the CBO membership. Notably, it is the women farmers who have control over the small livestock.

2016	
Target value: 1	**Cumulative target to date:** 2
Target narrative: 1. Business model on livestock and crop value chains 2. Engagement with the Hoima and Lushoto District governments with their extension staff for scaling up CSVs in their districts, and with the County governments of Kisumu, Kericho and Makueni for scaling up CSVs	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Women farmers and organized youth groups access innovation funds in their CBOs and link with the private sector to access input supplies and agro-advisories for implementing CSA	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways
NA

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

There is not an Outcome Case Study added.

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019

FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2019 contribution towards the selected MOG
Modelling of CSA interventions under CC will provide additional information on how CSA options and portfolios enhance adaptive capacity.

Brief plan of the gender and social inclusion dimension of the expected annual output
Particular attention will be given towards the CSA options and portfolios where women are actively involved

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FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Major Output groups - 2014

FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2015 contribution towards the selected MOG
Baseline data will provide overview of existing interventions in the sites

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

Brief plan of the gender and social inclusion dimension of the expected annual output
particular attention will be given to interventions used by women and youth

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

FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2016

FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
Participatory testing, evaluation and promotion of crop-related CSA practices in EA. Specific interventions include promotion of drought tolerant, disease resistant, pest tolerant, faster maturing, and highly nutritious crops

Brief plan of the gender and social inclusion dimension of the expected annual output
Participatory testing involves women and organized youth groups, who will particularly spearhead village demonstrations and multiplication of seeds and planting material in the local communities

FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

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

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

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: To effectively contribute to the MOGs and CCAFS outcomes requires sustained technical support and investment (funding) to continue field activities and support engagement of next users especially policy makers and development partners who

are key in supporting up-scaling and out-scaling of CSA interventions.

5.2 Deliverables

Deliverable #1

Main Information
Title: Report on feeding value and methogenoic potential of sweet potato vine silage
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** The proximate analysis of the sweet potato vine silage is being done in the laboratory. This will be followed by data analysis that will be used to write the research report.

Next-user
National Livestock Research Departments, county gorvenments, and farmers
Knowledge, attitude, skills and practice changes expected in next-user: Multiple use of crops, development of livestock feed, improved livestock management
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Farmer learning events, exchange visits, videos, media articles and programs, exhibitions in different public events

Partners contributing to this deliverable
Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>

License adopted: <Not defined>	
Dissemination Channel: -1	
Dissemination URL: <Not defined>	

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #2

Main Information	
Title: Simple guidelines for small ruminant breeding and management in Nyando	
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
National Livestock Research Departments, extesnion agents, and farmers
Knowledge, attitude, skills and practice changes expected in next-user: Using scientific principles to undertake small ruminant breeding and improved husbandry activities
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing through farmer learning events, exchange visits, and training at the Agricultural Society of Kenya Show

Partners contributing to this deliverable
Partner #1 (Responsible): Ojango, Julie <J.Ojango@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
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Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #3

Main Information
Title: Farmer training and learning events

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Workshops	**Sub Type:** Workshop

Year of expected completion: 2016

Status: <Not defined>

Next-user

Farmers, community based organization, and development organizations

Knowledge, attitude, skills and practice changes expected in next-user: Using new skills and knowledge to enhance farm productivity, and using improved livestock structures and feeding

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing through farmer learning events and exchange visits

Partners contributing to this deliverable

Partner #1 (Responsible): Leley, Phillip <Phillip.Leley@kalro.org>, KARI - Kenya Agricultural Research Institute

Partner #2: Ojiem, John <johnojiem@gmail.com>, KARI - Kenya Agricultural Research Institute

Partner #3: Mafuru, January <januarymafuru@yahoo.com>, SARI - Selian Agricultural Research Institute

Partner #4: Hafashimana, David <davidhaf2000@yahoo.com>, NARO - National Agricultural Research Organization

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #4

Main Information

Title: Working paper on crop and institutional innovations for building resilience

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2016

Status: <Not defined>

Next-user

National agricultural research stations, extension agents, policy makers, NGOs and farmer groups

Knowledge, attitude, skills and practice changes expected in next-user: Embrace reform for integrated approaches to promoting crop and institutional innovations for building resilience and improving food security

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory testing and learning involving all stakeholders, and farmer learning events

Partners contributing to this deliverable

Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #5

Main Information	
Title: Strengthened farmer experimentations networks	
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2016	

Status: <Not defined>

Next-user

Community Based Organizations (farmers) that include owmen and organized youth groups

Knowledge, attitude, skills and practice changes expected in next-user: Using climate services and other agro-advisories for farm-level decision-making, on appropriate portfolio of CSA technologies

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Learning events and fairs convened by CBOs, video testimonials in partnership with the media and blogs

Partners contributing to this deliverable

Partner #1 (Responsible): Nyariwo, Wilson <wilson.nyariwo@viagroforestry.org>, Vi Agroforestry

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #6

Main Information
Title: Business model for small ruminant value chain
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Reference material

Year of expected completion: 2016
Status: <Not defined>

Next-user
Farmer groups, Ministry of Agriculture and Livestock, County government, and agricultural extension agents
Knowledge, attitude, skills and practice changes expected in next-user: Improved management of resilient small ruminant breeds for high quality products for the market
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Village knowledge sharing and learning events, business training through local agricultural institutions, and linkage with private sector

Partners contributing to this deliverable
Partner #1 (Responsible): Nyariwo, Wilson <wilson.nyariwo@viagroforestry.org>, Vi Agroforestry

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #7

Main Information
Title: Communication products through video testimonials, blog stories, picture stories, newsletters, and media campaigns
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Communication Products and Multimedia	**Sub Type:** Articles for media or news

Year of expected completion: 2016
Status: <Not defined>

Next-user
National agricultural research stations, extension agents, policy makers, NGOs and farmers
Knowledge, attitude, skills and practice changes expected in next-user: Use of resilient livestock breeds and crop varieties, and improved agronomic and livestock management practices
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Sharing the communication products through farmer learning events, mainstream media, and online

Partners contributing to this deliverable
Partner #1 (Responsible): Ojiem, John <johnojiem@gmail.com>, KARI - Kenya Agricultural Research Institute
Partner #2: Hafashimana, David <davidhaf2000@yahoo.com>, NARO - National Agricultural Research Organization
Partner #3: Mafuru, January <januarymafuru@yahoo.com>, SARI - Selian Agricultural Research Institute
Partner #4: Leley, Phillip <Phillip.Leley@kalro.org>, KARI - Kenya Agricultural Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #8

Main Information

Title: Database for monitoring performance and provision of feedback on SR in smallholder systems

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Data and information outputs, including datasets, databases and models

Sub Type: Databases

Year of expected completion: 2016

Status: <Not defined>

Next-user

County governments, community based organizaions (CBOs), and Ministry of Agriculture, Livestock and Fisheries

Knowledge, attitude, skills and practice changes expected in next-user: Changes in the SR stocking rate to suit land carrying capacity, and SR management for improved nutrition and higher

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Through farmer learning events convened by the CBOs and local County governments, as well as farmer exchange visits through "Farms of the the Future" program

Partners contributing to this deliverable

Partner #1 (Responsible): Ojango, Julie <J.Ojango@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #9

Main Information

Title: Baseline report on market for SR in CSV of Kenya: household baseline

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2015

Status: Complete

Next-user

National agricultural research stations, extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: Using resilient SR breeds and improved breeding methods

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Farmer learning events, exchange visits, videos, media articles and programs, exhibitions in different public events

Partners contributing to this deliverable

Partner #1 (Responsible): Ojango, Julie <J.Ojango@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/68390

Deliverable Metadata
Description: Improving productivity of sheep and goats (i.e. small ruminants- SR) under smallholder farming systems faced with challenges of unfavorable climatic events has been identified as one means of enhancing livelihoods of communities. The baseline study was implemented to understand the socio-economic aspects, population structure, management practices and production constraints of SR in the CSV of the Lower Nyando basin of Kenya.
Creator / Authors: Ojango JMK, Audho J, Oyieng E, Recha J, Muigai A.
Author Identifier: X
Publication / Creation date: 2015
Language: English
Coverage: Nyando

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information
Title: Local Adaptation Plans for Agriculture for Lushoto and Nyando
MOG :<Not defined>

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Reference material
Year of expected completion: 2016	
Status: <Not defined>	

Next-user

National agriculural research stations, extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: The use of resilient crop varieties and livestock breeds based on climate information and local climate related risk profile

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Village farmer learning events, and farmer exchange visits

Partners contributing to this deliverable

Partner #1 (Responsible): Mafuru, January <januarymafuru@yahoo.com>, SARI - Selian Agricultural Research Institute

Partner #2: Ojiem, John <johnojiem@gmail.com>, KARI - Kenya Agricultural Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Info Note: Climate-smart villages and the hope of food secure households in Nyando
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Other non-peer reviewed articles

Year of expected completion: 2015
Status: Complete

Next-user
National agricultural research stations, agricutural extension agents, policy makers, NGOs and farmers
Knowledge, attitude, skills and practice changes expected in next-user: The use of climate information for on-farm and livestock management decision making
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of farmer learning events, videos, print material, electronic and print media

Partners contributing to this deliverable
Partner #1 (Responsible): Ojiem, John <johnojiem@gmail.com>, KARI - Kenya Agricultural Research Institute
Partner #2: Hafashimana, David <davidhaf2000@yahoo.com>, NARO - National Agricultural Research Organization
Partner #3: Leley, Phillip <Phillip.Leley@kalro.org>, KARI - Kenya Agricultural Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	4

Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://ccafs.cgiar.org/publications/climate-smart-villages-and-hope-food-secure-households#.VtakIvmqpBd

Deliverable Metadata

Description: This info note highlights preliminary results from climate change adaptation and mitigation initiatives in the Nyando climate-smart villages. Key messages include: shift in farming techniques reduces number of households eating one or no meals each day, households adopt three to five crop innovations and above, greatly expanding on-farm choices for resilient varieties, and resilient crossbreeds of small livestock better adapted to changing feed and water conditions in Nyando provide additional income.

Creator / Authors: Kinyangi J,Recha J,Kimeli P,Atakos V

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Nyando, Kenya

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Rangeland rehabilitation for improved livestock feed through enclosures and strategic grazing management

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2016	
Status: <Not defined>	

Next-user

National agriculural research stations, extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: proper stocking rate and grazing management practices within rangelands

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Herders learning events in the rangelands

Partners contributing to this deliverable

Partner #1 (Responsible): Desta, Solomon <solomon.desta82@gmail.com>, MARIL-Ethiopia - Managing Risk for Improved Livelihoods-Ethiopia

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #13

Main Information

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

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2015

Status: Complete

Next-user

National agricultural research stations, agricultural extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: Use of climate information for on farm decision making

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: videos, print and electronic media, booklets

Partners contributing to this deliverable

Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/56996

Deliverable Metadata
Description: Improving food security needs appropriate climate related risk management strategies. These include using climate information to guide farm level decision-making. Progress has been made in providing climate services in Tanzania but there are significant gaps with regard to downscaled location specific forecasts, as well as generating timely, reliable and user friendly information. Majority of the farmers have been using indigenous knowledge (IK) forecasts to predict weather through observing the behavior of large animals, birds, plants, insects, and the solar system. IK is not often documented and is mainly sustained from one generation to another through oral history and local expertise, creating a wide inter-generational gap between its custodians and the young people. This study identifies and documents existing IK in weather forecasting in Lushoto district, northern Tanzania, and aims at promoting the integration of IK and scientific weather forecasting for climate risk management. Historical rainfall data was used in combination with data collected through household surveys, focus group discussions and key informant interviews. Majority of the farmers (56%) indicated that weather forecasts using IK were more reliable and specific to their location compared to scientific forecasts. Comparison was made of the seasonal March-April-May (MAM) forecasts in 2012 from IK and Tanzania Meteorological Agency (TMA), with both approaches predicting a normal rainy season. The IK forecasts were, however, more reliable in the long rainy MAM season compared to the short rainy October-November- December season. To improve accuracy, systematic documentation of IK and establishment of a framework for integrating IK and TMA weather forecasting is needed. There is also a need to establish an information dissemination network and entrench weather forecasting within the District Agricultural Development Programmes.
Creator / Authors: Mahoo H,Mbungu W,Yonah I,Radeny M,Kimeli P,Kinyangi J
Author Identifier: <Not defined>
Publication / Creation date: 2015-03-09T14:22:36Z,2015-03-09T14:22:36Z,2015-03-09
Language: English
Coverage: Tanzania

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #14

Main Information

Title: Climatic trends, risk perceptions and coping strategies of smallholder farmers in rural Uganda

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2015

Status: Complete

Next-user

National agricultural research stations, agriculutral extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: Use of climate information for on-farm decision making, use of suitable crop and livestock production practices

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: print and electronic media, booklets

Partners contributing to this deliverable

Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking

Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/67139

Deliverable Metadata

Description: Smallholder farmers in Uganda face a wide range of agricultural production risks, with climate change and variability presenting new risks and vulnerabilities. Climate related risks such as prolonged dry seasons have become more frequent and intense with negative impacts on agricultural livelihoods and food security. This paper assesses farmers' perceptions of climate change and variability and analyses historical trends in temperature and rainfall in two rural districts of Uganda in order to determine the major climate-related risks affecting crop and livestock production and to identify existing innovative strategies for coping with and adapting to climate-related risks, with potential for up-scaling in rural districts. The traditional coping strategies that have been developed by these communities overtime provide a foundation for designing effective adaptation strategies.

Drought, disease and pest epidemics, decreasing water sources, lack of pasture, bush fires, hailstorms, changes in crop flowering and fruiting times were the major climate-related risks reported across the two districts. Farmers use a wide range of agricultural technologies and strategies to cope with climate change and climate variability. Mulching, intercropping and planting of food security crops were among the most common practices used. Other strategies included water harvesting for domestic consumption, other soil and water conservation technologies and on-farm diversification. Farmers often use a combination of these technologies and practices to enhance agricultural productivity. The average maximum temperatures increased across the two districts. Trends in average annual rainfall showed mixed results with a general decline in one district and a relatively stable trend in the other district. Perceived changes in climate included erratic rainfall onset and cessation, which were
either early or late, poor seasonal distribution of rainfall and little rainfall. Farmers also reported variations in temperatures. Farmers' perception of changing rainfall characteristics and increasing temperatures were consistent with the observed historical climatic trends from meteorological data.

Creator / Authors: Mubiru, DN,Kyazze, FB,Radeny, M,Zziwa, A,Lwasa, J,Kinyangi, J

Author Identifier: <Not defined>

Publication / Creation date: 2015-06-23T16:46:40Z,2015-06-23T16:46:40Z,2015-06-23

Language: en

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #15

Main Information

Title: Participatory Evaluation of Common Bean for Drought and Disease Resilience Traits in Uganda

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	Sub Type: Working paper

Year of expected completion: 2015

Status: Complete

Next-user
National agricultural research stations, agricultural extension agents, policy makers, NGOs and farmers
Knowledge, attitude, skills and practice changes expected in next-user: Selection and planting of suitable bean varieties, the use of improved agronomic practices
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of farmer learning events, videos, print material, electronic and print media

Partners contributing to this deliverable
Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking	
Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/71220

Deliverable Metadata

Description: The use of genetic resources to respond to occurring and unpredictable climatic changes is one of the coping mechanisms for small scale farmers in Africa. This paper summarizes findings of a participatory action research (PAR) project evaluating different common bean (Phaseolus vulgaris) varieties with nine farmer groups across nine villages in two CCAFS sites of Rakai and Hoima districts in Uganda. Six and fifteen bean varieties including local landraces, farmer variety (commonly grown by farmers), Uganda officially released varieties and new germplasm bearing different characteristics were evaluated with over 300 farmers in replicated trials in the first season of 2012, and two seasons of 2013, respectively.

The study provides evidence that breeders and farmers look out for similar traits, with yield being the major driver, and in most cases end up with the same results with a few discrepancies. Some key lessons emerged from the findings. First, making blanket variety and management recommendations to cover large physical areas is erroneous. Site and context specific recommendations, especially in the view of the variability in climatic conditions and soils are probably the best option. Second, the results highlight the need for plasticity in bean varieties (i.e. ability to change structure and function when exposed to changes in the environments hence suitability to a wide range of environments) in addition to having farmer preferred traits. Lastly, the project also highlighted the ability, capacity and willingness of farmers to adopt and adapt new technologies in the face of varying climate scenarios.,Internal Review

Creator / Authors: Mukankusi CM,Nkalubo S,Katungi E,Luyima G,Awio B,Radeny M,Kinyangi J

Author Identifier: <Not defined>

Publication / Creation date: 2016-02-26T09:18:12Z,2016-02-26T09:18:12Z,2015-12-30

Language: en

Coverage: Uganda

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #16

Main Information

Title: Climate - smart villages and the hope of food security in Kenya

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	Sub Type: Other non-peer reviewed articles

Year of expected completion: 2015

Status: Complete

Next-user

National agricultural research stations, agricultural extension agents, policy makers, NGOs and farmers

Knowledge, attitude, skills and practice changes expected in next-user: Crop and livestock innovations, use of crop diversification, promoting collective action

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of farmer learning events, videos, print material, electronic and print media

Partners contributing to this deliverable

Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking

Address gender and social inclusion aspect	5
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/65144

Deliverable Metadata

Description: Preliminary results from climate change adaptation and mitigation initiatives in the Nyando climate-smart villages

Creator / Authors: James Kinyangi, John Recha, Phillip Kimeli, Vivian Atakos

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Nyando

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #17

Main Information
Title: Info Note: Climate-smart villages and progress in achieving household food security in Lushoto, Tanzania
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Other non-peer reviewed articles

Year of expected completion: 2015
Status: Complete

Next-user
National agricultural research stations, agricutural extension agents, policy makers, NGOs and farmers
Knowledge, attitude, skills and practice changes expected in next-user: The use of climate information for on-farm and livestock management decision making
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of farmer learning events, videos, print material, electronic and print media

Partners contributing to this deliverable
Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/70257

Deliverable Metadata

Description: Preliminary results from climate change adaptation and mitigation initiatives in Lushoto climate-smart villages, Tanzania.

Creator / Authors: Recha J,Radeny M,Kinyangi J,Kimeli P,Atakos V,Lyamchai C,Ngatoluwa R,Sayula G

Author Identifier: <Not defined>

Publication / Creation date: 2016-02-02T15:29:50Z,2016-02-02T15:29:50Z,2015-11-30

Language: en

Coverage: Lushoto, Tanzania

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #18

Main Information

Title: Science Article (Nature): Climate-adaptation effort cuts hunger in African villages

MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Other non-peer reviewed articles

Year of expected completion: 2015

Status: Complete

Next-user

National agricultural research stations, agricultural extension agents, policy makers, NGOs and farmersl

Knowledge, attitude, skills and practice changes expected in next-user: The use of climate information for on-farm and livestock management decision making

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of farmer learning events, videos, print material, electronic and print media

Partners contributing to this deliverable
Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.nature.com/news/climate-adaptation-effort-cuts-hunger-in-african-villages-1.17112

Deliverable Metadata
Description: This article published on the Nature News website highlights emerging results from the CCAFS climate-smart villages in Nyando.
Creator / Authors: Natasha Gilbert
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English
Coverage: Nyando, Kenya

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #19

Main Information
Title: Agricultural Adaptation and Institutional Responses to Climate Change Vulnerability in Ethiopia

MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2015

Status: Complete

Next-user

NARES and policy makers

Knowledge, attitude, skills and practice changes expected in next-user: Integrating local knowledge

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: CCAFS website and a blog

Partners contributing to this deliverable

Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking

Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/56997

Deliverable Metadata

Description: Climate change is a major development challenge to Ethiopia. Climate change is expected to adversely affect all economic sectors, eco-regions, and social groups. Agriculture is one of the most vulnerable sectors as it is highly dependent on rainfall. This report synthesises four case studies focusing on the impacts, vulnerabilities and local adaptation practices in Ethiopia's agricultural sector, including policy and institutional responses. The case studies were carried out in nine districts, representing the major agro-ecological and farming systems. The case studies use qualitative data generated through rapid appraisal methods, complimented with a review of relevant literature. The results show that there are changes in local climatic conditions, manifested through several indicators. These include increased temperatures, changes in rainfall amounts and patterns, and increased incidence of drought and flood events. Drought was a major problem in almost all sites, while floods affected localized areas in some of the sites. Informants attributed climate change to poor management of natural resources (forests and grazing lands), with rapid population growth as a key driver.

Creator / Authors: Bewket W, Radeny M, and Mungai C

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Ethiopia

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #20

Main Information
Title: Indigenous Knowledge for Seasonal Weather and Climate Forecasting across East Africa
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study

Year of expected completion: 2015

Status: Complete

Next-user
NA
Knowledge, attitude, skills and practice changes expected in next-user: NA
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: NA

Partners contributing to this deliverable

Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.slideshare.net/CFCC15/indigenous-knowledge-poster-final-50348920

Deliverable Metadata

Description: Advance knowledge of climate information is important in helping farmers make decisions on resource allocation and type of agricultural enterprises in a season. Climate information coupled with agro-advisory services offers greater potential to enhance capacity of farmers to adapt to climate variability and climate change. In East Africa (EA), significant gaps still exist in provision of climate services for farmers, specifically downscaled location-specific forecasts, reliable, timely, and user-friendly climate information that effectively addresses farmer's needs. Consequently, farmers often rely on indigenous knowledge (IK) for their seasonal forecasts, where locally observed variables and experiences are used to assess and predict the local weather conditions and climate e.g. onset of rains. However, IK is not widely documented and often passed on from one generation to another through oral history, thus creating a wide inter-generational gap between IK custodians and the young generation.

Creator / Authors: Maren Radeny, Mary Nyasimi, James Kinyangi, John Recha, Drake Mubiru, Henry Mahoo, Ayal Desalegn

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: East Africa

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #21

Main Information
Title: Engendering Climate Smart Agricultural Innovations in East Africa
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study

Year of expected completion: 2015
Status: Complete

Next-user
NA
Knowledge, attitude, skills and practice changes expected in next-user: NA
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: NA

Partners contributing to this deliverable
Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	5
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.slideshare.net/CFCC15/gender-poster-final-50419046

Deliverable Metadata
Description: The negative impacts of climate change on agricultural productivity and food security varies by gender and wealth affecting the vulnerable groups, especially women. Various factors exacerbate the differential effects of climate change on gender, among them persisting sociocultural behaviours, economic roles and responsibilities and political barriers. Other barriers include limited access to resources, new technologies, information and credit. In East Africa, women's reliance on ecological resources, coupled with the above further exacerbate the problem. This study conducted in Nyando, Kenya aims to understand the climate risks and adaptation strategies in agriculture for men and women across different household types. We used survey data from 200 households, complimented with information from four focus group discussions. Out of the respondents, 45.5% and 54.5% were male and female headed households respectively.
Creator / Authors: Mary Nyasimi, Ruth Aura, Maria D. Phiri and Catherine Mungai
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English
Coverage: East Africa

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #22

Main Information
Title: Private Sector Actions to Enable (or Thwart) Climate-Smart Agriculture in Small-scale Framing in Tanzania
MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study
Year of expected completion: 2015	
Status: Complete	

Next-user
NA
Knowledge, attitude, skills and practice changes expected in next-user: NA

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Slide Share

Partners contributing to this deliverable

Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.slideshare.net/cgiarclimate/private-sector-actions-to-enable-or-thwart-climate-smart-agriculture-in-smallscale-farming-in-tanzania

Deliverable Metadata

Description: Small companies and informal trade plays an important role in East African agriculture but are typically out of view. This study examines patterns of and incentives for private sector investments and activities in climate-smart agriculture (CSA) in East Africa. Building capacity of private sector entities and improving their coordination with the public sector so that smallholders are not excluded may be key to facilitating the scaling up of agricultural innovations that improve food security for smallholders grappling with a changing climate (Jayne et al.2006; Gyau, 2015).

Creator / Authors: Sheryl Quail, Leah Onyango, John Recha, and James Kinyangi

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Tanzania

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #23

Main Information
Title: Changing crop practices to address climate related risks among rural farmers in Nyando, western Kenya
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study

Year of expected completion: 2015
Status: Complete

Next-user
NA
Knowledge, attitude, skills and practice changes expected in next-user: NA
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Slide share

Partners contributing to this deliverable
Partner #1 (Responsible): Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace

Dissemination URL: http://www.slideshare.net/cgiarclimate/private-sector-actions-to-enable-or-thwart-climate-smart-agriculture-in-smallscale-farming-in-tanzania

Deliverable Metadata

Description: Rural households in East Africa depend on rain fed agriculture as the primary source of food and income. In Nyando, Variation in seasonal rainfall coupled by late onset and early cessation events contributes to water stress and reduces length of crop growing period. Drought and flooding events are worsening land degradation. With these risks, nearly 15 percent of households in Nyando are unable to meet their food needs for 3-4 months in a year, and malnutrition in children under five years is estimated to be 40 percent. Nyando climate -smart villages Climate-smart villages (CSVs) are sites where researchers and development partners are working with smallholder farmers to test climate-smart agricultural interventions. Climate-smart agriculture aims to sustainably increase productivity and income, build resilience to climate change, reduce green house gas emissions where possible and enhance achievement of national food security and development goals. CSVs are learning grounds for researchers, policy makers, development practitioners and farmers.

Creator / Authors: Recha J, Kinyangi J, Radeny M

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: <Not defined>

Coverage: Kenya

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

Next user #1

Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: The CCAFS climate smart villages are located in the administrative locations of the sub-national governments. The on-farm interventions and reports were used for learning by the respective departments of agriculture. The development partners borrowed ideas from the rural agricultural innovations for undertaking similar projects elsewhere, where crop,livestock and soil and water management interventions were established. Specifically, the project focused on working with National agricultural research organizations,e.g. Kenya Agricultural Research Institute, Uganda's National Agricultural Research Organization, Tanzania's Agricultural Research Institute and National universities, e.g. Maseno University in Kenya, Sokoine University of Agriculture in Tanzaniato test CSA interventions with farmers. Non governmental organizations such as World Neighbors and World Vision are critical for up-scaling and outscaling of CSA interventions while sub-national governments e.g. Makueni County Government and Kisumu County Government in Kenya, Lushoto District Council in Tanzania support through policy changes. Maseno University has developed a Training Manual focusing on participatory approaches for discussing climate information services with farmers. The partners promoted the application of crop innovations like diversification and inter-cropping, and introduced new crops, and new varieties of existing crop types. Working with ILRI, a project on small ruminants has also been initiated.

Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Women led village demonstrations, farmer learning events, youth led horticultural demonstrations, County and District Field days, farmer exchange visits within the villages, blog stories, print and electronic media programs.

Reported deliverables serve as evidence towards this achieved change: Blog story on CANA website: Village youth group inspires climate action
http://canafrica.com/caina_blog/village-youth-group-inspires-climate-action/

France24 TV documentary on Climate-smart villages Nyando:
 https://www.youtube.com/watch?list=PLD632736EE276E119&v=Wc70Bw3oFIQ

Nature news: Climate-adaptation effort cuts hunger in African villages
http://bit.ly/1BBtnwp

Daily Nation newspaper: New goat breed promises high yields:
http://bit.ly/1H6NxB6

Kinyangi J, Recha J, Kimeli P, Atakos V. 2015. Climate - smart villages and the hope of food security in Kenya. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). https://cgspace.cgiar.org/handle/10568/65144

Lessons and implications for the next planning cycle: There is need to have more farmer learning events that are jointly planned with CCAFS partners. They effectively facilitate knowledge exchange.

5.4 Project highlights

Project highlight Information #1	
Title: <Not defined>	
Author: <Not defined>	**Subject:** <Not defined>
Publisher: <Not defined>	**Year:** 2015
Project highlights types	**Start date:** 2016-03-01
End date: 2016-03-01	**Is global:** No
Country:	**Keywords:** <Not defined>
Highlight description: <Not defined>	
Introduction / Objectives: <Not defined>	
Results: <Not defined>	
Partners: <Not defined>	
Links / Sources for further information: <Not defined>	

Project highlight Information #1

Title: Nyando farmers use resilient small ruminant breeds for climate change adaptation

Author: John Recha and Philip Kimeli	**Subject:** Climate change adaptation in Nyando
Publisher: <Not defined>	**Year:** 2015

Project highlights types
Participatory action research

Start date: 2016-03-01	**End date:** 2016-03-01

Is global: No

Country: Kenya	**Keywords:** Small ruminants; women; climate change adaptation, Nyando climate smart villages

Highlight description: CCAFS facilitated a partnership from late 2011 around collective action that integrates scientific applications for delivery of development outcomes in Nyando. The partnership with World Neighbors, Vi Agroforestry, Kenya Agriculture and Livestock Research Organisation (KALRO), Ministry of Agriculture and Livestock Development, and CGIAR centers sought to test a portfolio of promising climate change adaptation, mitigation and risk management interventions. Introduction of improved breeds of small ruminants (indigenous sheep and goats) by ILRI is one of the interventions, with the aim of improving the productivity small ruminants in Nyando. SR are suited to smallholder farming systems due to their small body size, flexible feeding habits and short generation intervals. They also require lower initial investment costs and play a complementary role to other livestock in the utilization of feed resources and are often owned and tended by women and children. In May 2015, the CCAFS Program Management Committee and Independent Panel Science members visited the farmers involved in the small ruminants project.The project also generated a lot of interest in the local media leading to numerous site visits to the farmers and interviews with the lead scientists. A key highlight of the activity was the participation of the Deputy President of Kenya, William Samoei Ruto in the annual goat auction held at Barng'oror, Kapsorok on December 2015. Increase in number of goats has been linked with the current activities on livestock management. The Deputy President urged the farmers and especially those from Kapsokale CBO in Upper Nyando to continue being champions and role models of goat keeping. From 2014, there has been 100% increase in the number of goats brought to the market. Close to 4,000 goats were sold at the auction in 2015, with over 60% coming from Kapsokale CBO members.

Introduction / Objectives: In Nyando, the indigenous small ruminants (SR) are generally left to graze on stovers from crops, and take a long time to grow to maturity (up to 4 years). Farmers know what traits they desire in their SR, and are willing to learn and change their practices in order to improve their livelihoods. CCAFS through ILRI partnered with the local CBOs to introduce resilient breeds of Galla goats and Red Maasai sheep in 2012 through 2013. The aim was to cross selected Galla goats and Red Maasai sheep with the small local East African breeds for resilience and increased productivity.

Results: The Galla goats and Red Maasai sheep have become popular in Nyando. It is projected that in the next 5 years they will replace all the other breeds in the area. In 2011, nearly 64% of the 467 households in Nyando villages had not introduced new livestock breeds. This changed in 2012 when 70 breeding units of Galla goats were introduced, and in mid-2013 when 30 breeding units of Red Maasai sheep were introduced. The households are now getting additional income from selling sheep, goats and chicken ranging between USD 266 and 300. From the 100 breeding units of Galla goats and Red Maasai sheep, a total of 1,506 crosses were registered in 2014, and increasing to 1,648 in 2015. With introduction of additional 44 breeding units towards end of 2015, the population of the resilient breeds is expected to double. At this rate, it is anticipated that the current total population of 38,725 sheep and goats (on average 57% of households keep sheep and goats) in the 106 villages could be replaced by new Galla and red Maasai crosses in five years, clearly demonstrating the benefit of breeding and genetic improvement as climatic conditions change. The Red Maasai sheep and Galla goats have faster growth, very strong compensatory growth after long dry seasons, resistance to internal parasites, and good tolerance to trypanosomes, drought and heat stress. The cross breeds of Red Maasai sheep and Gala goats also mature earlier compared to the local breeds. It also takes less time and labor to raise small ruminants compared to large cattle, and the meat and milk gains of small ruminants far exceed cattle because they have shorter reproductive cycles and maximize grass and fodder use from grazing sheep and browsing goats.

Partners: The partners include the Kisumu and Kericho County Departments of Agriculture and Livestock, who provide small ruminant extension services in the villages.a

Kenya Agricultural and Livestock Research organization (KARLO) on fodder research, production and management.

World Neighbors and the Ministry of Agriculture, Livestock and Fisheries supported the acquisition of the necessary permits, training of community paravets and provided extension services.

Links / Sources for further information: Kenya's native goats and sheep, expertly crossbred, are key to helping farmers cope with climate change
http://news.ilri.org/2015/07/10/kenyas-native-goats-and-sheep-expertly-crossbred-are-key-to-helping-farmers-cope-with-climate-change/

Sustainable small ruminant breeding program for climate-smart villages in Kenya
https://ccafs.cgiar.org/publications/sustainable-small-ruminant-breeding-program-climate-smart-villages-kenya#.VtYRyOZKZ2E

Heat Tolerant, Tough Teeth, Lots Of Milk — They're Supergoats!
http://www.npr.org/blogs/goatsandsoda/2015/03/26/395613089/heat-tolerant-tough-teeth-lots-of-milk-theyre-supergoats

Photos - https://www.flickr.com/photos/cgiarclimate/sets/72157650141485634

Newspaper article - http://www.nation.co.ke/business/seedsofgold/New-goat-breed-promises-high-yields/-/2301238/2725846/-/5nfsogz/-/index.html

Ojango JMK, Audho J, Oyieng E, Recha J, Muigai A. 2015. Sustainable small ruminant breeding program for climate- smart villages in Kenya: Baseline household survey report. CCAFS Working Paper no. 127. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
https://cgspace.cgiar.org/handle/10568/68390

Kinyangi J, Recha J, Kimeli P, Atakos V. 2015. Climate - smart villages and the hope of food security in Kenya. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
https://cgspace.cgiar.org/handle/10568/65144

France24 documentary: Climate-smart villages Nyando
https://www.youtube.com/watch?list=PLD632736EE276E119&v=Wc70Bw3oFIQ

Detailed information on on-going activities within the project sites is availed at http://ilri-angr.wikispaces.com/Nyando+Project

6. Activities

Activity #1
Title: Local adaptation plans, institutional innovations and business models for up scaling CSA
Description: Through participatory action research (PAR) in collaboration with local communities, national research organizations, and NGOs, this activity will focus on testing on-farm and evaluation of a portfolio of promising risk management CSA technologies and practices across CCAFS sites in East Africa. Specific interventions will include enhancing climate smart agriculture through decision support tools including use of CCAFS scenarios for local level adaptation planning, agro-advisories and climate services, diversification, institutional innovations for rural financing through CBOs, innovation financing, input and output markets and climate-smart farm models.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

Leader: Recha, John <j.recha@cgiar.org>, ILRI - International Livestock Research Institute	
Status: On-going	**Justification:** Working with CBOs, partners tested risk management practices in Hoima, Lushoto, Nyando and Wote that involving providing agro-advisories and climate information for decision making to over 2,750 households. These households accessed finances through the CBO innovation fund, where 1,675 households in Nyando were linked up to a microfinance services. The smart farm models were used to provide knowledge on improved agronomic practices and new crop varieties to over 2,000 farmers in test villages in Nyando.

Activity #2
Title: Participatory evaluation of multiple stress tolerant (drought, disease, pests) crop varieties
Description: The activity focuses on participatory testing and evaluation of crop-related CSA practices across CCAFS sites in EA. Specific interventions include: (i) participatory evaluation and promotion improved cassava and sweet potato in Hoima led by ZARDI-Bulindi (ii) evaluation and promotion of early maturing, pest tolerant varieties of Irish potatoes with higher nutritive value (CIP); disease resistant and pest tolerant maize varieties (SARI); disease resistant and pest tolerant bean landraces, (Bioversity) in Lushoto (iii) evaluation, dissemination and uptake of new sorghum and legume technologies integrated with improved soil and water management technologies and explore opportunities for creating farmer market linkages in Makueni (ICRISAT & KALRO Katumani) (iv) testing of drought tolerant sorghum and maize, new varieties of legume crops such as pigeon peas and cow peas, tissue culture bananas, fruit trees in on-farm arrangements that supplement improved pasture, soil and water management practices in Nyando (KALRO Kibos)

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

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

Status: On-going	**Justification:** Within Hoima, improved cassava and sweet potatoes were evaluated and promoted with 260 farmers from two CBOs. In Lushoto about 1,089 households from three SACCOS participated in evaluation and promotion of early maturing, pest tolerant and disease resistant varieties of Irish potatoes, maize and beans. In Wote, about 300 farmers were involved in the evaluation and promotion of sorghum and legume inter-crop technologies. In Nyando, about 1,675 farmers drawn from three CBOs were involved in testing of drought tolerant sorghum and legumes, tissue culture bananas, fruit trees in on-farm arrangements that supplement improved pasture, soil, and water management practices.

Activity #3

Title: Targeting small-ruminant resilient breeds for climate change adaptation and improved feeds.

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

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

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

Status: On-going	**Justification:** Following the establishment of Galla goat and Red maasi sheep breeding units earlier, about 1,880 crosses were registered in 2015. This represents about one third of the 5,106 sheep and goats in the seven test villages. Following data collection for the baseline household survey, a report (CCAFS working paper 127) was developed, and characterization of small-ruminant production environments as well as management strategies for sustainable production and improvement are ongoing. The experiment on alternative small ruminant feeds from sweet potato vines (SPVs) was concluded and laboratory proximate analysis of the feed is underway for a research report.

Lessons regarding your project activities and possible implications for the coming planning cycle: Activities were reduced due to the budget cuts, but because the work involved building on initiatives from previous years, achievements were made in the

participatory evaluation of multiple stress tolerant crop varieties. For example, Lushoto farmers identified the best Irish Potato varieties, while the Nyando   and Wote farmers identified the most suitable Sorghum varieties.   Similar results were achieved in the other crops, alongside the suitable agronomic practices. in relation to the small-ruminant (SR) activities, farmers are making incremental changes in their management, involving selective breeding   and   providing   adequate   feeds.

7. Leverages

<Not defined>

Title: Surveillance and early warning systems for climate sensitive diseases in Vietnam and Laos

Start date (dd-MM-yyyy)	01-01-2015	End date (dd-MM-yyyy)	31-12-2018
Management liaison	RP SEA - South East Asia Region	**Mgmt. liaison contact**	Tan Yen, Bui <y.bui@irri.org>
Lead organization	ILRI - International Livestock Research Institute - Vietnam	**Project leader**	Nguyen, Hung <h.nguyen@cgiar.org>
Project type	CCAFS CORE	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP2: Climate Information Services and Climate-Informed Safety Nets	RP SEA: South East Asia

Bilateral project(s) contributing to this project

This project does not have Bilateral projects

Summary

A warmer, wetter world is likely to be sicker. The Mekong is a hotspot for human, animal and plant disease, and some of the most important are highly sensitive to climate and climate changes. These diseases impose enormous burdens on human health and the agricultural sector and hinder broader development. Better tackling climate sensitive disease requires better information and tools. We identify a portfolio of climate-based information systems that target important diseases and are used successfully in other countries. We propose action research to adapt them for Vietnam/Laos and ensuring delivery through partnerships. The outcome is farming communities that are able to take practical action to reduce disease risk and/or benefit from risk-mitigating action by health providers. The impacts are better health, reduced economic loss from disease, increased food security, and ecosystems protected from disease spillover and misuse of agricultural chemicals

2. Partners

Partner #1

Institution: ICRAF - World Agroforestry Centre

Contacts

Type	Contact	Responsibilities and contributions
Partner	Su, Yufang <suyufang@mail.kib.ac.cn>	Activity 2014-206 *Co-Leader*.
Partner	Xu, Jianchu <J.C.Xu@cgiar.org>	Activity 2014-206 *Leader*.

Partner #2

Institution: VWB/VSF-Canada - Veterinary Withou Borders Canada

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Zalcman, Emma <emma@vetswithoutborders.ca>	Coordinating a project in Laos. But Emma contract will be terminated by March 2016 due to a lack of funding.

Partner #3

Institution: HSHP CENPHER - Hanoi School of Public Health Center for Public Health and Ecosystem Research

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Pham Duc, Phuc <pdp@hsph.edu.vn>	Activity 2014-203 *Partner*. Activity 2014-204 *Partner*. Activity 2014-249 *Partner*.

Partner #4

Institution: IMHEN - Vietnam Institute of Meteorology, Hydrology and Environment

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Quyen, Nguyan Huu <quyen.nguyenhuu@imh.ac.vn>	Mr. Quyen is a national partner from IMHEN and to work on climate data

Partner #5

Institution: NUOL - National University of Laos

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kongmanila, Daovy <daovyk@yahoo.com>	Dr Daovy Kongmanila facilitates the data collection of zoonotic diseases, aflatoxin and climate data in Laos. She is also the connecting person with other partners in Laos

Partner #6 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Nguyen, Hung <h.nguyen@cgiar.org>	Activity 2014-203 *Leader*.
Partner	Bett, Bernard <b.bett@cgiar.org>	Activity 2014-204 *Leader*.
Partner	Lindahl, Johanna <Johanna.Lindahl@slu.se>	Activity 2014-205 *Leader*.
Partner	Grace, Delia <d.grace@cgiar.org>	Activity 2014-249 *Leader*.

| Project Coordinator | Lee, Hu Suk <h.s.lee@cgiar.org> | Dr. Hu Suk Lee is a postdoc scientist of this project. He started working for ILRI from July 2015 and is the main person to work in Vietnam on the sero-prevalences of zoonotic diseases and epidemiological analysis between diseases and climate change. |

Partner #7

Institution: MARD - Ministry of Agriculture and Rural Development

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Thanh, Ha Minh <thanhhanipp@yahoo.com>	Dr. Ha Minh Thanh from the Plant Protection Research Institute (PPRI) is the responsible for aflatoxin sampling and analyses in Vietnam
Partner	Nguyen, Tung <nguyentungncvd@hotmail.com>	Dr. Tung Nguyen is the head of Epidemiology Division, Department of Animal Health, MARD. He is collaborating in providing pig serum samples and analyses of leptospirosis and Japanese encephalitis.
Partner	Khong, Nguyen Viet <nguyenvietkhong@yahoo.com>	Dr. Nguyen Viet Khong is the Deputy Director of National Institute Veterinary Research (NIVR), MARD. He is collaborating regarding pig serum/urine sampling, and analyses of leptospirosis, Japanese encephalitis and aflatoxins.

Partnerships overall performance over the last reporting period: We did make collaborative Research agreements (CRAs) in January 2016. In 2015, in order to make CRAs, we had several meeting with the national partners. It was very useful to understand each others as well as good opportunities to share various information.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: We have learned that it took a long time to work with the Ministries and research institutes due to administrative process. For the future research, we need to have enough   time   to   work   with   them.

3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Laos
Province	21.3289	21.3289	Son La
Province	21.0233	21.0233	Hanoi
Province	19.1855	19.1855	Nghe An
Province	12.8343	12.8343	Dak Lak
Province	10.8991	10.8991	Dong Nai
Province	10.5321	10.5321	An Giang

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
Animal health, livestock and crop management bodies at different levels will use the information from the project (early warning system for climate sensitive diseases) to adapt or develop strategies and policies to better identify and reduce risks of livestock and crop diseases related to climate change. Farmers from the study sites and other places in Vietnam will know timely when they harvest maize or optimize the time of harvest to avoid diseases and to gain the productivity. The period of harvesting will be provided by the tools developed by the project to forecast the time of diseases occurrence and communicated by crop management organizations at the local levels. They will also know timely to prevent their pigs from getting sick or when they have to sell pigs to avoid the impact of diseases. The alerts on high risk of specific diseases prevention and time to selling animals will be provided by the tools developed by the project and communicated to farmers by animal health workers or extension services. Particularly, farmers in Laos will be aware of the best time for rubber tapping based on the climate information system developed.

Annual progress towards outcome (end of 2015): Provincial departments of agriculture and rural development where the animal diseases hot spots are present will take a first set of animal disease hot spots maps from the project as advisories to inform the risk of animal diseases in their respective province.

Annual progress towards project outcome in the current reporting cycle (2015): We have obtained the climate data (last 30 years), human data (last 20 years) and agriculture data (last 10 years) in Vietnam. We are developing risk maps for climate sensitive zoonotic diseases. We made collaborative research agreements (CRAs) with our national partners (NIVR and PPRI) in order to assess the sero-prevalences of diseases and identify the potential risk factors. Currently, seasonality of viral encephalitis (VE) and associated environmental factors were evaluated. Based on this analysis, one manuscript is being prepared for publication.

Communication and engagement activities have contributed to achieving your Project outcomes: We had several meetings with the national partners for collaborative research agreements (CRAs) (including sampling/analysis and questionnaires).

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): Provincial departments of agriculture and rural development where the animal diseases hot spots are present will take full set of animal disease hot spots maps from the project as advisories. This will serve to inform the risk of animal diseases in their respective province.

Annual progress towards outcome (end of 2017): Pilot farmers will have information to help mitigate zoonotic pig disease risk (e.g. When to vaccinate their pigs). This information is

from the project (early warning system for climate sensitive diseases)

Annual progress towards outcome (end of 2018): In Laos, rubber management bodies will develop a system to provide farmers with information on the best time for rubber taping thanks to the climate information system developed in Laos and China. Also in Laos, animal health workers and human health workers will develop a pilot whereby they will meet and work together with monitoring people to better prevent diseases transmitted from animal to humans.

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: Initially, we are planning to evaluate the associations between climate change and climate sensitive diseases. However, due to a lack of data, we need to collect samples in order to understand the epidemiology of diseases across the country. After that, we will develop a more concrete idea in terms of risk maps and identifying the association between climate change/ variability between diseases.

4.2 Contribution to CCAFS Outcomes

RP SEA - Outcome 2019: National public sector institutions and the private sector (ICTS, media) understand climate information needs of stakeholders in the food system; collaborate on the design of climate services and products to meet those needs; and interpret and communicate the climate information effectively. Farmers access and use climate and early warning information and advisories.

Indicator #1: FP2 Indicator: Number of regional, national, and/or sub-national initiatives incorporating research outputs to develop or improve major demand-driven, equitable, climate informed services that support rural communities

2019	
Target value: Activity 2014-203: 5 institutionsActivity 2014-204: 1 million households of pig keeping communityActivity 2014-205: 5 institutionsActivity 2014-206: 10000 rubber farmers	**Cumulative target to date:** Cannot be Calculated
Target narrative: Activity 2014-204: Number of farmers with improved capacity to adapt to climate related risk by accessing research-informed climate services and/or well-targeted safety nets. This is for the pilot: the potential number of farmers at risk and benefiting from information is in tens of millions Activity 2014-205: We target research institutes and universities working on maize production in Vietnam and the region to take up the forecasting model.	

2019
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015		
Target value: 3	**Cumulative target to date:** 3	**Target achieved:** 2.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: We conducted a systematic literature review for the relationship between zoonotic diseases and climate change. We found that the occurrence of zoonotic diseases is strongly influenced by climate change around the world. However, a little is known about our target diseases in Vietnam and Laos (Japanese Encephalitis, leptospirosis and aflatoxins). Therefore, we are planning to collect samples from 6 provinces across the Vietnam in collaboration with the national partners in order to understand the epidemiology of diseases.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: We do not have a strong component for gender. However, we will conduct a survey (mainly the awareness of climate sensitive diseases), and then we will be able to understand the differences depending on gender, social economic factors, education level and age etc..		

2016	
Target value: 8	**Cumulative target to date:** 11
Target narrative: Scaling up climate advisories on weather associated plant, animal and zoonotic pests to 8 provincial departments of agriculture and rural development and health department in Vietnam and Laos	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The option of mitigating risks of zoonotic and plant diseases will imply the gender and social inclusion contribution	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways
The impact pathways take place through the take-up of the diseases mapping by next users to prevent and avoid disease outbreak, to support targeted surveillance/control. This will reduce the loss of livestock production and the expenses for animal and human health care due to diseases. This contributes to the improvement of maize quality and economic gain in the most productive regions of maize thanks to avoiding pest will contribute to a better health and well-being of the population. Finally this helps rubber farmers target the best time to tap and therefore leads to an improvement of income and well-being.

Collaborating with other CRPs

Agriculture for Nutrition and Health
Description of collaboration: A4NH co-funded staff time for this P49 Project through staff time
The achieved outcome contributions: <Not defined>

Livestock and Fish
Description of collaboration: We are using pig serum samples from L&F CRP to study the prevalence of zoonotic diseases to enlarge the database for disease mapping
The achieved outcome contributions: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Surveillance and early-warning systems for climate-sensitive zoonotic diseases in Vietnam
Outcome statement: A few studies have been conducted in order to evaluate the sero-prevalences of climate sensitive diseases at national level. This study is a good opportunity to understand/improve the epidemiology of diseases as well as identifying the potential environmental/climate risk factors.
Research Outputs: Understanding the epidemiology of climate sensitive diseases Developing risk maps with GIS datasets (such as NDVI and elevation etc.) Develop a model for prediction (such as time-series analysis) Identifying potential risk factors (including climate factors)
Research Partners: - Plant Protection Research Institute (PPRI) - National Institute of Veterinary Research (NIVR) under the Ministry of Agriculture and Rural Development (MARD) in Vietnam - Institute of Meteorology and Hydrology and Climate Change, Ministry of Natural Resources and Environment (IMHEN, MONRE) - Hanoi School of Public Health (HSPH) - National Institute of Hygiene and Epidemiology (NIHE)
Activities that contributed to the outcome: We visited one of our study areas (Son La province) in order to better understand the local situations. It was a good opportunity to have a discussion with local people as well as sharing knowledge. We are planning to have more field trips to other provinces. In addition, we had several meetings with other international organizations (FAO, CIRAD and WHO). It was good opportunities to share our knowledge.
Non-research Partners: - Ministry of Agriculture and Rural Development (MARD) - Ministry of Health (MOH)
Output Users: Our analyzed information will be used to develop public health policy in relation with livestock development as well as agricultural and environmental policy.
How the output was used: Our research will be helpful to prevent/control the diseases as an early warning system. Our outcomes will be useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.
Evidence of the outcome: We have obtained the human data and climate data (last 30 years) at province level. This information was used to identify the temporal patterns of diseases and prepared manuscripts for publications. In addition, we are planning to collect/analyze samples from 6 provinces in Vietnam in collaboration with the national partners.
References: See our list of references separately in the annexes below as when we added several references here, this section was not validated.

The primary 2019 outcome indicator that this case study is contributing to:
FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs
FP2 Indicator: Increase in research-informed demand-driven investments in climate services for agriculture and food security decision-making (millions)
FP2 Indicator: Number of regional, national, and/or sub-national initiatives incorporating research outputs to develop or improve major demand-driven, equitable, climate informed services that support rural communities
FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

Explanation of the link between your outcome story and the CCAFS indicators: Mainly, our project is to identify the association between climate change and zoonotic diseases which is in line with CCAFS indicator.

Year: 2015

Annexes uploaded: Research proposal with partners.docx

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP2 - MOG # 4: Decision support systems improved or developed for incorporation into national food security safety net programs **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP2 - MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP2 - MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP2 - MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014

FP2 - MOG # 4: Decision support systems improved or developed for incorporation into national food security safety net programs

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

FP2 - MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

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

Brief summary of your actual 2014 contribution towards the selected MOG:
Based on our data anaylsis, we identfied the temporal pattern of the climate sensitive diseases in Vietnam. This analyzed information might be useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2014 outputs:
None. It was not related to gender and social issues.

FP2 - MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed

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

Brief summary of your actual 2014 contribution towards the selected MOG:
Based on our data anaylsis, we identfied the temporal pattern of the climate sensitive diseases in Vietnam. This analyzed information might be useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2014 outputs:
None. It was not related to gender and social issues.

FP2 - MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP2 - MOG # 4: Decision support systems improved or developed for incorporation into national food security safety net programs

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

Brief summary of your actual 2015 contribution towards the selected MOG:
We conducted a systematic literature review in order to understand the relationship between climate change and zoonotic diseases in Vietnam.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
None. Because a project coordinator started working in the middle of July 2015. He was focusing on a systematic literature review in 2015.

FP2 - MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

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

Brief summary of your actual 2015 contribution towards the selected MOG:
We have obtained the national data for human disease cases as well as climate data. We implemented the epidemiological data and prepared posters, leaflet and manuscript for publication.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
None. It was not related to gender and social issues.

FP2 - MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Based on our data anaylsis, we identfied the temporal pattern of the climate sensitive diseases in Vietnam. This analyzed information might be useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
None. It was not related to gender and social issues.

FP2 - MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

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

Brief summary of your actual 2015 contribution towards the selected MOG:
We have obtained the climate data last 40 years in Vietnam from Institute of Meteorology and Hydrology and Climate Change, Ministry of Natural Resources and Environment (IMHEN, MONRE),

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
None. It was not related to gender and social issues.

Major Output groups - 2016

FP2 - MOG # 4: Decision support systems improved or developed for incorporation into national food security safety net programs

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
<Not defined>

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

FP2 - MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
<Not defined>

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

FP2 - MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
- Capacity building for national partners in analyzing aflatoxin and zoonoses.
- Providing maps of disease hot spots to local governments and plant and animal health.

Brief plan of the gender and social inclusion dimension of the expected annual output
Gender will be involved differently in mitigating risks of zoonotic and plant diseases in terms of production, harvesting and consumption

FP2 - MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
- Capacity building for national partners in analyzing climate data and link these data to diseases.

Brief plan of the gender and social inclusion dimension of the expected annual output
There is less gender issues involved here.

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: <Not defined>

5.2 Deliverables

Deliverable #1

Main Information
Title: Database of animal diseases and aflatoxicosis, meteorological data in Vietnam and Laos
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** Data were collected and partly used to create risk maps

Next-user
Policy makers, local authority, officers at the ministries of agriculture, researchers at universities
Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding of role of climatic trends on agriculture Improved understanding of climate-sensitive disease occurrence
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Update meetings, sharing of tools and results Improved understanding of climate-sensitive disease occurrence

Partners contributing to this deliverable
Partner #1 (Responsible): Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1

Dissemination URL: <u><Not defined></u>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #2

Main Information	
Title: Workshops of dissemination with manual of tools	
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2017	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Policy makers, extension staff, local authority, officers at the ministries of agriculture, farmers, researchers at universities
Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding of using early warning systems for climate sensitive diseases in Vietnam and Laos diseases to take decision for management of pest timely.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Building trust and partnership with key partners and end users of tools

Partners contributing to this deliverable

Partner #1 (Responsible): Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #3

Main Information

Title: A weather based risk-prediction model for aflatoxin in Vietnam (tool and publication)

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user

Public, private and NGO extension services

Knowledge, attitude, skills and practice changes expected in next-user: Capacity to understand weather based forecasting for aflatoxins and risk mitigation messages
Capacity to disseminate forecasts and risk mitigation to farmers

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Workshops, training, developing of pilot models for passing information

Partners contributing to this deliverable

Partner #1 (Responsible): Lindahl, Johanna <Johanna.Lindahl@slu.se>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information

Title: Assessing farmer perceptions and risk mitigating practices for moulds and mycotoxins in Vietnam (publication/report)	
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries	
Main Type: Data and information outputs, including datasets, databases and models	Sub Type: Data
Year of expected completion: 2016	
Status: On-going	Justification for cancelling the deliverable: We will conduct those activities.

Next-user
Decision makers in public and private sector
Knowledge, attitude, skills and practice changes expected in next-user: Understanding the burden of mycotoxins and possible management
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Workshops, meetings, brochures

Partners contributing to this deliverable
Partner #1 (Responsible): Lindahl, Johanna <Johanna.Lindahl@slu.se>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files   <Not defined>

Deliverable #5

Main Information
Title: An evaluated method for disseminating forecasting messages to farmers (report)
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries
Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2017	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Provincial authority in agriculture (DARD)

Knowledge, attitude, skills and practice changes expected in next-user: Capacity to understand weather based forecasting for aflatoxins and risk mitigation messages

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Involvement in the development of messages and risk mitigation strategies
Workshops, meetings

Partners contributing to this deliverable

Partner #1 (Responsible): Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #6

Main Information
Title: Gender-sensitive risk assessment of aflatoxin exposure in Vietnam (publication)
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2017	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Researchers, authorities
Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding of role of climatic trends on toxin production in maize and disease occurrence
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement workshops; linkage to national strategies for agriculture, production, trade and environment; 2-way knowledge sharing with farmers, researcher and authorities, and plant health workers

Partners contributing to this deliverable
Partner #1 (Responsible): Lindahl, Johanna <Johanna.Lindahl@slu.se>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #7

Main Information	
Title: Maps of hot spots of animal diseases and aflatoxicosis in Vietnam and Laos	
MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2017	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user #1
Researchers
Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding on diseases hot spots distribution related to climate variation
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Update meetings, sharing of tools and results

Next-user #2
Policy makers at ministries of , local authorities

Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding on diseases hot spots distribution related to climate variation
Use of science based tool for decision making process

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Update meetings, sharing of tools and results

Partners contributing to this deliverable

Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #8

Main Information

Title: Risk-based framework for predicting and managing disease risks

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Models

Year of expected completion: 2016

Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user

Researchers, agricultural and health authorities in Vietnam and Laos

Knowledge, attitude, skills and practice changes expected in next-user: Awareness of the linkages between climate variability and risk of selected zoonoses in Laos and Vietnam

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Communication with them and engage them throughout the research process

Partners contributing to this deliverable

Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #9

Main Information

Title: A weather based risk-prediction tool for diseases in Vietnam and Laos

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Tools and Computer Software	**Sub Type:** Tools

Year of expected completion: 2017

Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user

Researchers, agricultural and health authorities in Vietnam and Laos

Knowledge, attitude, skills and practice changes expected in next-user: Ability to understand weather-based forecasting
Passing messages on appropriate risk mitigation to relevant stakeholders
Timely management for response to the outbreak and prevention of human and animal diseases

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Communication with them and engage them throughout the research process

Partners contributing to this deliverable

Partner #1 (Responsible): Bett, Bernard <b.bett@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information	
Title: Journal papers on leptospirosis and vector borne diseases in Laos and Vietnam	
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2018	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Researchers
Knowledge, attitude, skills and practice changes expected in next-user: Apply research results to develop further research questions on the same topics
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Publish in peer -reviewed journals and communicate published papers through different channel (blog, newspaper, media).

Partners contributing to this deliverable
Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute
Partner #2: Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute
Partner #3: <Not defined>

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>

Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Dataset and high-resolution map detailing rubber distribution and age and ownership of individual plantations
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Provincial Meteorological Bureau in Laos and Rubber enterprises, NAFRI
Knowledge, attitude, skills and practice changes expected in next-user: 1)   Awareness of the exact location of every rubber plantation in the region; 2)   Comparing this information to satellite imagery may help identify new plantations through future satellite imagery rather than via field work; 3)   Ability for Meteorological Bureaus to re-assess their existing maps.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Sharing the knowledge with competent authorities and institutions

Partners contributing to this deliverable
Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>

Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Map detailing geographic suitability for growing rubber trees (with profitability estimations) in Laos

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user

Lao environmental authorities and Individual farmers and plantation owners

Knowledge, attitude, skills and practice changes expected in next-user: 1)   Government discourages rubber spread beyond sustainable zones
2)   Farmers and smallholders are able to choose optimal sites for their plantations;
3)   Ability to assess which plantations are in unsustainable or risky zones;
4)   Ability to warn prospective smallholders about low sustainability risks and prevent the clearing of valuable land;

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: 1)   Share the case study in Xishuangbanna may encourage local authorities to adopt similar measures;
2)   Information sessions for smallholders to raise awareness about where (not) to plant for optimal results;
3)   Raise awareness at government level about food security and loss of biodiversity due to planting in suboptimal areas.

Partners contributing to this deliverable

Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #13

Main Information

Title: Dataset on risk distribution in space and time and journal articles on rubber disease review
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Provincial Government of Laos and Vietnam
Knowledge, attitude, skills and practice changes expected in next-user: 1)   Understanding of the various risks to current and prospective plantations (climatic, pathological, topographical); 2)   Ability to take preventive measures in order to safeguard livelihoods of communities and to increase efficiency of existing plantations; 3)   Ability to suit the deployment of chemicals or alternative measures to the conditions.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Presentation in cooperation with local environmental organisations, case studies in which the financial gain for the communities is demonstrated

Partners contributing to this deliverable
Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #14

Main Information	
Title: Field manual for early warning and forecasting system and journal articles on rubber epidemic diseases	
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2017	
Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user
Provincial Governments of northern Laos and Vietnam

Knowledge, attitude, skills and practice changes expected in next-user: 1)   Ability to use the early warning system
2)   Understanding how to improve conditions for the livelihoods of smallholders, communities and the country
3)   Understanding the factors to improve he accuracy of its predictions;
4)   Better ties and willingness to work with KIB/ICRAF on the current project and future projects.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: 1)   If necessary, gatherings of all competent organisations in the region to promote cooperation among themselves;
2)   Presentation for the government and organisations, demonstrating how the system works, including case studies from China;
3)   Educational meetings with local farmers (especially those in risky areas

Partners contributing to this deliverable

Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Partner #2: Xu, Jianchu <J.C.Xu@cgiar.org>, ICRAF - World Agroforestry Centre

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

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Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #15

Main Information

Title: Engagement strategy developed, research questions on the process to identify effective means developed and shared

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2015

Status: On-going	**Justification for cancelling the deliverable:** We will conduct those activities.

Next-user

Smallholder farmers and provincial government

Knowledge, attitude, skills and practice changes expected in next-user: 1)   Full knowledge of the system, its advantages and the advantages of getting as many people to co-operate as possible;
2)   Government incentives for smallholders to participate in the project.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: 1)   Information sessions for smallholders featuring representatives of local government, environmental organizations and ICRAF, showing case studies, estimations of potential financial gain (or loss prevention) and demonstrating how participating benefits all;
2)   Setting up a point of contact for any questions that users may have.

Partners contributing to this deliverable

Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking

Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
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Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files   <Not defined>

Deliverable #16

Main Information
Title: Systematic litterature review of zoonotic diseases and aflatoxins in relation with cliamte change in Vietnam
MOG # 2: New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015
Status: Complete

Next-user
Scientist

Knowledge, attitude, skills and practice changes expected in next-user: Understanding the updated situation of zoonotic diseases and aflatoxins in relation with cliamte change in Vietnam

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Seminars, discussions

Partners contributing to this deliverable

Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Pestforecast_SLR_HS_Lee.xlsx

Systematic Literature Review of Pest Forecast project in Vietnam%28Draft_HS_Lee%29.docx

Deliverable #17

Main Information
Title: One Health, Ecohealth and Zoonoses in Southeast Asia
MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

Main Type: Communication Products and Multimedia	**Sub Type:** Poster

Year of expected completion: 2015
Status: Complete

Next-user
general public and local farmers in Southeast Asia
Knowledge, attitude, skills and practice changes expected in next-user: Our information are useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs. Therefore, our information will be practically useful to prevent /control of climate sensitive zoonotic diseases.

Partners contributing to this deliverable
Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Zoonotic conference.pptx

Deliverable #18

Main Information

Title: Climate Sensitive Diseases in the Mekong Region: Can We Predict Pests by Climate Factors?

MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

Main Type: Communication Products and Multimedia	**Sub Type:** Poster

Year of expected completion: 2015

Status: Complete

Next-user

Authorites, general public and local farmers in Southeast Asia

Knowledge, attitude, skills and practice changes expected in next-user: Our concept is useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs. Therefore, our information will be practically useful to prevent /control of climate sensitive zoonotic diseases.

Partners contributing to this deliverable

Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
2015_Pestforecast.pptx

Deliverable #19

Main Information
Title: Surveillance and early warning systems for climate sensitive diseases in Vietnam and Laos
MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

Main Type: Communication Products and Multimedia	**Sub Type:** Presentations

Year of expected completion: 2015

Status: Complete

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<tr><td colspan="2">Authorities, general public and local farmers in Southeast Asia</td></tr>
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<tr><td>Publication / Creation date: 2016-03-01T21:18:55Z,2016-03-01T21:18:55Z,2015-11-23</td></tr>
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Coverage: <Not defined>

Deliverable Data sharing
Climate change meeting(HSPH).pptx

Deliverable #20

Main Information

Title: Pestforest recent update

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Communication Products and Multimedia	**Sub Type:** Presentations

Year of expected completion: 2015

Status: Complete

Next-user
Authorities, general public and local farmers

Knowledge, attitude, skills and practice changes expected in next-user: Our information is useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs. Therefore, our information will be practically useful to prevent /control of climate sensitive zoonotic diseases.

Partners contributing to this deliverable
Partner #1 (Responsible): Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Pestforecast updates 16Nov_ILRI (1).PPTX

Deliverable #21

Main Information

Title: Current trends of rubber plantation expansion may threaten biodiversity and livelihoods

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2015

Status: Complete

Next-user

Authorities, general public and local farmers

Knowledge, attitude, skills and practice changes expected in next-user: Our information is useful to develop public health policy in relation with livestock development as well as agricultural and environmental   policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs.

Partners contributing to this deliverable

Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.sciencedirect.com/science/article/pii/S0959378015000801

Deliverable Metadata

Description: Agriculture is unique among economic sectors in the nature of impacts from climate change. The production activity that transforms inputs into agricultural outputs involves direct use of weather inputs (temperature, solar radiation available to the plant, and precipitation). Previous studies of the impacts of climate change on agriculture have reported substantial differences in outcomes such as prices, production, and trade arising from differences in model inputs and model specification. This article presents climate change results and underlying determinants from a model comparison exercise with 10 of the leading global economic models that include significant representation of agriculture. By harmonizing key drivers that include climate change effects, differences in model outcomes were reduced. The particular choice of climate change drivers for this comparison activity results in large and negative productivity effects. All models respond with higher prices. Producer behavior differs by model with some emphasizing area response and others yield response. Demand response is least important. The differences reflect both differences in model specification and perspectives on the future. The results from this study highlight the need to more fully compare the deep model parameters, to generate a call for a combination of econometric and validation studies to narrow the degree of uncertainty and variability in these parameters and to move to Monte Carlo type simulations to better map the contours of economic uncertainty.

Creator / Authors: Nelson GC,van der Mensbrugghe D,Ahammad H,Blanc E,Calvin K,Hasegawa T,Havlik P,Heyhoe E,Kyle P,Lotze-Campen H,von Lampe M,Mason d'Croz D,van Meijl H,Müller C,Reilly J,Robertson R,Sands RD,Schmitz C,Tabeau A,Takahashi K,Valin H,Willenbockel D

Author Identifier: <Not defined>

Publication / Creation date: 2014-12-16T06:37:37Z,2014-12-16T06:37:37Z,2014
Language: en
Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #22

Main Information

Title: Toward Operational Criteria for Ecosystem Approaches to Health

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2015

Status: Complete

Next-user

Authorities, general public and local farmers

Knowledge, attitude, skills and practice changes expected in next-user: Our information is useful to develop public health policy in relation with agricultural and environmental policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Agriculture and Rural Development and Ministry of Health) to help create more relevant and effective agriculture programs.

Partners contributing to this deliverable

Partner #1 (Responsible): Nguyen, Hung <h.nguyen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4

What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://link.springer.com/article/10.1007/s10393-015-1028-1

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #23

Main Information

Title: Assessing the vulnerability of agricultural systems to livestock pests under climate change scenarios

MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015

Status: Complete

Next-user

Authorities, general public and local farmers

Knowledge, attitude, skills and practice changes expected in next-user: Our information is useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs. Therefore, our information will be practically useful to prevent /control of climate sensitive zoonotic diseases.

Partners contributing to this deliverable

Partner #1 (Responsible): Grace, Delia <d.grace@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://ccafs.cgiar.org/publications/climate-and-livestock-disease-assessing-vulnerability-agricultural-systems-livestock#.VtOqyvl96Uk

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #24

Main Information
Title: Impact of climate change on African agriculture: focus on pests and diseases
MOG # 1: New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015
Status: Complete

Next-user
Authorities, general public and local farmers
Knowledge, attitude, skills and practice changes expected in next-user: Our information is useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Based on our analyzed information, we will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective health programs. Therefore, our information will be practically useful to prevent /control of climate sensitive zoonotic diseases.

Partners contributing to this deliverable
Partner #1 (Responsible): Grace, Delia <d.grace@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes

License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://ccafs.cgiar.org/publications/impact-climate-change-african-agriculture-focus-pests-and-diseases#.VtOrm_l96Uk

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #25

Main Information	
Title: Pest and disease in rubber	
MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
Main Type: Communication Products and Multimedia	**Sub Type:** Articles for media or news
Year of expected completion: 2015	
Status: Complete	

Next-user
Authorites, general public and local farmers
Knowledge, attitude, skills and practice changes expected in next-user: Our concept is useful to develop public health policy in relation with agricultural and environmental policy.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective rubber programs. Therefore, our information will be practically useful to prevent /control of rubber diseases.

Partners contributing to this deliverable
Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.worldagroforestry.org/sites/default/files/Su%20-%20Pest%20Forecast.pdf

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #26

Main Information

Title: Control decision model for Oidium heveae

MOG # 5: Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making

Main Type: Communication Products and Multimedia	**Sub Type:** Articles for media or news

Year of expected completion: 2015

Status: Complete

Next-user

Authorites, general public and local farmers

Knowledge, attitude, skills and practice changes expected in next-user: Our concept is useful to develop public health policy in relation with agricultural and environmental policy

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will share this information with the various ministries (Mainly, Ministry of Rural Development and Ministry of Health) to help create more relevant and effective agriculture programs.

Partners contributing to this deliverable

Partner #1 (Responsible): Su, Yufang <suyufang@mail.kib.ac.cn>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.worldagroforestry.org/sites/default/files/Su%20-%20Pest%20Forecast.pdf

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

Next user #1

Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Our key next users are Vietnamese authorities including policy makers. As little is known about climate sensitive diseases, so our research is a good opportunity to understand the epidemiology of diseases and to identify the associations between climate change and diseases. The findings will assist policy makers to develop public health policy in relation with livestock development as well as agricultural and environmental policy. In addition, our information will be useful to raise public awareness for general public and farmers such as when would be the ideal time to prevent before disease spread.

Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: It is very important to convey our concrete ideas to the national partners/research institutes in order to minimize the misunderstanding. In addition, it is very crucial to have a discussion with other international institutes/organizations in order to prevent the duplicate research.

Reported deliverables serve as evidence towards this achieved change: We identified the temporal pattern of the climate sensitive zoonotic diseases. It was the first to attempt to investigate the seasonality. The findings may assist clinicians in evidence based practice by providing information on seasonality. This analyzed information might be useful to develop public health policy in relation with livestock development as well as agricultural and environmental policy.

Lessons and implications for the next planning cycle: We are planning to collect/analyze agriculture products, animals and humans samples in collaboration with the national partners in order to estimate the sero-prevalences of climate sensitive zoonotic diseases. In addition, survey will be conducted to measure the awareness of diseases among general public. This information is useful to understand the epidemiology of those diseases as well as preventing the diseases.

5.4 Project highlights

Project highlight Information #1	
Title: Surveillance and early warning systems for climate sensitive diseases in Vietnam	
Author: Hu Suk Lee	**Subject:** <Not defined>
Publisher: <Not defined>	**Year:** 2015
Project highlights types Participatory action research Inter-center collaboration Policy engagement Breakthrough science Food security	**Start date:** 2015-07-15
End date: 2018-12-31	**Is global:** Yes
Country:	**Keywords:** <Not defined>
Highlight description: <Not defined>	
Introduction / Objectives: <Not defined>	
Results: <Not defined>	
Partners: <Not defined>	
Links / Sources for further information: <Not defined>	

6. Activities

Activity #1

Title: Developing, disseminating maps of hotspots of climate-sensitive animal and zoonotic diseases in Vietnam and Laos

Description: A systematic literature review on climate sensitive animal diseases (leptospirosis and Japanese encephalitis) and aflatoxicosis will be carried out to determine trends of these diseases drivers, impacts on health and livelihoods by gender for Vietnam and Laos by a post-doctoral researcher. A database on these diseases will be developed and mapped at national level and focus on the provinces where data are available coupled with climate data provided by national partners.

Risk maps will be developed based on the vulnerability framework which combines exposure, sensitivity and adaptive capacity. These analyses will be done at provincial level in both countries. Wherever the data is available from human diseases related to animal diseases (zoonoses), this will be mapped too. All the maps of hot spots will be used specifically for Vietnam and Laos to identify targets for further research and interventions.

Start date (dd-MM-yyyy): 01-05-2015	**End date (dd-MM-yyyy):** 31-12-2018

Leader: Lee, Hu Suk <h.s.lee@cgiar.org>, ILRI - International Livestock Research Institute

Status: On-going	**Justification:** We conducted the systematic literature review on climate sensitive animal diseases (leptospirosis and Japanese encephalitis) and aflatoxicosis and wrote the report (see deliverable list). We have obtained monthly human data for viral encephalitis and leptospirosis at province level as well as monthly weather data at province level for last 20 years. Sampling have completed in in Nghe An and Son La provinces. Sampling for Hanoi is conducted by cooperation between teams of NIVR and Sub DAH of Hanoi. In addition, questionnaires for public awareness of diseases are conducted in collaboration with the national partners.

Activity #2

Title: Developing a real-time prediction system for Japanese encephalitis and leptospirosis in people and animals

Description: We will develop a climate-based prediction tool driven by seasonal climate forecasts for a vector-borne disease, most likely using the example of leptospirosis and Japanese encephalitis, two of the most prevalent climate-sensitive. The prediction system to be developed will run on a spatial grid of the same size as that used for gridded precipitation datasets, covering the spatial extent of the target provinces where diseases prevalence is high and climate condition varies importantly. Dynamic models, driven by climate variables such as precipitation, temperature, humidity and land use will be developed and validated using historical data on disease outbreaks. Validated models will then be used for generating future predictions based on the climate forecasts.
A farmer dissemination system for Primary Animal Health workers (PAHWs), veterinary students, and government officials will be developed for reporting information around climate-sensitive diseases and weather events – trial period and roll-out.

Start date (dd-MM-yyyy): 01-01-2015	End date (dd-MM-yyyy): 31-12-2018
Leader: Bett, Bernard <b.bett@cgiar.org>, ILRI - International Livestock Research Institute	
Status: On-going	Justification: This is on-going activity. However due to the budget cut for 2016, we are considering to cancel this activity.

Activity #3

Title: Exploring the potential for weather-based forecasting for aflatoxin mitigation in Vietnam

Description: Aflatoxins are some of the most important mycotoxins which are serious public health threats. We will develop a risk-prediction model of toxin accumulation pre-harvest and immediately after harvest in order to inform farmers to timely harvest maize to avoid loss caused by fungi, and how to undertake other risk mitigating practices to reduce the levels of aflatoxins. Data to be collected at regional level in 6 provinces including weather parameters and practices from silking to harvesting, agronomic factors, harvesting and storage conditions and methods, crop varieties and varietal susceptibility. Effect of environmental factors on toxin production and the development of crops needs to be included in the model. A value chain study will be conducted to understand how maize production, trade, and consumption function. To collect data and optimize the model, we will survey levels of aflatoxins in products and to sample at the field and harvest.

Start date (dd-MM-yyyy): 01-01-2015	End date (dd-MM-yyyy): 31-12-2018
Leader: Lindahl, Johanna <Johanna.Lindahl@slu.se>, ILRI - International Livestock Research Institute	
Status: On-going	Justification: This is on-going activity and will continue in 2016-2017. Currently, we have collected 400 samples from Nghe An province (full) and 320 samples from Hanoi city. Samples from Dong Nai, An Giang and High land Center start collecting. We have tested for more than 200 samples from Nghe An.

Activity #4

Title: Climate service and early warning system for rubber plantations in northern Laos and Vietnam

Description: #1: Mapping rubber distribution in northern Laos: We will compile existing rubber distribution map in northern Laos and validate plantation structure (age groups and ownership: smallholder vs. large plantation).

#2: Climatic risk assessment for rubber plantation: current and future rubber distribution will be overlapped with historical meteorological data and future climatic scenario(s); we will identify climatic risks (water risk, frost risk, typhoon risk) for rubber plantations and assess disease risks (linking to rubber phenology and climatic factors).

#3: Capacity building for a real-time forecasting system for rubber production and diseases early warning.

#4: Smallholder participation in monitoring early warning and forecasting. We will develop protocol for participatory monitoring, an early warning and forecasting system (both hardware and software).

Note: Depending on the budget reduction situation, it would be possible that this activity A206 will be cut completely.

Start date (dd-MM-yyyy): 01-01-2015	End date (dd-MM-yyyy): 31-12-2018
Leader: Xu, Jianchu <J.C.Xu@cgiar.org>, ICRAF - World Agroforestry Centre	
Status: On-going	**Justification:** We mainly focused on the control decision model for Oidium heveae - early warning system. Oidium heveae is the most popular disease found in rubber plantation in Yunnan province, Southwest China, Our study aims to establish the early warning system for Oidium heveae in Yunnan Province, so as to help the rubber cultivators control the disease and reduce yield loss. Progresses included: 1. Collaboration with Yunnan Institute of Tropical Crops has been established, 2. Research scheme has come out 3. Phenological analysis has been completed 4. Oidium heveae data analysis is undergoing 5. Control experiment has been planned and started

Activity #5	
Title: AAA	
Description: AAA	
Start date (dd-MM-yyyy): 01-01-2016	**End date (dd-MM-yyyy):** 30-06-2018
Leader: Grace, Delia <d.grace@cgiar.org>, ILRI - International Livestock Research Institute	
Status: Cancelled	**Justification:** This activity was wrongly added when updating activities and needs to be cancelled.

Lessons regarding your project activities and possible implications for the coming planning cycle: We learned that it took a little more time to work with national partners in terms of administrative process. For future research collaboration, we have to consider this factor.

7. Leverages

Leverage #1
Title: Surveillance and early-warning systems for climate-sensitive diseases in Vietnam and Laos
Partner name: HSHP CENPHER - Hanoi School of Public Health Center for Public Health and Ecosystem Research - Vietnam
Year: 2015

Flagship: FP2: Climate Information Services and Climate-Informed Safety Nets	**Budget:** US $0.00

Leverage #2
Title: Surveillance and early-warning systems for climate-sensitive diseases in Vietnam and Laos
Partner name: IMHEN - Vietnam Institute of Meteorology, Hydrology and Environment - Vietnam
Year: 2015

Flagship: FP2: Climate Information Services and Climate-Informed Safety Nets	**Budget:** US $0.00

Leverage #3
Title: Surveillance and early-warning systems for climate-sensitive diseases in Vietnam and Laos
Partner name: PPRI - Plant Protection Research Institute - Vietnam
Year: 2015

Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $0.00

Leverage #4
Title: Surveillance and early-warning systems for climate-sensitive diseases in Vietnam and Laos
Partner name: NIVR - National Institute of Veterinary Research - Vietnam
Year: 2015

Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $0.00

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

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2016
Management liaison	RP EA - East Africa Region	**Mgmt. liaison contact**	Radeny, Maren <M.Radeny@cgiar.org>
Lead organization	ILRI - International Livestock Research Institute - Kenya	**Project leader**	Radeny, Maren <M.Radeny@cgiar.org>
Project type	CCAFS CORE	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP4: Policies and Institutions for Climate-Resilient Food Systems	RP EA: East Africa

Bilateral project(s) contributing to this project

This project does not have Bilateral projects

Summary

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

2. Partners

Partner #1

Institution: CIFOR - Center for International Forestry Research

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rufino, Mariana <m.rufino@cgiar.org>	Development and testing of a decison support tool for targeting CSA investments in Kenya, Activity 2014-129 *Partner*. This activity ends in 2015

Partner #2 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

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

Partner #3

Institution: COMESA - Common Market for Eastern and Southern Africa

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #4

Institution: ACPC - African Climate Policy Centre

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #5

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

CCAFS Partner(s) allocating budget

RPL EA - RPL East Africa

Contacts

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

Partner #6

Institution: MWE - Ministry of Water and Environment

CCAFS Partner(s) allocating budget

RPL EA - RPL East Africa

Contacts

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

Partner #7

Institution: RPL EA - RPL East Africa

Contacts

Type	Contact	Responsibilities and contributions
Project Coordinator	Kinyangi, James <j.kinyangi@cgiar.org>	Project Leader - Technical oversight

Partner #8

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

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #9

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

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #10

Institution: Pamoja Media

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

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

Partner #11

Institution: Ministry of Agriculture, Kenya

CCAFS Partner(s) allocating budget

RPL EA - RPL East Africa

Contacts

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

Partner #12

Institution: MAAIF - Ministry of agriculture Animal Industry and Fisheries

CCAFS Partner(s) allocating budget

RPL EA - RPL East Africa

Contacts

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

Partner #13

Institution: VPO - Vice President's Office

CCAFS Partner(s) allocating budget

RPL EA - RPL East Africa

Contacts

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

Partnerships overall performance over the last reporting period: The partnerships developed for this project range from government ministries focusing on agriculture, environment, forestry and climate change; Regional Economic Commissions (EAC), NGOs, donors, media, private sector and other national and international research institutions. New partnerships were also developed with the West and Central African Council for Agricultural Research and Development (CORAF/WECARD) who supported the engagement with the African Group of Negotiators (AGN). The national partners played a critical role in organizing national level engagements on climate-smart agriculture policy discussions.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: To facilitate smooth transition and continuity of engagement, it is critical to develop a relationship with more than one contact person within the partner organizations. Ensuring institutionalization of activities through legal agreements or memorandum of understanding can also facilitate the process.

3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	East Africa
Country	Not applicable	Not applicable	Kenya
Country	Not applicable	Not applicable	Tanzania
Country	Not applicable	Not applicable	Uganda

4. Outcomes

4.1 Project outcome narrative

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

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

Annual progress towards project outcome in the current reporting cycle (2015): In collaboration with ICRAF, CIAT, COMESA, ACPC, and national governments through the ministries of agriculture and environment, the regional program provided technical input to the development of climate-smart agriculture framework programs (CSA-FPs) in Kenya, Uganda, Tanzania, including CSA-FPs for Botswana and Namibia. The 5 countries successfully validated their national CSA-FPs, with Kenya, Uganda and Tanzania integrating CSA into their Intended Nationally Determined Contributions (INDCs) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. Working with the African Group of Negotiators (AGN) through collaboration with COMESA, ACPC/UNECA, CORAF/WECARD and IDRC, the regional program facilitated three submissions to UNFCCC during the 42 session of Subsidiary Body for Scientific and Technological Advice (SBSTA 42) in June. The submissions focused on i) Early Warning Systems, ii) Risks and Vulnerability in Agricultural Systems, and iii) Gender and Climate Change. The submissions were made by Sudan on behalf of the AGN (Sudan was AGN Chair in 2015). CCAFS EA scientists also contributed to the review of the gender dimensions of the Sustainable Development Goals and facilitated discussions on gender and social inclusion through a side event held at the 2015 Paris Climate Conference. As a result of continuous engagement with the government in Kenya (through the ministries of environment and agriculture), the greenhouse gas measurement lab facility at ILRI has been acknowledged for its contribution to monitoring green house gas emissions from livestock. This creates an opportunity to engage with the national government in implementing the INDCs and Nationally Appropriate Mitigation Actions (NAMAs).

Communication and engagement activities have contributed to achieving your Project outcomes: Through continued interactions with the ministries of agriculture and environment in the CCAFS countries, the project put together writing teams at national level to develop the CSA-FPs and also organized consultative and validation workshops. The engagement process was critical to build trust and strong relationships and in the identification of gaps where CCAFS research can be used. The Climate and Agriculture Network for Africa (CANA) platform, quarterly newsletters, blog stories and videos were used to share information on CSA.

Evidence documents of progress towards outcomes: CCAFS EA communications report_2015.pdf

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

Annual progress towards outcome (end of 2017): NA

Annual progress towards outcome (end of 2018): <Not defined>

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: By working with other CG centers, this project used CCAFS science products to influence decision making processes by offering technical support mainly to the AGN and contributing to ministries of agriculture and environment. Continuous engagement resulted in successful development of CSA-FPs which led to the inclusion of CSA into the INDCs of 3 focus countries - Kenya, Uganda and Tanzania. Also, the AGN made 3 submissions at SBSTA 42 on Early Warning Systems; Risks and Vulnerability in Agricultural Systems; and Gender and Climate Change. For science to inform decision making, continuous engagement with policy/decision makers is essential.

4.2 Contribution to CCAFS Outcomes

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

Indicator #1: FP4 Indicator: # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019	
Target value: 3	**Cumulative target to date:** Cannot be Calculated

2019
Target narrative: Kenya, Tanzania, and Uganda
The expected annual gender and social inclusion contribution to this CCAFS Outcome: No explicit gender and social inclusion contribution. The policies and strategies are expected to address gender issues.

2015		
Target value: 1 country	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 3.0
Target narrative: Kenya		
Narrative for your achieved targets, including evidence: Three countries in East Africa (Kenya, Uganda and Tanzania) and two countries in Southern Africa (Botswana and Namibia) developed climate-smart agriculture framework porgrams (CSA-FPs) which were successfully validated at national level. The three countries in East Africa also integrated CSA into their Intended Nationally Determined Contributions (INDCs) submitted to the UNFCCC in 2015. The INDCs are publicly available on the UNFCCC website - http://www4.unfccc.int/submissions/INDC/Submission%20Pages/submissions.aspx. The CSA_FPs are available on the Climate and Agriculture Network for Africa (CANA) website - http://canafrica.com/publication. E.g. http://canafrica.com/publication/uganda-climate-smart-agriculture-country-program-2015-2025/		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The national CSA-FPs clearly spell out the integration of gender and youth in the development of CSA interventions through value chain integration.		

2016	
Target value: 2	**Cumulative target to date:** Cannot be Calculated
Target narrative: Kenya, Tanzania, and other regional initiatives	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Policies and strategies are expected to include gender.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		

2014
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>

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

Indicator #1: FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs

2019	
Target value: 4	**Cumulative target to date:** 7
Target narrative: AGN, UNFCCC, COMESA, ACPC	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Not explicitly	

2015		
Target value: 1	**Cumulative target to date:** 1	**Target achieved:** 1.0
Target narrative: COMESA		
Narrative for your achieved targets, including evidence: Working with the African Group of Negotiators (AGN) in collaboration with COMESA, ACPC/UNECA, CORAF/WECARD and IDRC, the regional program facilitated three submissions to UNFCCC during SBSTA 42 on i) Early Warning Systems, ii) Risks and Vulnerability in Agricultural Systems, iii) Gender and Climate Change. Sudan as the Chair of the AGN, made the submissions on behalf of the AGN. CCAFS scientists and partners worked with the AGN team to prepare a presentation which was made by the Lead Agriculture Coordinator (from Malawi) of the AGN during the agriculture workshops held during SBSTA.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Working with the African Group of Negotiators, the project supported a submission on the inclusion of gender in the climate change discussions to the UNFCCC during SBSTA 42 held in June. In addition, the regional program scientists organized a session to dialogue on gender inclusion in the SDGs and Post COP 21 agreements. The RPL also participated in several gender events such as the Gender, Climate Change and Agriculture Support Programme (GCCASP) organized by COMESA and NEPAD in Lusaka, Zambia and Closing the gender gap in farming under climate change: New knowledge for renewed action held in Paris, France.		

2016	
Target value: 2	**Cumulative target to date:** 3
Target narrative: ACPC CCAFS EA working with COMESA & ACPC to infleunce the AGN to develop a common position on agriculture for the UNFCCC negotiations).	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The common position on agriculture should reflect gender and social inclusion.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways
NA

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

Outcome case study #1

Title: East African countries integrate Climate-Smart Agriculture into their Intended Nationally Determined Contributions (INDCs)

Outcome statement: With support from CCAFS EA, ICRAF, ILRI, CIFOR, and CIAT, Kenya, Uganda and Tanzania have developed Climate-Smart Agriculture Framework Programs (CSA-FP) to guide investments for climate resilient and low carbon agriculture. Across the three countries, the CSA-FP was integrated into the Intended Nationally Determined Contributions (INDCs) that were submitted to the UNFCCC in 2015. The Kenya INDC, for example, seeks to reduce 30% of the country's GHG emissions by 2030 relative to a BAU scenario of 132 Mt CO2 eq.

Research Outputs: The process of developing "targetCSA" a tool for prioritizing CSA practices at county level led by CIFOR and ILRI involved a series of engagements and key informant interviews which increased awareness on CSA issues in Kenya. CCAFS Working Paper 90 on "Evidence and policy implications of climate-smart agriculture in Kenya" includes input from national stakeholders from the ministries, research institutions and development practitioners. During the national technical working sessions, research partners from the CGIAR shared their tools and research findings which provided the current and historical perspectives of agriculture sector programs and provided an analysis of options for agricultural sector growth in a changing climate. The 'CSA Plan' being developed by ICRAF and CIAT will be used to support the prioritization and targeting of CSA. These processes build on national engagement processes held in the focus countries initiated in 2011-12 on identifying priority actions for agriculture in a changing climate.

Research Partners: International Livestock Research Institute (ILRI),
Center for International Forestry Research (CIFOR)
World Agroforestry Centre (ICRAF)
International Center for Tropical Agriculture (CIAT)

Activities that contributed to the outcome: Workshops and face to face meetings held in the countries were critical for building partnerships with key government institutions, and also led to identification of entry points for climate-smart agriculture in national policies, strategies and programs. In Kenya, for example, a key science-policy engagement has been the CCAFS led process on "Taking Forward Kenya's National Climate Change Action Plan (NCCAP) 2013-2017''. Apart from technical support by CCAFS and other CGIAR partners in the working sessions on developing the national CSA-FPs, officials from the Kenya ministry of environment visited the GHG laboratory facilities at ILRI. Others included engagements with DFID, GIZ, County Governments, Private sector in Kenya to build consensus for wider policy changes. Three key Principal Secretaries from Kenya Ministries of Environment, Livestock and Fisheries participated in the national validation workshop, including other stakeholders from Academia, county governments,NGOs, research institutions and the private sector, demonstrating strong government support for CSA-FP.

Non-research Partners: Ministry of Environment, Water and Natural Resources- Kenya
Ministry of Agriculture, Livestock and Fisheries - Kenya
Ministry of Agriculture Food Security and Cooperatives - Tanzania
Vice President's Office - Tanzania
Ministry of Agriculture, Animal Industry and Fisheries - Uganda
Ministry of Water and Environment - Uganda
The Common Market for Eastern and Southern Africa (COMESA)
East African Community (EAC)
Department for International Development (DFID)

Output Users: Ministries of Environment and Agriculture in Kenya, Uganda and Tanzania

How the output was used: To inform the development of the country Climate-Smart Agriculture Framework Programs (CSA-FP) and subsequent integration into the INDCs submitted to the UNFCCC.

Evidence of the outcome: The INDCs build on consultative processes around the development of the CSA-FPs. The INDCs identify mitigation and adaptation components referenced in the CSA-FPs where capacity building for GHG inventories with CIFOR and ILRI is critical. A prioritization tool 'targetCSA' is now available to support decision making for targeting CSA interventions.

References: Chesterman S, Neely C, (Eds.). 2015. Evidence and policy implications of climate-smart agriculture in Kenya. CCAFS Working Paper no. 90. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Journal paper - https://ccafs.cgiar.org/publications/how-target-climate-smart-agriculture-concept-and-application-consensus-driven-decision#.Vs_yNPmqpBc

Country CSA-FPs
Kenya - http://canafrica.com/wp-content/uploads/2015/06/Kenya-CSA-Program-.pdf
Uganda – http://canafrica.com/wp-content/uploads/2015/06/Uganda-CSA-Program.pdf
Tanzania - http://canafrica.com/wp-content/uploads/2015/06/Tanzania-CSA-program.pdf

Links to INDCs as submitted to the UNFCCC Kenya - http://www4.unfccc.int/submissions/INDC/Published%20Documents/Kenya/1/Kenya_INDC_20150723.pdf
Submitted on 24/07/2015

Uganda - http://www4.unfccc.int/submissions/INDC/Published%20Documents/Uganda/1/INDC%20Uganda%20final%20%2014%20October%20%202015,%20minor%20correction,28.10.15.pdf
Submitted on 28/10/2015

Tanzania - http://www4.unfccc.int/submissions/INDC/Published%20Documents/United%20Republic%20of%20Tanzania%E2%80%8B/1/INDCs_The%20United%20Republic%20of%20Tanzania.pdf
Submitted on 29/09/2015

The primary 2019 outcome indicator that this case study is contributing to:
 FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs
 FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

Explanation of the link between your outcome story and the CCAFS indicators:

Year: 2015

Annexes uploaded: <Not defined>

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Brief bullet points of your expected annual 2019 contribution towards the selected MOG
[should be 2018, as project ends in 2018.]New joined up policies for implementing Nagoya Protocol and ITPGRFA adopted (or under formal process of consideration for adoption). Local community protocols with women in decision-making roles recognized by national government.

Brief plan of the gender and social inclusion dimension of the expected annual output
[should be 2018] Local community protocols with women in decision-making roles recognized by national government.

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Major Output groups - 2014

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Brief bullet points of your expected annual 2015 contribution towards the selected MOG
Stakeholders within each of the two countries engaged; awareness raising exercises conducted; formation of a multi-stakeholder platform for overseeing research, policy instrument development and coordination among stakeholders.   Four case study/partner communities identified and awareness-raising conducted to enable their meaningful participation in following project activities.

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

Brief plan of the gender and social inclusion dimension of the expected annual output
Local community leaders engaged in national project level planning processes. Women's groups in case study-partner communities contacted and informed about options for participation.

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

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2016

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
Building on the previous engagement initiatives in EA, to monitor and document the emerging policies and strategies and tools related to climate change and agriculture. Expanded use of the CANA platform to facilitate timely information sharing and engagement between policy makers, researchers and development practitioners, the media and other stakeholders

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

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

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

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: Continued technical support from CG scientists and

development practitioners is key in supporting the development of policy and also in prioritizing and targeting interventions as we move into implementation. Identification of joint programs/projects with governments will be critical to inform the science-policy dialogues by facilitating the application of the tools in actual case studies.

5.2 Deliverables

Deliverable #1

Main Information
Title: Three technical papers on agriculture and climate change in Africa
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015

Status: Extended	**Justification for cancelling the deliverable:** A draft report is ready and will be finalized in 2016.

Next-user
African Group of Negotiators (AGN), UNFCCC country focal points, and National governments
Knowledge, attitude, skills and practice changes expected in next-user: Are using scientific evidence to effectively articulate the African and country positions on agriculture and climate change in regional and global climate change processes.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagements, science-policy dialogue, learning alliances, knowledge sharing platforms, briefing sessions during SBSTA & COP meetings

Partners contributing to this deliverable
Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa
Partner #2: Radeny, Maren <M.Radeny@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>

Dissemination Channel: -1
Dissemination URL: <u>\<Not defined\></u>

Deliverable Metadata
Description: \<Not defined\>
Creator / Authors: \<Not defined\>
Author Identifier: \<Not defined\>
Publication / Creation date: \<Not defined\>
Language: \<Not defined\>
Coverage: \<Not defined\>

Deliverable Data sharing
Deliverable files   \<Not defined\>

Deliverable #2

Main Information	
Title: Case studies of successful adaptation and mitigation strategies in Africa	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study
Year of expected completion: 2015	
Status: Extended	**Justification for cancelling the deliverable:** The draft will be finalized in 2016.

Next-user
AGN, UNFCCC country focal points, and National governments
Knowledge, attitude, skills and practice changes expected in next-user: Are using scientific evidence to effectively articulate the African and country positions on agriculture and climate change in regional and global climate change processes.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagements, science-policy dialogue, learning alliances, knowledge sharing platforms, briefing sessions during SBSTA & COP meetings

Partners contributing to this deliverable
Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa
Partner #2: Radeny, Maren <M.Radeny@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #3

Main Information
Title: Publication and dissemination of 5 country Climate-Smart Agriculture Framework Programs (CSA-FPs)

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015

Status: Complete

Next-user
Ministries of Agriculture and Environment in Tanzania, Uganda, and Kenya
Knowledge, attitude, skills and practice changes expected in next-user: Are integrating CSA into the National Agricultural Investment Plans (NAIPs).
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagements with the relevant ministries in the countries and knowledge sharing platforms such as CANA, site visits such as to the ILRI Mazingira lab.

Partners contributing to this deliverable
Partner #1 (Responsible): Wamukoya, George <gwamukoya@comesa.int>, COMESA - Common Market for Eastern and Southern Africa
Partner #2: Mutai, Charles <drcmutai@gmail.com>, MEWNR - Ministry of Environment, Water and Natural Resources
Partner #3: Shakwaanande, Natai <aikairuwa@gmail.com>, MAFC - Ministry of Agriculture, Food security and Cooperatives
Partner #4: Maikut, Chebet <chmaikut@gmail.com>, MWE - Ministry of Water and Environment

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other

Dissemination URL: http://canafrica.com/resources/publications/?search_term=climate+-smart+agriculture+country+program&pub-types=&pub_year=

Deliverable Metadata
Description: Five countries, Kenya, Uganda, Tanzania, Namibia and Botswana developed climate-smart agriculture framework programs which have been uploaded on the CANA platform.
Creator / Authors: CCAFS, COMESA, Government Partners
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English
Coverage: Regional

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information
Title: Decision support tool for targeting CSA investments in Kenya
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2015
Status: Complete

Next-user #1
Ministry of Agriculture , Livestock and Fisheries and Ministry of Environment, Water and Natural Resources in Kenya
Knowledge, attitude, skills and practice changes expected in next-user: Are using scientific evidence to prioritize CSA investments at national and county levels.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement and knowledge sharing, participatory testing.

Next-user #2
Private sector through the Kenya Private Sector Alliance
Knowledge, attitude, skills and practice changes expected in next-user: Are using scientific evidence to prioritize CSA investments.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement and knowledge sharing.

Partners contributing to this deliverable
Partner #1 (Responsible): Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research
Partner #2: Mungai, Catherine <c.mungai@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://ccafs.cgiar.org/publications/how-target-climate-smart-agriculture-concept-and-application-consensus-driven-decision#.Vs_yNPmqpBc

Deliverable Metadata

Description: Planning for agricultural adaptation and mitigation has to lean on informed decision-making processes. Stakeholder involvement, consensus building and the integration of comprehensive and reliable information represent crucial, yet challenging, pillars for successful outcomes. The spatially-explicit multi-criteria decision support framework "targetCSA" presented here aims to aid the targeting of climate-smart agriculture (CSA) at the national level. This framework integrates quantitative, spatially-explicit information such as vulnerability indicators (e.g. soil organic matter, literacy rate and market access) and proxies for CSA practices (e.g. soil fertility improvement, water harvesting and agroforestry) as well as qualitative opinions on these targeting criteria from a broad range of stakeholders. The analytic hierarchy process and a goal optimization approach are utilized to quantify collective, consensus-oriented stakeholder preferences on vulnerability indicators and CSA practices. Spatially-explicit vulnerability and CSA data are aggregated and coupled with stakeholder preferences deriving vulnerability and CSA suitability indices. Based on these indices, relevant regions with the potential to implement CSA practices are identified. "targetCSA" was exemplarily applied in Kenya exploring group-specific and overall consensus-based solutions of stakeholder opinions on vulnerability and CSA under different consensus scenarios.

Creator / Authors: Patric Brandt, Marko Kvaki?, Klaus Butterbach-Bahl, Mariana C. Rufino

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: <Not defined>

Coverage: Kenya

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #5

Main Information
Title: Analysis of existing NAPA projects related to Agriculture and identification of implementation gaps in Uganda
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** The deliverable will be finalized in 2016.

Next-user #1

Ministry of Water and Environment in Uganda

Knowledge, attitude, skills and practice changes expected in next-user: Are using findings from the analysis reports/studies to identify gaps and areas of improvement to advise transition from NAPAs to NAPs and to identify priority actions for the agriculture sector.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement and knowledge sharing.

Next-user #2

NGOs in Uganda

Knowledge, attitude, skills and practice changes expected in next-user: Are using findings from the analysis reports/studies to identify gaps and areas of improvement to advise transition from NAPAs to NAPs.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing.

Partners contributing to this deliverable

Partner #1 (Responsible): Radeny, Maren <M.Radeny@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Mungai, Catherine <c.mungai@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information
Title: Regional workshop for learning and sharing experiences CSA mainstreaming into NAIPs and CSA best practices.
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Workshops	**Sub Type:** Workshop

Year of expected completion: 2015
Status: Complete

Next-user
Ministries of Agriculture and Environment in Kenya, Uganda, Tanzania
Knowledge, attitude, skills and practice changes expected in next-user: Policy makers using CCAFS science and tools to develop policies on CSA and to integrate climate change and agriculture.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement through workshops and face to face meetings with key decision makers and policy makers. The Climate and Agriculture Network for Africa knowledge sharing platform was used to engage with policy makers and share research tools for CSA prioritization and targeting.

Partners contributing to this deliverable
Partner #1 (Responsible): Wamukoya, George <gwamukoya@comesa.int>, COMESA - Common Market for Eastern and Southern Africa
Partner #2: Mutai, Charles <drcmutai@gmail.com>, MEWNR - Ministry of Environment, Water and Natural Resources
Partner #3: Shakwaanande, Natai <aikairuwa@gmail.com>, MAFC - Ministry of Agriculture, Food security and Cooperatives

Partner #4: Maikut, Chebet <chmaikut@gmail.com>, MWE - Ministry of Water and Environment	
Partner #5: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research	

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://ccafs.cgiar.org/blog/enhancing-readiness-address-climate-shocks-africa#.VtALUvmqpBc

Deliverable Metadata
Description: This blog story summarizes the engagement process that led to the regional workshop which brought together experts from Kenya, Uganda and Tanzania, Namibia and Botswana drawn from ministries of environment, agriculture and other relevant ministries and including private sector, academia and civil society. The objective of the consultative session was to develop country CSA Programs as part of national readiness to access climate finance
Creator / Authors: Tabitha Muchaba and Todd Rosenstock
Author Identifier: <Not defined>
Publication / Creation date: 28th October 2015
Language: English
Coverage: Regional

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #7

Main Information

Title: National round tables in 4 countries, to consider and validate the resultant integrated NAIPs

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Workshops	**Sub Type:** Workshop

Year of expected completion: 2015

Status: Complete

Next-user

National governments in Kenya, Uganda, Tanzania, Botswana and Namibia - Agriculture and Environment Ministries

Knowledge, attitude, skills and practice changes expected in next-user: Are integrating CSA into the National Agricultural Investment Plans (NAIPs) and are learning and sharing experiences among themselves.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing platforms/forums such as CANA, national engagements and face to face meetings

Partners contributing to this deliverable

Partner #1 (Responsible): Wamukoya, George <gwamukoya@comesa.int>, COMESA - Common Market for Eastern and Southern Africa

Partner #2: Mutai, Charles <drcmutai@gmail.com>, MEWNR - Ministry of Environment, Water and Natural Resources

Partner #3: Shakwaanande, Natai <aikairuwa@gmail.com>, MAFC - Ministry of Agriculture, Food security and Cooperatives

Partner #4: Maikut, Chebet <chmaikut@gmail.com>, MWE - Ministry of Water and Environment

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://canafrica.com/resources/publications/?search_term=climate+-smart+agriculture+country+program&pub-types=&pub_year=

Deliverable Metadata

Description: This is a link to the five CSA-FPs developed and shared.

Creator / Authors: CCAFS, COMESA, Government Partners

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Regional

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #8

Main Information

Title: Communication of CCAFS research and policy engagement through CANA platform, blogs, quarterly newsletter

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Communication Products and Multimedia	**Sub Type:** Articles for media or news

Year of expected completion: 2015

Status: Complete

Next-user

AGN

Knowledge, attitude, skills and practice changes expected in next-user: Are using and sharing scientific evidence, experiences and challenges to effectively articulate the African position on agriculture and climate change in regional and global climate change processes.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagements,knowledge sharing platforms,exhibitions and side events

Partners contributing to this deliverable

Partner #1 (Responsible): Atakos, Vivian <v.atakos@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://canafrica.com/

Deliverable Metadata

Description: This is the CANA platform for disseminating knowledge and information on climate change and agriculture in Africa.

Creator / Authors: Vivian Atakos

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Continental

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #9

Main Information

Title: Existing partnerships strengthened and new partnerships developed

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Capacity	**Sub Type:** Capacity

Year of expected completion: 2015

Status: On-going	**Justification for cancelling the deliverable:** In 2015, the project strengthened the partnership with ministries of agriculture and environment in the focus countries, regional economic commissions, donors and other development practitioners.

Next-user

National governments, NGOs, Research Institutions, Private Sector

Knowledge, attitude, skills and practice changes expected in next-user: Enhanced exchange of knowledge and experiences between different stakeholders.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Learning alliances, knowledge sharing platforms, side events.

Partners contributing to this deliverable

Partner #1 (Responsible): Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information	
Title: Analysis of the impact of climate change adaptation projects in Uganda	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2015	
Status: Extended	**Justification for cancelling the deliverable:** This activity was carried forward to 2016 as necessitated by budgetary revisions.

Next-user #1
Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Water and Environment
Knowledge, attitude, skills and practice changes expected in next-user: Are using findings from the analysis reports/studies to identify gaps and areas of improvement to identify priority actions for the agriculture sector.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing

Next-user #2
NGOs working in Uganda

Knowledge, attitude, skills and practice changes expected in next-user: Are using findings from the analysis reports/studies to identify gaps and areas of improvement to identify priority actions for the agriculture sector.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing

Next-user #3
Research Institutions (NARL)

Knowledge, attitude, skills and practice changes expected in next-user: Are using findings from the analysis reports/studies to identify gaps and areas of improvement to identify priority actions for research in the agriculture sector.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement and knowledge sharing

Partners contributing to this deliverable

Partner #1 (Responsible): Mungai, Catherine <c.mungai@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Emerging policies on climate change and agriculture in East Africa
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** 2016 deliverable

Next-user
Policy makers and researchers
Knowledge, attitude, skills and practice changes expected in next-user: Are collaborating in order harmonize policies related to climate change across the different sectors
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing through the CANA platform and other forums

Partners contributing to this deliverable
Partner #1 (Responsible): Radeny, Maren <M.Radeny@cgiar.org>, ILRI - International Livestock Research Institute
Partner #2: Mungai, Catherine <c.mungai@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3

What is your personal perspective of the importance of this product	4

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Active communication of CCAFS research through expanded use of the CANA platform, webinars, blogs, newsletter

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Communication Products and Multimedia	**Sub Type:** Articles for media or news

Year of expected completion: 2016

Status: On-going	**Justification for cancelling the deliverable:** In 2015, the CANA platform hosted two webinars and was used to actively share information via the platform itself and through social media. Blogs and newsletters were shared widely through online forums.

Next-user

Policy makers

Knowledge, attitude, skills and practice changes expected in next-user: Are using CCAFS knowledge products to inform policy decisions

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement and knowledge sharing through the CANA platform, CCAFS EA quarterly newsletter

Partners contributing to this deliverable

Partner #1 (Responsible): Atakos, Vivian <v.atakos@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Mungai, Catherine <c.mungai@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://canafrica.com/

Deliverable Metadata

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

Creator / Authors: Vivian Atakos, Solomon Kilungu and Catherine Mungai

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: English

Coverage: Continental

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

<table>
<tr><td align="center">**Next user #1**</td></tr>
</table>

Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: In 2015, the project focused on providing technical support to the ministries of agriculture and environment in Kenya, Uganda and Tanzania. This led to the successful development and validation of the national CSA-FPs. Subsequently, CSA was included into the INDCs which were submitted to the UNFCCC in 2015. At the continental level, continued technical support to the African Group of Negotiators led to 3 submissions on i) Early warning systems, ii) Risks and Vulnerability in Agricultural Systems, and iii) Gender and Climate Change, being made to the UNFCCC during SBSTA 42. There is increased demand for evidence to inform decision making and scientists need to identify ways of ensuring continued support to the process. Governments also need tools to support the implementation of policies and support for fundraising.

Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Continuous engagement and technical support played a critical role in influencing the next users to utilize the deliverables. A visit by policy makers in Kenya to GHG lab at ILRI also created an opportunity to demonstrate to the Kenyan government how science can be integrated into policy development and implementation, for example, by providing up to date data on GHGs emissions from livestock systems. The CANA knowledge platform was used to share emerging research products linking to policy. Exhibits held during key events such as COP 21, SBSTA, CCDAV, CBA9 were essential for information sharing of newsletters and fliers.

Reported deliverables serve as evidence towards this achieved change: The national CSA-FPs developed by Kenya, Uganda and Tanzania and by extension Botswana and Namibia are the result of the contined technical support offered through the project. The subsequent inclusion of CSA into the INDCs submitted to UNFCCC is a clear indication of government support for CSA. We have provided links to the CSA-FPs and the INDCs in previous sections.

Lessons and implications for the next planning cycle: Technical support from research is critical in influencing policy making processes. However, it is important to identify the needs and priorities of the next users so as to ensure their support and ownership of the process. As countries move into implementation of climate change and agriculture policies and strategies, research institutions need to identify entry points where science outputs and tools can be used to support the prioritization and targeting of interventions through real case studies identified together with the next users (ministries of environment and agriculture, African Group of Negotiators, development partners and private sector).

5.4 Project highlights

Project highlight Information #1	
Title: Bridging the science-policy gap through an online knowledge sharing platform: The Climate and Agriculture Network for Africa (CANA)	
Author: Vivian Atakos and Catherine Mungai	**Subject:** Science-policy, agriculture, learning platform
Publisher: CCAFS EA	**Year:** 2015
Project highlights types Successful communications Innovative non-research partnerships Policy engagement	**Start date:** 2016-02-15
End date: 2016-12-31	**Is global:** No
Country:	**Keywords:** Science-policy, agriculture, learning platform, knowledge sharing

Highlight description: This activity focused on encouraging dialogue between policy makers, researchers, development practitioners, the media and other stakeholders in public, private and civil society organizations in documenting, monitoring and dissemination of emerging policies, strategies and tools relating to climate change and agriculture in Africa. An interactive online knowledge sharing platform - Climate and Agriculture Network for Africa (CANA) - was used to bridge the science-policy gap by facilitating timely sharing of information and engagement. Since 2014, the regional program continued to work with partners to build capacity for evidence-informed policy making by encouraging key players in African agriculture and climate change to share information on on-going and emerging innovative initiatives in the region. We also put a strong emphasis on incorporating issues related to gender and the youth. The platform has a section that is fully dedicated to climate-smart agriculture. Other key themes include building resilience to climate change, low emissions development, financing climate change adaptation, policies for adaptation and gender and equity. To boost information sharing social media platforms such as Facebook and Twitter are actively used to share information relating to climate change and agriculture. This includes conference calls and symposiums, reports, blog stories, news articles and videos.

Introduction / Objectives: The Climate and Agriculture Network for Africa is an interactive, knowledge sharing web platform by a diverse range of partners drawn from the continent. CANA brings together researchers, policy makers and other players within climate science and agriculture seeking to build resilience. Through CANA, we share, learn and promote dialogue on the impacts of climate change in African agriculture and how these can be addressed through policy.

Results: In 2015, two training workshops (one physical and one webinar) were conducted to build regional capacity on use of the CANA platform. Over 100 participants from research, policy and development organizations participated in the training and expressed interest to share content and collaborate on CANA. In the last quarter of 2015, we held a webinar on climate-smart agriculture (CSA) tools for Africa, in collaboration CGIAR scientists from CIAT, ICRAF CIFOR and ILRI; and CARE International through the Adaptation Learning Program (ALP). The webinar attracted over 500 people who expressed interest in the webinar, however due to software restrictions, we only hosted 146 during the live webinar. We sent the webinar report to over 500 people who expressed interest, including the recording and presentations. By sharing up to date information through social media platforms, CANA is expanding. Currently the platform has 152 followers on Twitter and 304 followers on Facebook with increased potential to draw a larger following. CANA had 4088 unique page views and 9505 views in total in 2015. Overall, the 2015 CANA interactive online sessions were in high demand with participants signing up to continually receive updates from CANA and take part in the discussions. There is a high demand among practitioners (researchers and policy makers) to use the CANA platform to collaborate and share information.

Partners: Rockefeller Foundation
Pamoja Media
The Common Market for Eastern and Southern Africa (COMESA)
Care International (Adaptation Learning Program)

Links / Sources for further information: CANA Platform - http://canafrica.com/
CANA Flier - http://canafrica.com/wp-content/uploads/2015/02/CANA-flyer.pdf
CANA Video -
https://www.youtube.com/watch?v=OBmfPzH9tlc&feature=youtu.be&list=PLD632736EE276E119

6. Activities

Activity #1
Title: Using CCAFS science to build AGN capacity in UNFCCC and supporting countries access climate finance
Description: In collaboration with COMESA and ACPC, CCAFS will continue to support the AGN with scientific evidence to articulate the African vulnerability to climate change in global climate change processs, and to support individual countries to access climate finance for readiness in developing CSA country programs. In addition, documentation of successful case studies in adaptation and mitigation in Africa will supplement the writing of technical papers and science briefs for the group. In 2016, the regional program working with CGIAR centres and CCAFS coordinating unit to support the country and AGN submissions to SBSTA on agriculture, specifically on adaptation measures and agricultural practices and technologies, including contributing a case study on adaptation planning as part of the resources for the AGN.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

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

Status: On-going	**Justification:** In 2015, through continued collaboration with COMESA, ACPC, CORAF/WECARD and IDRC, the regional program worked with African Group of Negotiators (AGN) to make three submissions to 42nd session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) of the UNFCCC. Specifically, the submissions focused on i) Early Warning Systems, ii) Risks and Vulnerability in Agricultural Systems, and iii) Gender and Climate Change. CCAFS scientists and partners also worked together with the AGN team to prepare a presentation which was shared during the agriculture workshop held on 3rd June by the agriculture coordinator of the AGN.

Activity #2
Title: Support to countries on early CSA action, and using CCAFS knowledge inputs to inform NAIPs
Description: The regional program will take stock of current CSA practices for up-scaling in the region and use knowledge generated through shared learning to inform the National Agricultural Investment Plans (NAIPs), with a strong emphasis on gender. Other areas of focus will include scaling up local innovations from action research, national policy actions and regional partnerships for CSA in 5 countries expanding the CANA knowledge hub. Support co-generation of knowledge and shared learning in key regional and Africa-wide events and conferences, and global conferences related to climate change, agriculture and food security (e.g. AMCEN and CCDA, SBSTA, COP). Guidelines for climate smart agriculture practices - specifically conservation agriculture with/without trees targeting major development agencies, including national governments and NEPAD.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

Leader: Kinyangi, James <j.kinyangi@cgiar.org>, RPL EA - RPL East Africa

Status: On-going	**Justification:** Working with ILRI, CIFOR, CIAT and ICRAF and ministries of Agriculture and Environment, provided technical input to development of climate-smart agriculture framework programs (CSA-FPs) in Kenya, Uganda, Tanzania, Botswana and Namibia. CSA-FPs successfully validated, with Kenya, Uganda and Tanzania integrating CSA into their INDCs submitted to UNFCCC. Exhibitions and engagements held during CBA 9, COP21, and CCDA V to share information on agriculture and climate change, highlight policy linkages of CSA in Africa, including emerging success stories from CCAFS EA CSVs. Policy makers from Rwanda and Ethiopia visited Nyando CSVs to learn how the local community is addressing climate-related risks.

Activity #3

Title: CSA priority actions within NAPs, Climate Change Action Plans, and CSA investments decision support tool

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

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016

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

Status: On-going	**Justification:** A paper published in Agricultural Systems (Brandt et. al) based on "TargetCSA" tool developed with CIFOR and ILRI. Continuous engagement with climate change units in MoALF and Environment ministries in Kenya, resulted in support to CIFOR for the IFAD funded project by Permanent Secretary (livestock department). Representatives from the ministries visited ILRI Mazingira Lab, and as a result UNDP will fund training on livestock emissions for government. Kenya government acknowledged contribution of the lab in measuring emissions from livestock in their booklet "Addressing Climate Change: Success stories from Kenya." TargetCSA tool shared during CANA webinar on CSA tools for Africa.

Activity #4

Title: Policies, strategies and tools related to climate change and agriculture in East Africa

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

Start date (dd-MM-yyyy): 01-01-2016	**End date (dd-MM-yyyy):** 31-12-2016

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

Status: On-going	**Justification:** Successful communication, including CSA success stories and lessons learnt to influence greater uptake of CSA through increased investments. CSA now referenced in several policy documents by in EA countries e.g. Kenya, Uganda and Tanzania INDCs. CANA platform used to share with policy makers and other stakeholders - NGOs, research institutions, private sector, media and students. A training workshop organized in May 2015 to build regional capacity on use of CANA. Two webinars hosted on CANA: 1. Mid-August 2015 to introduce more people to CANA and open it up for use. About 88 practitioners (policy, research, development) signed up to learn more about the platform. 2. Mid-October 2015 to introduce CSA tools for Africa. About 146 stakeholders among them policy makers, development practitioners and researchers took part in the interactive webinar. Over 500 people signed up. Researchers from the CGIAR (CIAT, ICRAF, ILRI and Care International shared some of the innovative CSA tools that have developed. These included i) Climate-Smart Agriculture Prioritization Framework, ii) Climate Smart Agriculture Rapid Appraisal (CSA-RA), iii) Participatory scenario planning (PSP), iv) CSA Compendium, v) targetCSA- a decision support tool to target CSA practices.

Lessons regarding your project activities and possible implications for the coming planning cycle: Continuous engagement with partners is critical for achieving results. Working jointly with next users (policy makers especially) to identify needs and priorities for research and policy, is essential to identify entry points where CCAFS evidence and tools can be applied. As the focus countries move into fundraising for and implementation of CSA-FPs, CCAFS tools can be used to assist national and local governments to target and prioritize CSA interventions. Online platforms such as CANA are useful in sharing information with policy makers and other interested stakeholders. Webinars, especially are proving to be a

useful platform to reach out to a wide range of stakeholders.

7. Leverages

Leverage #1	
Title: Climate Services for Africa	
Partner name: USAID - U.S. Agency International Development - United States	
Year: 2015	
Flagship: FP2: Climate Information Services and Climate-Informed Safety Nets	**Budget:** US $479,416.00

Leverage #2	
Title: Support to Africa Interact participants attending SBSTA 42 meeting in Bonn	
Partner name: IDRC - International Development Research Centre - Canada	
Year: 2015	
Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $22,486.00

Leverage #3	
Title: Working Session on Agriculture\Landuse	
Partner name: CORAF/WECARD - West and Central African Council for Agricultural Research and Development - Senegal	
Year: 2015	
Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $7,761.60

Leverage #4	
Title: Working Session on Agriculture\Landuse	
Partner name: UNECA - United Nations Economic Commission for Africa - Ethiopia	
Year: 2015	
Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $16,354.00

Title: (ILRI-EA/WA) Analyzing the science-policy-practice interface in climate change adaptation in East and West Africa

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2017
Management liaison	F4 - Flagship 4	**Mgmt. liaison contact**	Thornton, Philip <p.thornton@cgiar.org>
Lead organization	ILRI - International Livestock Research Institute - Kenya	**Project leader**	Crane, Todd <T.Crane@cgiar.org>
Project type	CCAFS CORE	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP4: Policies and Institutions for Climate-Resilient Food Systems	RP EA: East Africa
	Global: Global
	RP WA: West Africa

Bilateral project(s) contributing to this project
This project does not have Bilateral projects

Summary
This project aims to conduct empirical analysis of policy formation and implementation as a social process that involves complex interactions between a wide variety of stakeholders, including global policy and research actors, donor agencies, national policymakers, government ministries and their staff at various levels, civil society stakeholders, and sub-national political actors. First, we will analyze national policy environments that influence pastoral and agropastoral systems in East and West Africa. The second part of the approach is to analyze the dynamics of the science-policy interface platforms in real-time. Where the first part of the research assesses the overall policy environment, the second part emphasizes interface mechanisms between science and policy, focusing on how scientific information is produced, delivered, received, and drawn upon in the shaping of policies. Such analyses will enable a detailed understanding of the co-production of science, policy and (development) practice.

2. Partners

Partner #1 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Crane, Todd <T.Crane@cgiar.org>	Overall project leader, taking over from Polly Ericksen.
Partner	Chartier, Denis <denis.chartier@mnhn.fr>	He is the supervisor of Julien Meunier, the PhD student conducting the field research in Senegal.
Partner	Ivanova, Maria <maria.ivanova@umb.edu>	She is the supervisor of Wondwossen Wondemagegnehu, the PhD student conducting field research in Ethiopia.
Project Coordinator	Robinson, Lance <l.robinson@cgiar.org>	Activity 2014-208 *Leader*.

Partnerships overall performance over the last reporting period: Development of partnerships have not yet begun as 2015 was a year of the PhD students who will lead data gathering just starting their fieldwork.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: None at this time

3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Ethiopia
Country	Not applicable	Not applicable	Senegal
CCAFS Site	4.957	4.957	Borana
CCAFS Site	14.242	14.242	Kaffrine

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
The outcome of this project will be more effective engagement between national governments toward climate smart food systems, through a deeper understanding of policy and governance processes, leading to more effective "science-policy" platforms and "multi-level learning alliances".
There are two main objectives:
1.   To analyze the dynamics of policy and governance processes and mechanisms both upstream in terms of influences on policy formation and downstream in terms of the implementation and impact on livelihoods and climate change adaptation. This will identify the factors that have influenced the development of existing policy dialogues, which determine which policy options are on or off the table.
2.   To identify the best communication tools and modes of organization and for making platforms/alliances effective means of social learning between scientists and policy makers. This research will produce an empirical evidence base for recommending best practices in bringing science to bear on policy formation.

Annual progress towards outcome (end of 2015): National policy makers in both Ethiopia and Senegal can articulate an understanding of the cross-level governance processes that shape the local impact of one or two key national climate change adaptation policies.

Annual progress towards project outcome in the current reporting cycle (2015): Initial analyses have been done. Scoping study reports outline national stakeholders' understanding of how cross-scale governance issues affect local adaptation processes. However, we have not done a restitutions of findings to national stakeholders.
Communication and engagement activities have contributed to achieving your Project outcomes: We have not done a restitutions of findings to national stakeholders, but these activities had been planned for 2016.
Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): Strengths and weaknesses of existing policy processes and platforms are appreciated by CCAFS FP 4 researchers in Senegal and Ethiopia

Annual progress towards outcome (end of 2017): CCAFS scientists working in Senegal and Ethiopia can articulate the importance of key entry points and the impact of governance and political processes on uptake of science to shape national climate change adaptation policy. National stakeholders have a greater appreciation of the strengths and and weaknesses   of   existing   policy   processes   and   platforms.

Annual progress towards outcome (end of 2018): <Not defined>

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: Both scoping studies indicate some degree of reflexive awareness regarding the complexities of cross-scale governance and the role of scientific information in policy processes, creating a foundation for dialogue on how to navigate them.

4.2 Contribution to CCAFS Outcomes

RP WA - Outcome 2019: National level decision-makers (Gov. ministries), national agricultural research systems, NGOs, civil society organizations, regional organizations use CCAFS science-derived decision support tools and systems to mainstream climate change into national plans and policies from local to national levels.

Indicator #1: FP4 Indicator: # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019	
Target value: 1	**Cumulative target to date:** 2
Target narrative: Our analysis of policy and governance processes and mechanisms, together with analysis of the science-policy interface, will result in an understanding of how to use more evidence-informed approaches to policymaking. As a result, CCAFS derived science and other non-governmental stakeholders will engage more strategically with Senegalese policymakers and these policymakers in Senegal will take steps toward changing at least one policy to take into account evidence on equity and on the impacts of policies on climate smart practices in pastoral and agropastoral settings by the end of 2018. Exactly which policy(ies) to target will be determined through the analysis.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: National level stakeholders in Senegal begin appreciating some of the dynamics of policy processes, including at the level of implementation of the policy focused on for this project.		
Narrative for your achieved targets, including evidence: No targets for 2015.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		

2015
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: No targets for 2015.

2016	
Target value: 0	**Cumulative target to date:** 0
Target narrative: Discussions taking place in Senegal regarding specific actions to improve implementation of the target policy.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: As gendered analysis will be included in understanding the impacts of policy at community and household level, it is expected that the work will contribute to more gender sensitive policy.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

FP4 - Outcome 2019: Appropriately directed institutional investment of regional/global organisations and processes (e.g. IFAD, WB, FAO, UNFCCC) based on national/regional engagement to learn about local climate smart food system priorities

Indicator #1: FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs

2019	
Target value: 1	**Cumulative target to date:** 1
Target narrative: Bi-lateral and multilateral donor organizations, such as IFAD, the World Bank, and others, will gain an improved understanding of how their priorities and international discourses exert influence "downward" on national policy environments, and of the kinds of "upward" feedback that they require. This will lead to changes in their forms of engagement with developing country governments by 2019.	

2019
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: Identify the most influential adaptation donor for the selected policy in Senegal and Ethiopia.		
Narrative for your achieved targets, including evidence: No targets for 2015.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: No targets for 2015.		

2016	
Target value: 0	**Cumulative target to date:** 0
Target narrative: Because of reduced budget, this outcome should be dropped	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: N/A	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

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

Indicator #1: FP4 Indicator: # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019	
Target value: 1	**Cumulative target to date:** 2
Target narrative: Our analysis of policy and governance processes and mechanisms will help to identify particular policies and policy levers most in need of attention. This analysis, together with analysis of the science-policy interface, will result in an understanding of how to use more evidence-informed approaches to policymaking. As a result, policymakers in Ethiopia will take steps toward changing at least one policy by the end of 2018. Exactly which policy(ies) to target will be determined through the analysis.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: National level stakeholders in Ethiopia begin appreciating some of the dynamics of policy processes, including at the level of implementation of the policy focused on for this project.		
Narrative for your achieved targets, including evidence: No targets for 2015.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: No targets for 2015.		

2016	
Target value: 0	**Cumulative target to date:** 0
Target narrative: Discussions taking place in Ethiopia regarding specific actions to improve implementation of the target policy/platform.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: As gendered analysis will be included in understanding the impacts of policy at community and household level, it is expected that the work will contribute to more gender sensitive policy.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		

2014
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways

Activity 2014-208: The activity will also contribute to Flagship 1 by helping to understand the connections between national and supranational policies and policy engagement on the one hand, and local level interplay among policies at the level of implementation. Improved understanding of this connection will result in policies that are better in that they lead to more effective implementation and more appropriate impact at local and community levels.

Collaborating with other CRPs

Dryland Systems
Description of collaboration: Work in Ethiopia under this project connects with Dryland Systems work on natural resources, especially rangeland, policy and governance. This project is focused on the science-policy interface, and DS CRP work on this issue is doing systems analysis at more local levels.
The achieved outcome contributions: <Not defined>

4.4 Outcome case studies

There is not an Outcome Case Study added.

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Major Output groups - 2014

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Scoping studies in both sites have outlined actual national policy processes, including formulation and implementation, providing a foundation for informed engagement toward MOG.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
Scoping studies identified relevant gender and social inclusions issues to be pursued in follow up research.

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Scoping studies in both sites have outlined actual national policy processes, including formulation and implementation, providing a foundation for informed engagement toward MOG.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
Scoping studies identified relevant gender and social inclusions issues to be pursued in follow up research.

Major Output groups - 2016

FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
- We will have analyzed the environment created by the interaction of policies and implementation at the level of practice, and how these affect adaptation.
- Will have begun to analyze how science-policy interaction influences policy.

Brief plan of the gender and social inclusion dimension of the expected annual output
Examination of local level analysis of the environments created by policy will include a gendered analysis.

FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
Because of budget cuts, this MOG should be removed from this project.

Brief plan of the gender and social inclusion dimension of the expected annual output
N/A

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: <Not defined>

5.2 Deliverables

Deliverable #1

Main Information
Title: Analysis of cross-scale governance and policy dynamics in Senegal and Ethiopia
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015
Year of expected completion: 2015
Status: Complete

Next-user
Researchers
Knowledge, attitude, skills and practice changes expected in next-user: The stakeholders become aware of the interplay between national policy and local level implementation through governance mechanisms. This leads to more effective analysis and strategizing by policy stakeholders and ultimately to changes in policies.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement with existing national policy platforms.

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute
Partner #2: Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	2

Deliverable dissemination
Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata
Description: Synthesis of findings from a scoping studies
Creator / Authors: Todd A. Crane, Lance W. Robinson
Author Identifier: <Not defined>
Publication / Creation date: Decmeber 2015
Language: English
Coverage: Senegal, Ethiopia

Deliverable Data sharing
Senegal policy dynamics.pdf Analysis of policy dynamics - Ethiopia.pdf

Deliverable #2

Main Information
Title: Conceptual Framework for analysing cross-level science-policy interactions
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Discussion paper

Year of expected completion: 2015

Status: Complete

Next-user
Scientists and graduate students
Knowledge, attitude, skills and practice changes expected in next-user: The researchers are able to effectively analyze policy environments and the science-policy-practice interface.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Workshop among researchers, also involving other stakeholders.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: Elaboration of a conceptual framework for analysis of cross-scale governance dynamics for climate change adaptation

Creator / Authors: Lance W Robinson, Todd A. Crane

Author Identifier: <Not defined>

Publication / Creation date: Decembere 2015

Language: English

Coverage: Conceptual

Deliverable Data sharing

SciencePolicyInteractionsConceptualFramework_FINAL.pdf

Deliverable #3

Main Information

Title: Policy briefs (two) on cross-scale governance and policy dynamics

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers

Sub Type: Policy briefs - Briefing paper

Year of expected completion: 2017

Status: <Not defined>

Next-user

National government stakeholders.

Knowledge, attitude, skills and practice changes expected in next-user: National government actors become aware of interplay and start to think through how this could better foster climate adaptation. This leads to more effective analysis and strategizing by policy stakeholders and ultimately to changes in policies.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Constant engagement through the research process.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>	
Creator / Authors: <Not defined>	
Author Identifier: <Not defined>	
Publication / Creation date: <Not defined>	
Language: <Not defined>	
Coverage: <Not defined>	

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information
Title: Description of policy environment in pastoral/agropastoral settings in Ethiopia and Senegal and aimpacts on CCA
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016
Status: <Not defined>

Next-user
National government stakeholders.
Knowledge, attitude, skills and practice changes expected in next-user: National government actors become aware of interplay and start to think through how this could better foster climate adaptation. This leads to more effective analysis and strategizing by policy stakeholders and ultimately to changes in policies.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Constant engagement through the research process.

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files   <Not defined>

Deliverable #5

Main Information	
Title: Policy briefs (2) on cross-scale governance and policy dynamics and on the science-policy interface	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper

Year of expected completion: 2017

Status: <Not defined>

Next-user #1

National government stakeholders

Knowledge, attitude, skills and practice changes expected in next-user: Evidence of national government stakeholders and non-governmental stakeholders adopting new attitudes to cross-sectoral, cross-level planning, and science-policy co-ordination and interaction. This leads to more effective analysis and strategizing by policy stakeholders and ultimately to changes in policies.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Constant engagement through the research process.

Next-user #2

Scientists

Knowledge, attitude, skills and practice changes expected in next-user: Scientists will better understand interface mechanisms between science and policy, focusing on how scientific information is produced, delivered, received, and drawn upon in the shaping of policies. Such analyses will enable a detailed understanding of the co-production of science, policy and development practice.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement through multi-stakeholder platforms and through ongoing scientific collaboration, such as through CCAFS funding.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <u><Not defined></u>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information
Title: Assessment of science-policy exchange processes; evidence-based recommendations for the organisation of science-policy platforms
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2017
Status: <Not defined>

Next-user
National government stakeholders, National and international applied science organisations. CCAFS Flagship 4 projects.
Knowledge, attitude, skills and practice changes expected in next-user: These stakeholders better understand how to bridge the science-policy "gap".
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Constant engagement with national level partners through the research process. Engagement with donor agencies through multi-donor platforms, e.g. those that exist for sector-wide approaches in recipient countries. Engagement through multi-stakeholder platforms and through ongoing scientific collaboration, such as through CCAFS funding.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #7

Main Information

Title: Journal articles : four by 2017

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2017

Status: <Not defined>

Next-user

Scientists

Knowledge, attitude, skills and practice changes expected in next-user: They appreciate the importance of social and institutional processes in the science-policy interface.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Promotion of the papers through scientific conferences, blogs and other communication tools.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>	
Publication / Creation date: <Not defined>	
Language: <Not defined>	
Coverage: <Not defined>	

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #8

Main Information	
Title: Policy dialogues	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2017	
Status: <Not defined>	

Next-user
National government stakeholders; international donors
Knowledge, attitude, skills and practice changes expected in next-user: Stakeholders become aware of some of the dynamics of their interaction, and of the interaction of policies at the level of implementation, and as a result choose to continue engaging in efforts to analyze and assess Platforms and other spaces of science-policy interaction.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Ongoing engagement outside of the policy dialogues and engagements through Platforms.

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>

Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #9

Main Information

Title: Institutional assessment for climate change adaptation, Didahara, Borena, southern Ethiopia	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2015	
Status: Complete	

Next-user

NGOs, government

Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement through this project

Partners contributing to this deliverable

Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	2

Deliverable dissemination

Open access restriction: Yes

License adopted: CC-BY-NC-SA (allow modifications as long as other share alike, but no commercial use)

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/68497

Deliverable Metadata

Description: <Not defined>

Creator / Authors: Desalegn, Ayal; Desta, Solomon; Robinson, Lance W.

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: en

Coverage: Ethiopia

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #10

Main Information
Title: How Landscape Level Governance and Land Use Planning are Connected: Insights from Marsabit, Isiolo, Makueni
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Communication Products and Multimedia	**Sub Type:** Presentations

Year of expected completion: 2015
Status: Complete

Next-user
Researchers; development change agents
Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement through this project

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	1

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>

Dissemination Channel: other	
Dissemination URL: http://www.slideshare.net/ILRI/lup-learning2015-robinson	

Deliverable Metadata
Description: <Not defined>
Creator / Authors: Robinson, L.W.
Author Identifier: <Not defined>
Publication / Creation date: 11-12 February, 2015
Language: en
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information	
Title: Assessing governance for climate smart landscapes: A case from Makueni County, Kenya	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Communication Products and Multimedia	**Sub Type:** Poster
Year of expected completion: 2015	
Status: Complete	

Next-user
Researchers; development change agents
Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement through this project

Partners contributing to this deliverable

Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	1

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.slideshare.net/cgiarclimate/makueni-governance-csa20150302final

Deliverable Metadata

Description: <Not defined>

Creator / Authors: Ontiri, E.; Robinson, L.W.

Author Identifier: <Not defined>

Publication / Creation date: 16-18 March, 2015

Language: en

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Analyse des dimensions institutionnelles de l'adaptation au changement climatique du Baobolong, Kaffrine, Sénégal

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper

Year of expected completion: 2015

Status: Complete

Next-user

NGOs, government

Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement through this project

Partners contributing to this deliverable

Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	2

Deliverable dissemination

Open access restriction: Yes

License adopted: CC-BY-NC-SA (allow modifications as long as other share alike, but no commercial use)

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/65974

Deliverable Metadata

Description: <Not defined>

Creator / Authors: Camara, A.D.; Fall, M.

Author Identifier: <Not defined>

Publication / Creation date: 2015	
Language: fr	
Coverage: <Not defined>	

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #13

Main Information	
Title: Landscape–level institutional assessment of Baobolong, Kaffrine, Senegal	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2015	
Status: Complete	

Next-user
Academics
Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Writing a journal paper

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1

What is your personal perspective of the importance of this product	2

Deliverable dissemination

Open access restriction: Yes

License adopted: CC-BY-NC-SA (allow modifications as long as other share alike, but no commercial use)

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/71091

Deliverable Metadata

Description: English translation of original French report available at https://cgspace.cgiar.org/handle/10568/65233.

Creator / Authors: Camara, A.D.,Fall, M.

Author Identifier: <Not defined>

Publication / Creation date: 2016-02-17T19:21:04Z,2016-02-17T19:21:04Z,2015-12

Language: en

Coverage: Kaffrine, Senegal

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #14

Main Information

Title: Governance dimensions of climate change adaptation: Methodology for landscape-level institutional assessments

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Tools and Computer Software	**Sub Type:** Tools

Year of expected completion: 2015

Status: Complete

Next-user
Researchers; development change agents
Knowledge, attitude, skills and practice changes expected in next-user: Improved ability to appreciate, investigate and assess the institutional and governance dimensions of climate change adaptation and strategize on governance design
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The methodology is being used in other projects, through which more researchers are being exposed to it. A journal publication on the methodology is being planned.

Partners contributing to this deliverable
Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	5
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: CC-BY-NC-SA (allow modifications as long as other share alike, but no commercial use)
Dissemination Channel: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/71090

Deliverable Metadata
Description: <Not defined>
Creator / Authors: Robinson, L.A.,Desalegn, A.,Camara, A.D.,Ontiri, E.
Author Identifier: <Not defined>
Publication / Creation date: 2016-02-17T19:20:44Z,2016-02-17T19:20:44Z,2015-09
Language: en
Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #15

Main Information

Title: Institutional assessment, Baobolong, Kaffrine, Senegal

MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper

Year of expected completion: 2015

Status: Complete

Next-user

NGOs, government

Knowledge, attitude, skills and practice changes expected in next-user: Deeper understanding of local and landscape level institutional dimensions of climate change adaptation

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement through this project

Partners contributing to this deliverable

Partner #1 (Responsible): Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	1

Deliverable dissemination

Open access restriction: Yes

License adopted: CC-BY-NC-SA (allow modifications as long as other share alike, but no commercial use)	
Dissemination Channel: cgspace	
Dissemination URL: <Not defined>	

Deliverable Metadata
Description: This is an English translation of https://cgspace.cgiar.org/handle/10568/65974
Creator / Authors: Camara, A.D.,Fall, M.
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: en
Coverage: Kaffrine, Senegal

Deliverable Data sharing
ResearchBrief_59.pdf

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: The next users of the 2015 activities and deliverables are other researchers, especially the PhD students on this project. Our scoping research and conceptual framework has given them a headstart on their research projects.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: We have been in regular contact with the students, sharing our insights and providing feedback on their proposals and work plans.
Reported deliverables serve as evidence towards this achieved change: All deliverables have contributed to the next users work.
Lessons and implications for the next planning cycle: Scoping studies and conceptual framework enable the next users to get into greater depth more quickly. They will also help ensure that the 2 studies will be effectively comparable.

5.4 Project highlights

6. Activities

Activity #1
Title: Analysing the science-policy-practice interface
Description: This project aims to conduct empirical analysis of policy formation and implementation as a social process that involves complex interactions between a wide variety of stakeholders, including global policy and research actors, donor agencies, national policymakers, government ministries and their staff at various levels, civil society stakeholders, and sub-national political actors. First, we will analyze national policy environments that influence pastoral and agropastoral systems in East and West Africa. The second part of the approach is to analyze the dynamics of the science-policy interface platforms in real-time. Where the first part of the research assesses the overall policy environment, the second part emphasizes interface mechanisms between science and policy, focusing on how scientific information is produced, delivered, received, and drawn upon in the shaping of policies. Such analyses will enable a detailed understanding of the co-production of science, policy and (development) practice.[Project description is the same as activity description]

Start date (dd-MM-yyyy): 01-01-2015	End date (dd-MM-yyyy): 31-12-2017
Leader: Robinson, Lance <l.robinson@cgiar.org>, ILRI - International Livestock Research Institute	
Status: On-going	**Justification:** Initial fieldwork has begun and the first reports produced. As this activity is the only one in the project (the project and the activity are synonymous), for further information, please see other sections of the reporting.

Lessons regarding your project activities and possible implications for the coming planning cycle: None at this time.

7. Leverages

<Not defined>

CCAFS COFUNDED W1_W2_W3

Title: ILRI Mitigation in livestock systems and LED pathways

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2018
Management liaison	RP EA - East Africa Region	**Mgmt. liaison contact**	Kinyangi, James <j.kinyangi@cgiar.org>
Lead organization	ILRI - International Livestock Research Institute - Kenya	**Project leader**	Ericksen, Polly <p.ericksen@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP3: Low Emissions Agricultural Development	RP EA: East Africa

Bilateral project(s) contributing to this project
202 - In situ assessment of GHG emissions from two livestock systems in East Africa
204 - Greening Livestock: Incentive-based interventions for reducing the climate impact of livestock in East Africa
203 - Climate and Clean Air Coalition (CCAC) - manure management

Summary
This project integrates social and biophysical research, including surveys, ethnography, spatial and mechanistic modeling, and targeted GHG measurements, to co-define with stakeholders landscape mitigation leverage points, supportive social constructs, and national priorities in order to inform ongoing climate change policy processes in Uganda, Tanzania, and Kenya, through a foes on high mitigation potential livestock systems.
The project seeks to answer four research questions:
1.   Where are high mitigation potential livestock systems based upon current information?
2.   What is the uncertainty of current information on emissions and spatial data for the identified livestock systems?
3.   What are the incentives, institutional environments and investments needed for smallholders to adopt livestock climate smart practices and do they differ by geography (landscape), livelihood and gender?

4.   What are the best strategies for engaging research users and value chain actors to implement LEDs?

2. Partners

Partner #1

Institution: CIFOR - Center for International Forestry Research

Contacts

Type	Contact	Responsibilities and contributions
Project Coordinator	Rufino, Mariana <m.rufino@cgiar.org>	CIFOR will lead Activity 2, to compile and analyse spatially explicit activity and socio-economic data, which will be used both to target emissions reductions and to assess the potential for scaling out best practices towards the end of the project. Additionally CIFOR will contribute to consideration of how emissions from livestock value chains could be offset by tree/agroforestry interventions in the landscape (Activity 1).

Partner #2

Institution: ICRAF - World Agroforestry Centre

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rosenstock, Todd <t.rosenstock@cgiar.org>	ICRAF will contribute to Activities 2 and 3, and act (along with ILRI) as the main liaison with the EADD project partners (Heifer International in particular). ICRAF also will be our main point of contact with the Unique Forestry group, with whom we anticipate interactions under Activity 1 in particular, linked to the ICRAF and UF project for FP 3. Activity 2014-73 *Partner*. Activity 2014-102 *Partner*. Activity 2014-213 *Partner*.

Partner #3 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Ericksen, Polly <p.ericksen@cgiar.org>	Activity 2014-422 *Leader*. Activity 2014-102 *Leader*.

Partner	Crane, Todd <T.Crane@cgiar.org>	Activity 2014-293 *Leader*.
Partner	Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>	Activity 2014-73 *Partner*. Activity 2014-213 *Leader*.
Partner	Goopy, John <J.goopy@cgiar.org>	Leads the emissions measurements activities.

Partner #4

Institution: Heifer International

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kapoor, Rakesh <r.kapoor@heifer.org>	Activity 2014-73 *Partner*. Activity 2014-213 *Partner*.

Partner #5

Institution: UNIQUE - Unique Forestry and Land Use GmbH

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>	Activity 2014-102 *Partner*.

Partner #6

Institution: CIFOR - Center for International Forestry Research

Contacts

Type	Contact	Responsibilities and contributions

Partner	Rufino, Mariana <m.rufino@cgiar.org>	Activity 2014-213 *Partner*. Activity 2014-73 *Leader*.

Partnerships overall performance over the last reporting period: The partnership has worked well especially between CIFOR and ILRI, as we have worked as a team to deliver on the targeting and sampling, and the engagement with stakeholders, and resource mobilisation. The partnership with ICRAF suffered from the funding cuts. The partnership with Unique Forestry has required persistent nagging from CIFOR and ILRI to be included in UF plans and workshops. The partnership with Heifer has relied on ICRAF and ILRI previous work with them, especially to gain access to EADD data.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: None in particular. We note the need to continue working through Unique Forestry to help inform the NAMA process. We will also maintain our own links to Kenyan partners however.

3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	East Africa
Country	Not applicable	Not applicable	Kenya
Country	Not applicable	Not applicable	Tanzania

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
National policy makers and donors use the decision support provided by this project for the design of and investment in LED pathways for livestock systems in Kenya and Tanzania based on robust evidence about mitigation potentials, institutional incentives, and tradeoffs/synergies between mitigation and development. The research will support a reduction in GHG emission intensities from livestock production (live weight, milk, per head) of 25% in intensive livestock systems of mixed highlands by 2019.
The following specific outputs are expected by 2018.
* Synthesis of current data and uncertainties on livestock-related emissions for East Africa.
* Improved emissions estimates for livestock systems across East Africa.
* Assessment of adoption potential of climate smart livestock technologies.
* Recommendations for creating the required institutional mechanisms and enabling environment to promote adoption of climate smart livestock practices.

Annual progress towards outcome (end of 2015): We will have reviewed the emissions targets in the Kenya NAMA and the Kenya Livestock Master Plan. We will use the regional assessment to assess which plans to target in 2016, 2017 and 2018.

Annual progress towards project outcome in the current reporting cycle (2015): The targets for our annual progress have been modified, given that the Kenya NAMA is still under development and the Kenya Livestock Master Plan has not yet been developed either. However, through the collaboration with Unique Forestry as well as CIFOR and ILRI's own efforts in collaboration with the East Africa Regional Programme, we are still on track to meet the target of informing one low emissions plan by end 2016. This will be the Kenya NAMA, which got a slow start in 2015 but is now on target for a first draft by July 2016. CIFOR and ILRI have supported the Climate Change Unit of the Ministry of Agriculture in their efforts to contribute to the inclusion of livestock in the NAMA. the CIFOR/ ILRI teams have attended an initial stockholders meeting for the Kenya NAMA in September 2015. In two separate planning meetings with Unique Forestry we have outlined specific contributions that the CCAFS funded FP 3 research can make to the development of the Kenya Dairy NAMA. These include how to ensure gender inclusion and social equity; filling in data gaps for feed sources and land use change; and providing alternative models/ methods for estimating emissions from livestock systems. ILRI/ CIFOR team is to be invited to the NAMA development committee, which will further confirm our support to the NAMA.

As summarised in the deliverables section, we have made good progress on the scientific outputs underlying our ability to provide information/ fill the data gaps needed for a successful NAMA. This input will intensify once the draft NAMA is submitted to the Green Climate Fund and the design stage commences.

We provide evidence additional in our Outcome Case Study, including future plans for influencing IFAD investments.

> **Communication and engagement activities have contributed to achieving your Project outcomes:** We have used a several pronged engagement approach. First has been to continue the engagement with the Climate Change Unit of the Ministry of Agriculture, led by CIFOR through support from the EA RPL and ILRI. This engagement began through presentations on the TargetCSA work to the Climate change Secretariat by CIFOR.   Second has been to work with Unique Forestry to engage with the Dairy NAMA development process, and to attend any of the workshops organised around this.   Third has been ensuring local stakeholder participation in choosing sampling sites and target interventions.

> **Evidence documents of progress towards outcomes:** <Not defined>

Annual progress towards outcome (end of 2016): The regional baseline will be published. We will begin to target livestock systems in either Tanzania   through the mapping and analysis of social differentiation as well as discussions with climate change units and livestock ministry staff.

Annual progress towards outcome (end of 2017): Preliminary analysis of adoption potential of identified feeding strategies in at least two livestock systems (Kenya, Tanzania). Preliminary analysis of uptake of emissions results into Tanzanian national plans.

Annual progress towards outcome (end of 2018): Project outcome achieved (end of four years).

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: <Not defined>

4.2 Contribution to CCAFS Outcomes

RP EA - Outcome 2019: National Governments and Agencies (Ministries of Environment, Agriculture and the National Environment Authorities) are designing, developing and implementing low emissions strategies for agriculture.

Indicator #1: FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

2019	
Target value: Two additional (three in total)	**Cumulative target to date:** Cannot be Calculated
Target narrative: Either the Tanzania or Uganda national plans also include emissions reductions in the Dairy sector. The plans will have solid evidence for how to achieve the 5% reduction based upon the targeting work as well as the measurements which have greatly reduced the uncertainty that currently exists and make it difficult to include the diary sector in climate change investments.	

2019

The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015

Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0

Target narrative: The regional baseline will start in 2015 so we will not have a target until 2016. We also need 2015 to review the two Kenya national plans and understand how to improve the data and estimates.

Narrative for your achieved targets, including evidence: We had no 2015 target, but we can now confirm that we will target the Kenya NAMA for 2016.

The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The gender and social inclusion contribution is underway; in 2015 the project conducted preliminary research on gender and social differentiation in feed and manure management; and started data analysis using EADD data on the gender differences in intra-household decision making in the Kenya dairy sector.
In 2016 the project will contribute a review of best practices to ensure gender equity in the dairy sector, as a specific deliverable to the drafting of the Kenya NAMA. The project will continue to inform the actual design of NAMA interventions to ensure gender equity.

2016

Target value: 1	**Cumulative target to date:** 1

Target narrative: The Kenya national plan (NAMA) will have solid evidence for how to achieve the 5% reduction based upon the targeting work as well as the measurements which have greatly reduced the uncertainty that currently exists and make it difficult to include the diary sector in climate change investments. Through the different project and private sector implementation initiatives under the ICRAF/ Unique Forestry project this plan could reach between 200 and 600 thousand farmers.

The expected annual gender and social inclusion contribution to this CCAFS Outcome: Note the target of 10% of beneficiary farmers to be women. In order to comply with this we are conducting research into the gendered nature of participation in dairy value chains as well as the implications of introducing interventions and incentives to reduce emissions from dairy value chains on women.

2014

Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>

Target narrative: <Not defined>

Narrative for your achieved targets, including evidence: <Not defined>

2014
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways
Activities 2014-102 and 2014-213: Are also contributing to the overall FP 3 impact pathway Outcome 1 on Science-based decision making - Global standards organizations and national decision-makers are planning and implementing low-emissions development strategies that contribute to food security, using reliable, comparable quantification data and decision support tools.

Activity Also contributes to the FP 3 outcome number 1.

Activity 2014-293: FP 3 outcome 2: incentives and innovations... by conducting research on social and institutional issues necessary to get the incentives for behaviour change right.

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Outreach to Kenya Ministry Environment and Agriculture Climate Change Staff
Outcome statement: The Climate Change Units of the Ministries of Environment and Agriculture recognise the role of the research CIFOR and ILRI are conducting on options for mitigating the contribution of livestock production systems to climate change.
Research Outputs: First is the TargetCSA tool developed by CIFOR (M. Rufino) with support from CCAFS East Africa. Target CSA allows national partners to make informed choices about where to locate CSA interventions, based upon a range of geographic, biophysical, and economic data. Second is the data and products from the SAMPLES work conducted by ILRI, CIFOR and ICRAF under Flagship 3 for the past 3 years, highlighting the importance of collecting in situ data from African systems, and designing and piloting best practice for such data collection. Third are the as yet preliminary results of emissions differences from changed manure management and livestock feeding practices.
Research Partners: The primary research partners are the International Livestock Research Institute, The Centre for International Forestry Research, the World Agroforestry Centre, the Karsruhe Institute of Technology and Institute of Meteorology and Climate Research, Garmisch-Partenkirchen (Germany).
Activities that contributed to the outcome: 1. March 5, 2015 visit to ILRI hosted Mazingira Lab by Min of Environment Climate Change Unit Staff and other key stakeholders. 2. Continuous support by CIFOR and ILRI to the CC Unit as they formulated their CSA strategy and included agriculture in their INDC. 3. Request to CC unit of the Ministry of Agriculture to formally support the IFAD grant to ILRI / CIFOR project on "Greening Livestock", which will inform the ongoing Kenya NAMA, which includes the Dairy Sector. 4. Participation in the Unique Forestry stakeholder consultation with the Ministry of Agriculture to discuss the dairy NAMA.
Non-research Partners: Unique Forestry, which has been commissioned by CCAFS FP 3 to support the development of a Dairy NAMA in Kenya.
Output Users: The output users are members of the Climate Change Unit within the Ministry of Environment, and the CC Unit within the Ministry of Agriculture.
How the output was used: The outputs have been used to embed agriculture in the Kenya INDC, and to include the dairy sector in the NAMA that is under development.
Evidence of the outcome: Letters from the Ministry staff are included in an annex. A blog (see below) covers the March 5 visit. CCAFS EA wrote an outcome story about the Kenya INDC (see below).
References: March 5 visit: http://blog.cifor.org/27454/in-an-important-first-for-africa-climate-data-made-in-kenya?fnl=en INDC: https://cgspace.cgiar.org/bitstream/handle/10568/67906/07outcomecase.pdf?sequence=6 Journal papers reported under the deliverable.s
The primary 2019 outcome indicator that this case study is contributing to: FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.
Explanation of the link between your outcome story and the CCAFS indicators:
Year: 2015

Annexes uploaded: outcome annex.zip

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014
FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers **Brief bullet points of your expected annual 2014 contribution towards the selected MOG** <Not defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not defined>

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Developed national level targeting strategy for selecting geographic locations for collecting data to develop estimates of emissions (current) and future reductions through targeted interventions.
Developed and implemented sampling strategy for collecting emissions data from smallholder dairy systems at county level.
Begun data collection for feed/ manure interventions.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
This is a geographic targeting process so gender not important.

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Engaging with the Kenya Dairy NAMA development process.
Consulted with EADD partner Heifer as well as local Nandi stakeholders on site/ intervention sampling strategy.

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
Undertaking analysis to understand the current gender differentiated roles in dairy production, to inform future analysis of how changes in dairy production to reduce GHG emissions will have an impact on women's duties and responsibilities.

Major Output groups - 2016

FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
<Not defined>

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
<Not defined>

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: <Not defined>

5.2 Deliverables

Deliverable #1

Main Information
Title: Engagement strategy developed and research questions on the process to identify effective means developed
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study

Year of expected completion: 2015
Status: Complete

Next-user
Ourselves as researchers, to better understand how to engage with end users
Knowledge, attitude, skills and practice changes expected in next-user: Beginning of a process of co-ownership of knowledge will be generated;
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The commitment to and development of a co-learning approach. As the engagement with Kenyan stakeholders and Unique Forestry has evolved, it is clear that this requires continual commitment by all parties to make the research useful but also to use the research.

Partners contributing to this deliverable
Partner #1 (Responsible): Ericksen, Polly <p.ericksen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>

Dissemination Channel: -1	
Dissemination URL: <Not defined>	

Deliverable Metadata

Description: brief report indicating our joint work planning with Unique Forestry.

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

30 November NAMA planning workshop.pdf

Deliverable #2

Main Information

Title: Discussions about emissions uncertainties and hotspots for interventions;

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Workshops	**Sub Type:** Workshop

Year of expected completion: 2016

Status: <Not defined>

Next-user

Ourselves, livestock value chain and national stakeholders.

Knowledge, attitude, skills and practice changes expected in next-user: End users will have a greater appreciation of the benefits of reducing emissions along livestock value chains.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Co-learning and strong engagement through UF and EARP.

Partners contributing to this deliverable

Partner #1 (Responsible): Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>, UNIQUE - Unique Forestry and Land Use GmbH

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #3

Main Information
Title: Uptake of outputs from Activities 2, 3 and 4 monitored
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2017	
Status: <Not defined>	

Next-user

County and district land use planners, livestock ministry staff, livestock value chain actors

Knowledge, attitude, skills and practice changes expected in next-user: Emissions reductions influence county and livestock sector development plans

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Co-learning and strong user engagement through UF and EARP

Partners contributing to this deliverable

Partner #1 (Responsible): Ericksen, Polly <p.ericksen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information
Title: Synthesis of current data and estimate uncertainties in livestock systems with potential for emissions reductions.
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2015
Status: Complete

Next-user
Unique F; national climate change units; EADD stockholders; donors
Knowledge, attitude, skills and practice changes expected in next-user: Climate change units acknowledge the importance of national and sub-national analysis of emissions and their uncertainties, and therefore begin to contribute to the development of the targets for emissions reductions. UF and EADD become users of the analysis to design NAMAs and to adjust their targets for CSA
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Consultations will be used to shape the format of the science output that the next user needs. Members of the climate change units will be invited to become part of the targeting team, along with Ministry of Agriculture, Livestock and Fisheries staff. These staff will be integrated into project analysis.

Partners contributing to this deliverable
Partner #1 (Responsible): Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4

What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: The data represent first results from a study on greenhouse gas (GHG) emissions from dairy cattle in Kenya, assessing co-benefits between milk production and mitigation. Available are baseline estimates focussing on enteric fermentation, manure and soil management (CH4, N2O) under current feeding and manure management regimes. The data are derived from a dynamic model simulating dairy cows in time, including milk and excreta production as well as resulting GHG emissions on a monthly basis. Available outputs are expressed as per cow head (spreadsheets) and spatially up scaled on livestock production systems using cattle type and herd composition data (Geotiff grids) at a spatial resolution of 1km. Please note that the results are preliminary.

Creator / Authors: Patric Brandt, Mariana C. Rufino

Author Identifier: <Not defined>

Publication / Creation date: 3/3/2016

Language: English

Coverage: Kenya (main dairy production areas)

Deliverable Data sharing

CCAFS_report_03-03-2016.docx

data.zip

Deliverable #5

Main Information

Title: Spatially explicit mapping of promising mitigation options at county level

MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2016

Status: <Not defined>

Next-user

1-2 county governments in Kenya where EADD partners work including implementing NGOs.

Knowledge, attitude, skills and practice changes expected in next-user: Users value the information provided (publically available) and learn how to use if to inform their development plans.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: One workshop will be held to share knowledge and the scientific products will be shaped to serve the needs in conjunction with Activity 1 and UF activities.

Partners contributing to this deliverable

Partner #1 (Responsible): Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information
Title: Sub-national plans for emissions reductions are tailored to value chains for selected counties
MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Reports, Reference Materials and Other Papers	Sub Type: Research report

Year of expected completion: 2017
Status: <Not defined>

Next-user
Selected county governments in Kenya; EADD partners and implementing NGOs
Knowledge, attitude, skills and practice changes expected in next-user: Selected county governments have incorporated targets for emissions reductions from the livestock sector in the development plans for their value chains, supported by the Kenyan national government and the donor community.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We translate the information generated to the levels users need (e.g. counties versus donors), disseminate and engage through Activity 1 in providing technical advise to specific value chains.

Partners contributing to this deliverable
Partner #1 (Responsible): Ericksen, Polly <p.ericksen@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #7

Main Information

Title: Diet mapping for East African dairy industry.

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2015

Status: On-going	**Justification for cancelling the deliverable:** The field campaign for diet mapping (including sample collection) has been completed for one area (Nyando) has been completed. Due to the need for sample analysis to be undertaken outside of Kenya, proximate analysis of the feed basket constituents has been delayed and will be completed by the end of calender Q1. Data analysis should be complete by the end of Q2, with a publication ready for submission by Q3. Data collection for a second area (Nandi province) is under way and scheduled for completion by October (2016). There is intent to repeat in a third area if necessary operating is made available. New Livestock emissions estimates. Data underpinning new emissions estimates for ruminant livestock (in Nyando) has been collected and collated. It is undergoing primary analysis and new estimates should be ready to present for spatially explicit modelling by the end of Q2, with publication to follow. Data collection for a second area will be completed by October.

Next-user

National stakeholders, EADD stakeholders; private sector.

Knowledge, attitude, skills and practice changes expected in next-user: Awareness raised about feeding systems and identification of high potential intervention areas.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Links to activities 4 and 1 ensure stakeholder perspectives are included and that we document barriers to uptake and use of the data.

Partners contributing to this deliverable

 Partner #1 (Responsible): Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Open access restriction: <Not defined>

| License adopted: <Not defined> |
| Dissemination Channel: -1 |
| Dissemination URL: <Not defined> |

| Deliverable Metadata |
| Description: <Not defined> |
| Creator / Authors: <Not defined> |
| Author Identifier: <Not defined> |
| Publication / Creation date: <Not defined> |
| Language: <Not defined> |
| Coverage: <Not defined> |

| Deliverable Data sharing |
| **Deliverable files**
<Not defined> |

Deliverable #8

Main Information
Title: Manure managent survey and mapping for East Africa.
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers
Main Type: Data and information outputs, including datasets, databases and models **Sub Type:** Data
Year of expected completion: 2015

Status: On-going	**Justification for cancelling the deliverable:** We have almost finished the characterization of the manure management systems used by farmers in Nandi county, Kenya. We have visited 297 farms and collected data on 290 of these. We have also completed one full study and a pilot study investigating GHG emissions from livestock manure in a Kenyan context. The first study has been submitted to the Journal of Environmental Quality and investigated the GHG emissions of dung and urine from typical Kenyan cattle given typical and improved feeds applied to grasslands in Nairobi. Three publications have been submitted to journals; One is now publicly available.

Next-user

as for deliverable 1

Knowledge, attitude, skills and practice changes expected in next-user: Awareness raised about manure management systems and identification of high potential intervention areas.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: as for deliverable 1

Partners contributing to this deliverable

Partner #1 (Responsible): Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.biogeosciences-discuss.net/bg-2015-392/

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #9

Main Information	
Title: Assessment of opportunities to collected data on farm management activities within smallholder dairy value chains.	
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** This activity was modified due to budget cuts and overlap with Unique Forestry projects. We are now writing up a case study on EADD MRV system to include with a working paper on MRV for Kenya NAMA. I received the information from EADD now and plan to write up the case study this upcoming week. I'd think the WP would be out in 2nd Quarter 2016. ICRAF and colleagues have also submitted several papers related to SAMPLES.

Next-user
as for previous two deliverables
Knowledge, attitude, skills and practice changes expected in next-user: Helps CCAFS, EADD and Livestock and Fish to understand challenges of data collection

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: N/A as this is ourselves; hopefully we will be more realistic about sampling and survey design.

Partners contributing to this deliverable
Partner #1 (Responsible): Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	3

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information

Title: Emissions factors for different dairy feeding strategies, manure management options, manure application

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2016

Status: <Not defined>

Next-user

as for previous deliverables.

Knowledge, attitude, skills and practice changes expected in next-user: Users appreciate the value of emissions factors measured in real life East African dairy systems, meaning they believe the numbers and are more likely to use them in planning.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: as for previous deliverables.

Partners contributing to this deliverable

Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>	
Author Identifier: <Not defined>	
Publication / Creation date: <Not defined>	
Language: <Not defined>	
Coverage: <Not defined>	

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Identification of mitigation potential for different feeding and manure management options in Kenya.
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Main Information (cont.)
Year of expected completion: 2016
Status: <Not defined>

Next-user
National livestock ministry staff, Climate Change unit staff; EADD partners.
Knowledge, attitude, skills and practice changes expected in next-user: Users start to think about how they might modify livestock management and milk production in order to maximise productivity and minimise the environmental footprint.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Link to activities 1 and 4.

Partners contributing to this deliverable
Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>

Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Emissions factors for different dairy feeding strategies and manure management options in Tanzania   obtained.

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data

Year of expected completion: 2017

Status: <Not defined>

Next-user

as above but for Tanzania .

Knowledge, attitude, skills and practice changes expected in next-user: as above.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: as above.

Partners contributing to this deliverable

Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #13

Main Information
Title: Identification of mitigation potential for different feeding and manure management options in Tanzania.
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016
Status: <Not defined>

Next-user
as above.
Knowledge, attitude, skills and practice changes expected in next-user: as above.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: as before for the whole activity.

Partners contributing to this deliverable
Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #14

Main Information

Title: Farmer experimentation in Kenya and Tanzania implemented.

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study

Year of expected completion: 2016

Status: <Not defined>

Next-user

Farmers.

Knowledge, attitude, skills and practice changes expected in next-user: Farmers begging to modify their dairy production systems.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Tight links to the farmer innovation platforms and dissemination systems in the EADD and Livestock and Fish value chains.

Partners contributing to this deliverable

Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	\<Not defined\>
Potential for/ actual contribution to outcomes	\<Not defined\>
Level of shared ownership (partnerships across org.)	\<Not defined\>
What is your personal perspective of the importance of this product	\<Not defined\>

Deliverable dissemination
Open access restriction: \<Not defined\>
License adopted: \<Not defined\>
Dissemination Channel: \<Not defined\>
Dissemination URL: \<Not defined\>

Deliverable Metadata
Description: \<Not defined\>
Creator / Authors: \<Not defined\>
Author Identifier: \<Not defined\>
Publication / Creation date: \<Not defined\>
Language: \<Not defined\>
Coverage: \<Not defined\>

Deliverable Data sharing
Deliverable files   \<Not defined\>

Deliverable #15

Main Information	
Title: Pilot tool will be developed to collect information on key farm management variables	
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2015	

Status: Cancelled	**Justification for cancelling the deliverable:** ICRAF cancelled this activity due to the 2015 budget cuts.

Next-user

EADD stakeholders and researchers.

Knowledge, attitude, skills and practice changes expected in next-user: Better awareness of how to rapidly collect farm data.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: embedding the project in existing value chains (EADD, Livestock and Fish) research for development.

Partners contributing to this deliverable

Partner #1 (Responsible): Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #16

Main Information

Title: Report analysing the social distribution of participation in targeted livestock value chains	
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** We completed two preliminary studies, one qualitative and one quantitative, both looking social differentiation in management of dairy production and milk sales. These will now feed into a publication for 2016.

Next-user
Research team and EADD implementing partners.
Knowledge, attitude, skills and practice changes expected in next-user: Understanding of how patterns of GHG emissions intersect with the distribution of social equity.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Links to activity 1 with a strong emphasis on stakeholder engagement.

Partners contributing to this deliverable
Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	5
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

social diff annex.zip

Deliverable #17

Main Information

Title: Analysis of the institutional mechanisms underpinning the social distribution of participation in livestock value chains

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016

Status: <Not defined>

Next-user

Research team and EADD/ L&F implementing partners.

Knowledge, attitude, skills and practice changes expected in next-user: Greater appreciation of the social and institutional components of mitigation opportunities

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Use of a participatory and co-learning approach to the research.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #18

Main Information

Title: Co-definition of technical and social components of mitigation opportunities and pilot implementation of practices

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2016

Status: <Not defined>

Next-user

Partners along the value chain (NGOs, private sector, Ministry of Livestock)

Knowledge, attitude, skills and practice changes expected in next-user: Appreciation of the feasibility of adoption of mitigation interventions along the value chain; appreciation of the tradeoffs from such adoption (e.g. gender roles, productivity, land use).

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Stakeholder engagement, on-farm experiments; interaction with activity 1.

Partners contributing to this deliverable

Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Partner #3: Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #19

Main Information

Title: Recommendations for creating the required enabling environment to promote adoption of climate smart practices

MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2018

Status: <Not defined>

Next-user

Ministry of livestock; national climate change units

Knowledge, attitude, skills and practice changes expected in next-user: Greater appreciation of the mitigation opportunities that can be achieved in the dairy sector

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Embedding with Activity 1.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #20

Main Information

Title: Analysis of the potential to scale out promising mitigation opportunities	
MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2018	

Status: <Not defined>

Next-user

Climate Change Mitigation Units and Ministry of Livestock officials; EADD partners and implementing NGOs

Knowledge, attitude, skills and practice changes expected in next-user: National government officials include emissions reductions from the livestock sector in the development plans for their value chains, supported by the the donor community, in all three countries.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We translate the information generated to the levels users need (e.g. national versus donors), disseminate and engage through Activity 1 in providing technical advise to specific national partners and platforms

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #21

Main Information

Title: Discussion paper on feasibility of offsetting emissions from the livestock sector with certification schemes.

MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2018

Status: <Not defined>

Next-user

Climate Change Mitigation Units

Knowledge, attitude, skills and practice changes expected in next-user: A multi-sectoral and landscape approach to offsetting emissions from the livestock sector begins to be appreciated by the mitigation units.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: TIght collaboration with Unique Forestry and the East African Regional Programe.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>, UNIQUE - Unique Forestry and Land Use GmbH

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>

What is your personal perspective of the importance of this product	\<Not defined\>

Deliverable dissemination

Open access restriction: \<Not defined\>

License adopted: \<Not defined\>

Dissemination Channel: \<Not defined\>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: \<Not defined\>

Creator / Authors: \<Not defined\>

Author Identifier: \<Not defined\>

Publication / Creation date: \<Not defined\>

Language: \<Not defined\>

Coverage: \<Not defined\>

Deliverable Data sharing

Deliverable files
\<Not defined\>

Deliverable #22

Main Information

Title: Recommendations about best practices for reducing GHG emissions in the East African Dairy sector.

MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2018

Status: \<Not defined\>

Next-user

Ministry of Livestock, Climate Change Mitigation Units, Private Sector actors

Knowledge, attitude, skills and practice changes expected in next-user: Development plans, the NAMAs reflect these recommendations.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: as for the entire project.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #23

Main Information
Title: Impact of farmer experimentation assessed.
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2018
Status: <Not defined>

Next-user
NGO, extension workers; Ministry of Livestock; CCM Units
Knowledge, attitude, skills and practice changes expected in next-user: They appreciate the potential for interventions to have an impact on emissions.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Links to activities 1 and 4.

Partners contributing to this deliverable
Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #24

Main Information	
Title: Quantification of uncertainty reduction in emissions factors.	
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2018	
Status: <Not defined>	

Next-user
Climate Change Mitigation Units
Knowledge, attitude, skills and practice changes expected in next-user: They trust the calculations from East African systems.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: TIght links to Activity 1; inclusion of key staff in workshops.

Partners contributing to this deliverable
Partner #1 (Responsible): Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #25

Main Information

Title: National Inventories using the emissions factors

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

| **Main Type:** Reports, Reference Materials and Other Papers | **Sub Type:** Research report |

Year of expected completion: 2018

Status: <Not defined>

Next-user

CC Mitigation Units

Knowledge, attitude, skills and practice changes expected in next-user: They use the emissions factors for their NAMAS and other mitigation plans.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Link to Activity 1 and Unique Forestry contract.

Partners contributing to this deliverable

Partner #1 (Responsible): Goopy, John <J.goopy@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #26

Main Information
Title: Study on social contexts and conditions affecting gender equality in livestock value chains
MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Reports, Reference Materials and Other Papers	Sub Type: Research report

Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** This activity was delayed as it took us several months to hire a gender post doc. The gender PostDoc is now also on board with a detailed work plan.

Next-user
National and regional stakeholders, development practitioners, research scientists
Knowledge, attitude, skills and practice changes expected in next-user: Adaptation of project methodology to be inclusive of women; specific recommendations to the Kenya NAMA on making this strategy gender inclusive.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participation in the development and implementation of the study. Wide dissemination of results in meetings with project groups and partners, as well as centers involved, CCAFS and L&F. Engagement with the stakeholders developing the Kenya NAMA.

Partners contributing to this deliverable
Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	5
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: These are a series of reports documenting progress made in understanding the gender and social differentiation issues associated with Dairy production in Kenya. They are not really meant to be shared widely but are to document our progress.

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Gender PD updated workplan 2016 17_Jan 25.docx

Deliverable #27

Main Information

Title: Structural and normative conditions affecting opportunities for increasing gender equality in EADD livestock value chains

MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Main Type: Peer reviewed Publications   **Sub Type:** Peer-reviewed journal articles

Year of expected completion: 2016

Status: <Not defined>

Next-user

National and regional stakeholders, development practitioners, research scientists

Knowledge, attitude, skills and practice changes expected in next-user: Adaptation of project methodology to be inclusive of women

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Promote information sharing across projects and use lessons from EADD to: inform the work in the L&F Tanzania dairy value chain and possibly other L&F value chains; to inform gender research in all of CCAFS contributing Centers.

Partners contributing to this deliverable

Partner #1 (Responsible): Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking

Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: We had two key groups of next users. The first are the two Climate Change Units (Ministry of Environment and Ministry of Agriculture). As described in our outcome story, these are key next users who need to be convinced that the Dairy sector can be considered a good investment in the Kenya NAMA. The change in knowledge and attitudes we have seen (in conjunction with the partner Unique Forestry) is an awareness that Kenya can generate its own reliable data on emissions from the Dairy sector, which could enable the sector to receive financing to reduce GHG emissions.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: We repeatedly engaged them through meetings organised either by CCAFS EA RPL or Unique Forestry. We invited staff from both CC Units to a tour of the Mazingira Facility and explained the research we are conducting.
Reported deliverables serve as evidence towards this achieved change: Please see the evidence in our outcome story. This includes a letter of support for our IFAD funded project from the CC Unit in the Ministry of Agriculture.
Lessons and implications for the next planning cycle: The plan is to target our research outputs specifically at the needs of the Kenya NAMA, especially once it is drafted and the next phase of demonstrating which interventions have highest potential begins. We will show the high potential to reduce emissions via increasing productivity per animal, primarily through better feeding options. Manure management is the second best bet; for which we also have good evidence.

5.4 Project highlights

6. Activities

Activity #1

Title: Targeting agricultural systems and field measurements to reduce uncertainties in GHG emissions;

Description: Compile and analyse spatially explicit (local to national) activities (systems, land use, feed/biomass, emissions) and socio-economic data from downscaled global data sets, national statistical information and CGIAR databases,and quantify uncertainties to set targets for emissions reduction and to guide measurements. Assess potential to scale out mitigation interventions, informed by technical, economic, institutional issues, aligning with interventions to national LED pathways.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018

Leader: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Status: On-going	**Justification:** Analysis completed for Kenya. See deliverables lists.

Activity #2

Title: Inform government, donor, private sector and NGO investment decisions on LEDs.

Description: Based upon user demands for information, we shall package and interpret the data generated in the other activities to inform government, donor, private sector and NGO investment decisions around LEDs. This work will contribute directly to ongoing policy development engagement that UNIQUE Forestry is leading in East Africa for the livestock sector.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018

Leader: Ericksen, Polly <p.ericksen@cgiar.org>, ILRI - International Livestock Research Institute

Status: Cancelled	**Justification:** Budget cuts. Unique Forestry will now take care of this.

Activity #3

Title: Address uncertainties from activity 2 through measurement of fluxes, etc. using the SAMPLES protocol.

Description: Use the SAMPLES protocol to address uncertainties in the GHG estimates from livestock production through measurement of fluxes, biomass flows, manure management, feed quality, livestock numbers and land use.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018

Leader: Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>, ILRI - International Livestock Research Institute

Status: On-going	**Justification:** The uncertainty analysis has been partially addressed in the deliverable for Activity 102 but not completely as the field data collection is still ongoing and hence we cannot do the full uncertainty analysis.

Activity #4
Title: Assess social organisation and institutional incentives of current smallholder value chain activities in livestock systems
Description: Assess social organization and institutional (including economic) incentives of current smallholder and value chain activities in livestock systems across geography and livelihood diversity and gender, complementing the information from activity 2. Using ethnographic methods, empirically document and analyze the mechanisms that link incentive structures and individual behaviour along value chains.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018
Leader: Crane, Todd <T.Crane@cgiar.org>, ILRI - International Livestock Research Institute	
Status: On-going	**Justification:** As described in the deliverables section, in 2015 preliminary studies were made.

Activity #5
Title: Social Science Fellow – Gender Research
Description: The Post-Doctoral Fellow (PDF) would be a key contributor to, and significantly increase gender expertise in CCAFS and L&F through their research on social contexts and structural and normative conditions affecting opportunities for increasing gender equality in livestock value chain development in East Africa, with attention to reducing risk for women due to climate change and reducing emissions through making dairy production more efficient. The PDF is funded by the the CGIAR 2014 Gender Postdoctoral Fellowship for 54,050 per year for two years and 50,000 per year for two years from FP3 W1/2 funds.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016
Leader: Ericksen, Polly <p.ericksen@cgiar.org>, ILRI - International Livestock Research Institute	
Status: On-going	**Justification:** The Gender post doc is now in post with an agreed work plan. She will directly contribute to the Kenya NAMA.

Lessons regarding your project activities and possible implications for the coming planning cycle: Due to budget cuts, Activity 102 relies more on the role of Unique Forestry in linking this project to ongoing NAMA development plans by the Kenyan government.   This activity will therefore be cancelled.

The gender post doc only joined in October 2015, so this activity was delayed in starting (although we used a student and a consultant to begin some of this preliminary investigation).

7. Leverages

<Not defined>

Title: ILRI Identification and implementation support of mitigation priorities and opportunities in rice-dominated landscapes + SAMPLES coord

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2017
Management liaison	RP SEA - South East Asia Region	**Mgmt. liaison contact**	Tan Yen, Bui <y.bui@irri.org>
Lead organization	ILRI - International Livestock Research Institute - Vietnam	**Project leader**	Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP3: Low Emissions Agricultural Development	RP SEA: South East Asia

Bilateral project(s) contributing to this project
237 - Facilitation of ICON Phase-2 Field Experiment

Summary

Policy makers need precise information for prioritizing mitigation interventions. While there have been several attempts to estimate GHG emissions from Vietnamese agriculture, this project will use state-of-the-art models in combination with new spatial and temporal information derived from other projects. This will include an analysis of hotspots of emissions, with different emission sources (lowland and upland production systems, livestock systems) and potential sinks (afforestation of degraded land) as well as spatially explicit evaluation of mitigation options. This allows government (e.g. MARD), private sector, NGOs to set priorities and realistic targets for emission reductions from intensifying rice, livestock and aquaculture systems.

2. Partners

Partner #1 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>	Activity 2014-184 *Partner*. Activity 2014-212 *Leader*.

Partner #2

Institution: IRRI - International Rice Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Partner	Wassmann, Reiner <r.wassmann@irri.org>	Activity 2014-184 *Partner*. Activity 2014-212 *Partner*. Spatial information on rice management, climate and soil properties and assessing the implementation potential for AWD. Provision of field data sets /Rice systems) for model testing. Joined evaluation of obtained results with GIS coupled biogeochemical modeling.

Partner #3

Institution: WorldFish - WorldFish

Contacts

Type	Contact	Responsibilities and contributions
Partner	Beare, Douglas <d.beare@cgiar.org>	Activity 2014-184 *Partner*. Activity 2014-212 *Partner*. Current and future distribution of aquaculture, nutrient flows in aquaculture, emission estimates for aquaculture (incl. deforestation losses)

Partner #4

Institution: VIFEP - Vietnam Institute of Fisheries Economics and Planning

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Quyen, Cao Le <quyenvifep@yahoo.com.vn>	Activity 2014-184 *Partner*. Activity 2014-212 *Partner*.

Partner #5

Institution: UAF - Nong Lam University

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kim Loi, Nguyen <ngkloi@hcmuaf.edu.vn>	Activity 2014-184 *Partner*. Activity 2014-212 *Partner*.

Partner #6

Institution: CIFOR - Center for International Forestry Research

Contacts

Type	Contact	Responsibilities and contributions
Project Coordinator	Rufino, Mariana <m.rufino@cgiar.org>	Activity 2014-212 *Partner*. Spatial analysis and targeting, scenarios and hotspot analysis, off-setting agricultural emissions by reforestation/ afforestation

Partner #7

Institution: IMK-IFU - Institute of Meteorology and Climate Research, Atmospheric Environmental Research

CCAFS Partner(s) allocating budget: <Not defined>

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kiese, Ralf <ralf.kiese@kit.edu>	Activity 2014-212 *Partner*.

Partner #8

Institution: CIFOR - Center for International Forestry Research

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rufino, Mariana <m.rufino@cgiar.org>	Activity 2014-184 *Leader*.

Partnerships overall performance over the last reporting period: Cooperation among WorldFish, KIT, BIK-F, IRRI and ILRI and its national Vietnamese partners (Institute of Agricultural Environment, Hanoi; VIVEP) worked well

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Cooperate only with Partners who are willing to cooperate and to communicate

3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Vietnam
CSV	Not applicable	Not applicable	My Loi
CSV	Not applicable	Not applicable	Tra Hat

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
Here we focus on the feasibility of introducing low-emissions development across agricultural systems in SEA, using Vietnam as an example. This holistic approach across lowland rice production, upland crop production, livestock systems has never been attempted before. For upland agricultural and rice systems, we will in close partnership with the Institute for Agricultural Environment (IAE), and the National Institute of Agricultural Planning and Projection (NIAPP) as well as with other partners (VIVEP etc.) establish Tier 3 methodology for GHG reporting at national scale. This methodology will also be used for scenario studies for identifying most promising regional strategies for mitigating emissions from the agricultural sector. By providing training to staff of NIAPP, IAE and MARD we will enable our partners to improve the Mitigation Plan at national level (MARD's 20-20-20) as well as at regional level (Mekong delta and Central Vietnam).

Annual progress towards outcome (end of 2015): Awareness of national partners on the contribution of different agricultural subsectors and land use change to total national emissions. MARD staff understand the usefulness of using model approaches for estimating GHG emissions from agricultural sources.
Working with partners, we will first run scoping workshops, pay visits to relevant actors, etc. to make sure that all relevant information gathered by previous and on-going activities on GHG emissions from the agricultural sector gets known and assessed. Based on this the most important gaps needed for ultimate upscaling of mitigation options in Vietnam will be assessed.
In the early stages of the project Boru Douthwaite and Rodrigo Paz Ybarnegaray (WorldFish, experts in theories of change and outcome strategies) will act as consultants helping us to understand how we can best use the models developed, and the resulting hotspot analyses etc. to influence the National Mitigation Plans for Vietnam. For this we will closely work together with IAE and NIAPP, both being advisors to the Ministry of Agriculture and Rural Development (MARD).

Annual progress towards project outcome in the current reporting cycle (2015): Staff of IEA was trained, communication with MARD was started, but Project was cncelled at end of 2015

Communication and engagement activities have contributed to achieving your Project outcomes: IEA and MARD are highly interested in the calculation of GHG inventories as this is needed for national reporting and allows governmental actors to target mitigation activities

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): National partners start to use inventory tools by their own for testing and developing low emission pathways for agricultural production

Annual progress towards outcome (end of 2017): National partners use inventory tools for at least two concrete regions

Annual progress towards outcome (end of 2018): National partners use inventory tools at national scale for a) inventoring GHG emissions at national scale, b) identify regions and agricultural practices most promising for reducing GHG emissions due to feed and food production, and c) use the methodology for reaching out to extension services and farmers organizations to finally support the widespread use of identified mitigation methods in practice

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: n.a. Project cancelled after one year

4.2 Contribution to CCAFS Outcomes

RP SEA - Outcome 2019: Public sector institutions, innovate, plan, invest, regulate/reform/enforce laws and provide incentives for understanding, accessing and implementing low-emission/CSA technologies appropriate for local contexts through multi-stakeholder consultation.

Indicator #1: FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

2019	
Target value: Activity 2014-184: 10Activity 2014-212: 10	**Cumulative target to date:** Cannot be Calculated
Target narrative: Activity 2014-184: Via workshops, trainings, staff exchange, briefs and consultations the knowledge, approaches and tools created/used in this project will be made available to national stakeholders. We are specifically targeting the following institutions: Ministry of Agriculture and Rural Development (MARD), rovincial Departments of Agriculture and Rural Development (such as Sub-Departments of Agriculture; Livestocks; Aquaculture; Plan Protection, Disaster Prevention and Rescue); Provincial and District Agriculture Extension Service Department; People Committees of CSV; Local professional associations such as Farmer Associations, local society of fisheries, aquaculture associations,...District Divisions of Agriculture / Economics; International organizations: Care International - Vietnam; IFAD - Vietnam; GIZ	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: N/A	

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: Year 2015 will be needed to train Vietnamese partners in the respective tools		
Narrative for your achieved targets, including evidence: n.a.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: n.a.		

2016	
Target value: 2	**Cumulative target to date:** 2
Target narrative: Following training in tools and techniques for calculating GHG emission inventories (national scale) first reults will be used to identify most promising low emission pathways for at least two regional case studies (most likely Mekong Delta Region). This results will be used for 2 LED pathways to reduce emissions	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Training of female scientist, which finally take responsibility for national reporting of GHG emissions	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways
Activity 2014-184: Gathered Information will be made widely available and e.g. communicated to CCAC-Rice, working not only in Vietnam but across SEA. Based on running projects by

KIT and IRRI on the Philippines information will also be used in this country to inform stakeholders about the respective tools and startegies.

Activity 2014-212: see activity #1

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

There is not an Outcome Case Study added.

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014
FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers **Brief bullet points of your expected annual 2014 contribution towards the selected MOG** <Not defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not defined>

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

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

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

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

Major Output groups - 2015

FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Development of a GIS database on drivers and initial values for simulating rice production at national scale

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
We trained female staff of the Institute of Agricultural Environment, Hanoi

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Identification of hotspots of CH4 emissions from Rice Paddy systems

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
Training

Major Output groups - 2016

FP3 - MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
Calculation of Emission inventories allowing targeting for mitigation

Brief plan of the gender and social inclusion dimension of the expected annual output
Training of women

FP3 - MOG # 2: Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
Emission inventories and Scenarios for effects of management changes on Overall GHG emissions

Brief plan of the gender and social inclusion dimension of the expected annual output
Focus on Training of women

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: Longer funding needed. No one can work with such abrupt changes/ cuts in budgets

5.2 Deliverables

Deliverable #1

Main Information
Title: Assessment of the potential of reforestation/ afforestation/ agroforestry to offset emissions from the agricultural sector
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Databases

Year of expected completion: 2016

Status: On-going	**Justification for cancelling the deliverable:** This project was affected by the numerous budget cuts, which required modifying the plans and therefore delayed. We upload a report with current progress. Next steps would be: 1. Review the current results on the light of different forest ecosystems for the three provinces. 2. Re-run the COMAP analyses on a provincial basis, per forest types, 3. Assess the implications of the legal disagreements of forest land use trajectories at provincial scales and offer suggestions on ways to minimize the consequences on the estimates of mitigation potentials.

Next-user
MARD-Viet Nam Academy of Forest Sciences and MARD-Institute for Agricultural Environment
Knowledge, attitude, skills and practice changes expected in next-user: Next users understand the barriers and opportunities for the design and implementation of forest mitigation options in selected provinces in Viet Nam
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Report on areas and GHG emissions for the different sectors and analysis of the current laws and institutional frame and their effects on land use, land use changes, and forest mitigation initiatives will be discussed with next users in the frame of a different EC project in 2016

Partners contributing to this deliverable
Partner #1 (Responsible): Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research

Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Limited Exclusivity Agreements

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: The data used in this study is managed by MONRE and MARD from Viet Nam. There is no open access to it, and therefore we have conducted this analysis through our ministry partners

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Report_Potential Mitigations_V4 (002).pdf

Deliverable #2

Main Information

Title: Assessment of existing information on the contribution of agriculture to national level emissions

MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Workshops	**Sub Type:** Workshop

Year of expected completion: 2015

Status: Complete

Next-user

National partners from VIVEP and IEA

Knowledge, attitude, skills and practice changes expected in next-user: Created awareness of environmental Impacts of agriculture as a source of GHG's and driver of climate change. Learning of advancing practices and methods for GHG accounting

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Training of staff of VIVEP and IEA. Training is still required but since the Project is not funded for 2016 we are currently evaluating other sources to continue this work

Partners contributing to this deliverable

Partner #1 (Responsible): Kiese, Ralf <ralf.kiese@kit.edu>, IMK-IFU - Institute of Meteorology and Climate Research, Atmospheric Environmental Research

Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	1
Level of shared ownership (partnerships across org.)	1
What is your personal perspective of the importance of this product	1

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: n.a.

Creator / Authors: Klaus Butterbach-Bahl

Author Identifier: KBB

Publication / Creation date: February 2016

Language: English

Coverage: Nationak

Deliverable Data sharing
FP3-SEA-ILRI Hanoi-November 2015.pdf WorldFishSAMPLES_Report4CCAFS.pdf

Deliverable #3

Main Information
Title: Evaluation of LandscapeDNDC to simulate biomass production and GHG emissions for different typical landuse types
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Main Type: Reports, Reference Materials and Other Papers	Sub Type: Working paper

Year of expected completion: 2015
Status: Complete

Next-user
<Not defined>
Knowledge, attitude, skills and practice changes expected in next-user: <Not defined>
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: <Not defined>

Partners contributing to this deliverable
Partner #1 (Responsible): Kiese, Ralf <ralf.kiese@kit.edu>, IMK-IFU - Institute of Meteorology and Climate Research, Atmospheric Environmental Research

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>

Dissemination Channel: -1	
Dissemination URL: <Not defined>	

Deliverable Metadata
Description: Report on activities, national scale CH4 emission inventory for rice systems
Creator / Authors: Christian Werner, David Kraus, Klaus Butterbach-Bahl
Author Identifier: KBB
Publication / Creation date: December 2015
Language: English
Coverage: Vietnam

Deliverable Data sharing
CCAFS_SEA_Report 2015.docx Worldfish_CN-Flagship1-AQfutures4MRD_03Oct2014.docx

Deliverable #4

Main Information	
Title: GHG emission inventories for agricultural sub-sectors using Landscape DNDC, livestock model and empirical methods	
MOG # 1: Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2016	
Status: On-going	**Justification for cancelling the deliverable:** We finalized the inventory of GHG emissions from Rice based cropping Systems and trained staff of IAE. Moreover, WorldFish assessed the potential importance of aquaculture as sources of GHG's. -->see reports

Next-user
MARD, Regional and Provincial Research Institutions of Agriculture, Livestocks, Aquaculture, Irrigation, Plant Protections

Knowledge, attitude, skills and practice changes expected in next-user: GIS coupled biogeochemical models (IPCC Tier 3 Approach) used for national reporting. MARD starts to host standardized relevant databases for model drivers and model initialization and archives model versions for verification purposes . Regional and provincial research institutions and Extension Services start to work with model outputs.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Workshop will be held to share knowledge and the scientific products will be shaped to serve the needs of the counties and project developers. Participatory Approach to establish modeling capacities and understanding of database and model maintenance

Partners contributing to this deliverable

Partner #1 (Responsible): Beare, Douglas <d.beare@cgiar.org>, WorldFish - WorldFish

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>
Potential for/ actual contribution to outcomes	<Not defined>
Level of shared ownership (partnerships across org.)	<Not defined>
What is your personal perspective of the importance of this product	<Not defined>

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: Report on Progress towards GHG emissions from the livestock sector

Creator / Authors: David Pelster

Author Identifier: DP

Publication / Creation date: February 2016

Language: English

Coverage: Vietnam

Deliverable Data sharing

SE Asia summary report livestock Feb 16.docx

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Internal
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: for comparison with own calculations
Reported deliverables serve as evidence towards this achieved change: not applicable
Lessons and implications for the next planning cycle: n.a.

5.4 Project highlights

Project highlight Information #1	
Title: National inventory of CH4 emissions from rice paddies	
Author: Klaus Butterbach-Bahl	**Subject:** GHG emissions
Publisher: not published yet	**Year:** 2015
Project highlights types Capacity enhancement Breakthrough science	**Start date:** 2016-02-16
End date: 2016-02-16	**Is global:** No
Country: Vietnam	**Keywords:** CH4, rice paddies, emission reporting
Highlight description: First calculation of national wide CH4 emissions from rice paddies using process oriented modeling linked to GIS databases	
Introduction / Objectives: Calculation of a Vietnam inventory of GHG emissions from Rice based Systems using a coupled GIS_biogeochemical model approach	
Results: First national inventory of CH4 emissions from rice paddies allowing to identify hotspots and multi-year variability	
Partners: Institute of Agricultural Environment (Hanoi, Vietnam), Senckenberg Biodiversity and Climate Research Centre (BiK-F) (Frankfurt, Germany), Institute of Meteorology and Climate Research, Atmospheric Environmental Research (Garmisch-P, Germany)	
Links / Sources for further information: n.a.	

6. Activities

Activity #1
Title: Targeting LED pathways for rice dominated landscapes in Vietnam
Description: Compile and analyse spatially explicit (local to national) activity (systems, land use/ land use change, feed/biomass, emissions) and socio-economic data from downscaled global data sets, national statistical information and available data bases, to set targets for emissions reduction and to align with LED at country level
Start date (dd-MM-yyyy): 01-01-2015   **End date (dd-MM-yyyy):** 31-12-2017
Leader: Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research
Status: Complete

Activity #2
Title: Testing and adaptation of biogeochemical models, calculation of GHG inventories
Description: Baselining of the GHG balance of agricultural food production in Vietnam and CSV using the biogeochemical LandscapeDNDC and spatial data on management, climate and soils. IRRI will deliver a rice crop calender and identify on national and regional scale water management and suitability of rice growing areas for AWD. This information will be used to improve emissione estimates from rice production. Emissions from livestock will be quantified via improved mapping (ILRI), and dynamic simulation modeling using the LIVSIM model. Emissions from aquaculture (WorldFish) will be based on carbon losses from landuse change mangrove conversion and nutrient flows and environmental conditions for N2O/ CH4 fluxes. Use of shared scenarios (IFPRI) and evaluation of different management options for scenario studies at CSV level
Start date (dd-MM-yyyy): 01-01-2015   **End date (dd-MM-yyyy):** 31-12-2017
Leader: Butterbach-Bahl, Klaus <k.butterbach-bahl@cgiar.org>, ILRI - International Livestock Research Institute
Status: Complete

Lessons regarding your project activities and possible implications for the coming planning cycle: n.a. Project ended 2015

7. Leverages

Leverage #1	
Title: ICON	
Partner name: KIT - Karlsruher Institut für Technologie - Germany	
Year: 2015	
Flagship: FP3: Low Emissions Agricultural Development	**Budget:** US $50,000.00

Title: (ILRI) What works where for which farmer: Household modelling for improved targeting of CSA technologies

Start date (dd-MM-yyyy)	01-01-2014	**End date (dd-MM-yyyy)**	31-12-2016
Management liaison	F4 - Flagship 4	**Mgmt. liaison contact**	Thornton, Philip <p.thornton@cgiar.org>
Lead organization	ILRI - International Livestock Research Institute - Kenya	**Project leader**	Van Wijk, Mark <m.vanwijk@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP4: Policies and Institutions for Climate-Resilient Food Systems	RP EA: East Africa
	Global: Global
	RP WA: West Africa

Bilateral project(s) contributing to this project
208 - Crowd Sourcing and Big Data to move to What Works in Sustainable Intensification

Summary

This is a continuation of a 2015 activity, that has lead to two papers submitted, 2 further in advanced drafts, and links with medium sized NGOs thanks to contact made through ICRAF. In 2015 We calculated a simple indicator of food availability using data from 93 sites in 17 countries across contrasted agro-ecologies in sub-Saharan Africa (13000+ farm households) and analysed the drivers of variations in food availability. These analyses will be taken forward in 2016 and spatially explicit analyses will be performed for at least 3 countries in SSA

2. Partners

Partner #1 (Leader)

Institution: ILRI - International Livestock Research Institute

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Van Wijk, Mark <m.vanwijk@cgiar.org>	Activity 2014-189 *Leader*. Activity 2014-190 *Leader*. Activity 2014-382 *Leader*.

Partner #2

Institution: WUR - Wageningen Unversity and Research Centre

CCAFS Partner(s) allocating budget

ILRI - International Livestock Research Institute - Kenya

Contacts

Type	Contact	Responsibilities and contributions
Partner	Giller, Ken <k.giller@wur.nl>	Activity 2014-189 *Partner*. Activity 2014-190 *Partner*. Activity 2014-382 *Partner*.

Partner #3

Institution: CSIRO - Commonwealth Scientific and Industrial Research Organisation

CCAFS Partner(s) allocating budget

ILRI - International Livestock Research Institute - Kenya

Contacts

Type	Contact	Responsibilities and contributions
Partner	Herrero, Mario <m.herrero@csiro.au>	Activity 2014-189 *Partner*. Activity 2014-190 *Partner*. Activity 2014-382 *Partner*.

Partner #4

Institution: ICRAF - World Agroforestry Centre

Contacts

Type	Contact	Responsibilities and contributions
Partner	Muthuri, Catherine <c.muthuri@cgiar.org>	Activity 2014-382 *Partner*.

Partnerships overall performance over the last reporting period: Partnerships are still especially within the academic and CGIAR space. Contacts with IITA and ICRAF however have led to concrete linkages with international NGOs from which we hope to harvest in 2016 through joint work

Lessons regarding your partnerships and possible implications for the coming reporting cycle: At first I tried to establish contacts with NGOs myself, but that did not go anywhere. Important is to build partnerships with people who already work with people in NGOs on a 'trust' basis.

3. Locations

Project level	Latitude	Longitude	Name
CCAFS Site	-0.269	-0.269	Nyando
CCAFS Site	-1.809	-1.809	Makueni
CCAFS Site	1.535	1.535	Albertine Rift
CCAFS Site	-0.621	-0.621	Kagera Basin
CCAFS Site	-4.79	-4.79	Usambara
CCAFS Site	4.957	4.957	Borana
CCAFS Site	13.828	13.828	Yatenga
CCAFS Site	10.735	10.735	Lawra-Jirapa
CCAFS Site	14.242	14.242	Kaffrine
Village	8.925	8.925	Bako
Village	8.925	8.925	Melkassa
Village	-1.761	-1.761	Gishwati
Province	-2.3951	-2.3951	Bugesera

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
FP 4 flagship projects running in sub Saharan Africa will use the outputs generated by the model analyses to better target already identified or newly to be developed CSA technologies. Outcomes in terms of better information supply to policy makers and policy analysis institutions will achieved by linking onto the information platforms developed by Flagship 4 WA and EA projects. At least one NGO (currently links with Oxfam are established) will use the outputs generated by the analyses in their planning and targeting.

Annual progress towards outcome (end of 2015): The household modelling results of this project play an effective support role for the outscaling of the identified or to be identified CSA practices, thereby increasing the outreach potential of the different FP 4 flagship projects in sub Saharan Africain by using their existing information supply chains to policy makers.

Annual progress towards project outcome in the current reporting cycle (2015): Analyses have been performed. New links with NGOs have been established through collaboration with IITA (ZOA) and UC Davis (One Acre fund). Hopefully this will lead to direct impact in this year, in which we can show the combined strengths of efficient and targeted data collection and an integrated analysis framework

Communication and engagement activities have contributed to achieving your Project outcomes: Engagement has been mainly indirect, through partnerships with other institutes (IITA, ICRAF, UC Davis).

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): The household modelling results of this project play an effective support role for the outscaling of the identified or to be identified CSA practices, thereby increasing the outreach potential of the different FP 4 flagship projects in sub Saharan Africain by using their existing information supply chains to policy makers. The first direct links with NGOs (e.g. WorldVision, OneAcre Fund) have been made,

Annual progress towards outcome (end of 2017): The household modelling results of this project play an effective support role for the outscaling of the identified or to be identified CSA practices, thereby increasing the outreach potential of the different FP 4 flagship projects in sub Saharan Africain by using their existing information supply chains to policy makers. The first direct links with NGOs (e.g. WorldVision, OneAcre Fund) have been made,

Annual progress towards outcome (end of 2018): <Not defined>

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for

them: Target group is now medium sized NGOs, the large ones are less open to new M&E and prioritization tools

4.2 Contribution to CCAFS Outcomes

RP WA - Outcome 2019: National level decision-makers (Gov. ministries), national agricultural research systems, NGOs, civil society organizations, regional organizations use CCAFS science-derived decision support tools and systems to mainstream climate change into national plans and policies from local to national levels.

Indicator #1: FP4 Indicator: # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019	
Target value: Activity 2014-189: 2Activity 2014-190: 2	**Cumulative target to date:** Cannot be Calculated
Target narrative: Activity 2014-189: Also here we link up to the information channels set up by the Flagship 4 WA project and their target values Activity 2014-189: Here we will link up to the Flagship 4 EA project and make use of their information channels in both Uganda and Tanzania. Activity 2014-190: Here we also link up to the Flagship 4 WA project and its targets, and will make use of their information supply chains Activity 2014-190: Here we also link up to the Flagship 4 EA project and its targets, and will make use of their information supply chains	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: Targeting report based on results generated by this project will be used in policy planning by at least one government. Choice will be made in cooperation with FP4 WA project.	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 0.0
Target narrative: Priority report generated and through the FP4 WA project inserted into policy development process.		
Narrative for your achieved targets, including evidence: We did not succeed here, first focus was on generating methods and analyses results. Hopefully new focused collab with CCAFS FP4 and CCAFS WA might result in an outcome here		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		

2015
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: No contribution here.

2016	
Target value: 1	**Cumulative target to date:** Cannot be Calculated
Target narrative: Through existing WA activities, especially where ILRI is involved, key information to be channeled to these policy formulations is generated	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Gender differentiated information on control over benefits of on and off farm activities for different farm groups can now be generated using a new farming system analysis framework, Rhomis, which will be applied next year in several sites in the region.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

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

Indicator #1: FP4 Indicator: # of equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies

2019	
Target value: Activity 2014-189: 2Activity 2014-190: 2	**Cumulative target to date:** Cannot be Calculated

2019
Target narrative: Activity 2014-189: Also here we link up to the information channels set up by the Flagship 4 WA project and their target values Activity 2014-189: Here we will link up to the Flagship 4 EA project and make use of their information channels in both Uganda and Tanzania. Activity 2014-190: Here we also link up to the Flagship 4 WA project and its targets, and will make use of their information supply chains Activity 2014-190: Here we also link up to the Flagship 4 EA project and its targets, and will make use of their information supply chains
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015		
Target value: Targeting report based on results generated by this project will be used in policy planning by at least one government. Choice will be made in cooperation with FP4 EA project.	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 0.0
Target narrative: Priority report generated and through the FP4 WA project inserted into policy development process.		
Narrative for your achieved targets, including evidence: Through the FP4 EA project PACCA, where ICRAF in the persons of Christine Lamanna and Todd Rosenstock have established links with the CSA alliance, input is given into the Tanzanian CSA policy planning. This needs to be concretized in specific analyses demands in the coming months.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Analyses generate gender differentiated outputs on some of the key performance indicators quantified in the analyses.		

2016	
Target value: 1	**Cumulative target to date:** Cannot be Calculated
Target narrative: Through existing AA activities, especially where ILRI is involved, key information to be channeled to these policy formulations is generated	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: Gender differentiated information on control over benefits of on and off farm activities for different farm groups can now be generated using a new farming system analysis framework, Rhomis. This tool has been applied in Tanzania, and further applications in Ethiopia are envisaged for next year.	

2014		
Target value: <Not defined>	**Cumulative target to date:** 0	**Target achieved:** <Not defined>
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: <Not defined>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: <Not defined>		

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways

Activity 2014-189: We will supply information to the Flagship 1.1 WA and EA projects in which ILRI is both involved. Targeting analyses of CSA practices will be performed, and the outreach potential will be quantified.

Collaborating with other CRPs

Integrated Systems for the Humid Tropics
Description of collaboration: Data exchange and collaboration in tool development
The achieved outcome contributions: <Not defined>

Livestock and Fish
Description of collaboration: Data exchange and collaboration in tool development
The achieved outcome contributions: <Not defined>

4.4 Outcome case studies

There is not an Outcome Case Study added.

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP4 - MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014
FP4 - MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios **Brief bullet points of your expected annual 2014 contribution towards the selected MOG** <Not defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not defined>

Major Output groups - 2015

FP4 - MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

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

Brief summary of your actual 2015 contribution towards the selected MOG:
- First data analysis using database of 13k+ farm households completed
- Rapid multi-indicator survey tool developed and applied in 4 contrasting systems in developing countries
- Spatial maps generated of farming systems and key patterns in drivers of household level food security for Uganda. Analyses for other countries underway

Brief plan of the gender and social inclusion dimension of the expected annual output
<Not defined>

Summary of the gender and social inclusion dimension of the 2015 outputs:
Gender equity is integrated element in the rapid multi-indicator survey tool. First paper on the tool and analyses has been submitted. Applications are foreseen for west, central and east africa, which together with existing data will result in a global analysis of the interplay between agriculture, gender, and nutrition

Major Output groups - 2016

FP4 - MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
- foresight activities under way using CCAFS scenarios, currently mainly focusing on EA

Brief plan of the gender and social inclusion dimension of the expected annual output
Gender differentiated analyses on control over benefits of on and off farm activities executed for the Tanzanian CCAFS benchmark site

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: <Not defined>

5.2 Deliverables

Deliverable #1

Main Information
Title: Ex-ante assessment of CSA practices in 9 African CCAFS benchmark sites
MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Main Type: Data and information outputs, including datasets, databases and models	Sub Type: Datasets
Year of expected completion: 2016	
Status: Complete	

Next-user
Policy support institutions
Knowledge, attitude, skills and practice changes expected in next-user: Improved insight in future target population of interventions and projected changes in food security levels to be expected from interventions: improved insight into what agronomic interventions can really change in poor farm households
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Similar to activity 189, embedding into the outreach platforms being developed within Flagship 4 projects in WA and EA; his project is too small and too short of duration to develop it's own strategy

Partners contributing to this deliverable
Partner #1 (Responsible): Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	3

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>

Dissemination Channel: -1	
Dissemination URL: <Not defined>	

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

https://research.csiro.au/foodglobalchange/data-and-tools/household-data/

Deliverable #2

Main Information

Title: Food security analyses performed in all 9 African CCAFS benchmark sites

MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Main Type: Data and information outputs, including datasets, databases and models	**Sub Type:** Datasets

Year of expected completion: 2015

Status: Complete

Next-user

Policy support institutions

Knowledge, attitude, skills and practice changes expected in next-user: Increased system perspective of farm households, more nuanced picture of target households within a population thereby allowing a better quantification of the target population of proposed interventions. Inclusion of quantitative impact assessment in policy development.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Knowledge sharing platforms are in place in FP4 East Africa thanks to continued collaboration with Piet van Asten at IITA, one of the flagship 4 EA leaders. This work will be further expanded and well embedded within the FP4 EA flagship project. Contacts with FP4 WA need to be made.

Partners contributing to this deliverable

Partner #1 (Responsible): Herrero, Mario <m.herrero@csiro.au>, CSIRO - Commonwealth Scientific and Industrial Research Organisation

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

https://research.csiro.au/foodglobalchange/data-and-tools/household-data/

Deliverable #3

Main Information

Title: Reporting the Food security analyses performed in all 9 African CCAFS benchmark sites

MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015

Status: Complete

Next-user

colleague scientists

Knowledge, attitude, skills and practice changes expected in next-user: Increased system perspective of farm households, more nuanced picture of target households within a population thereby allowing a better quantification of the target population of proposed interventions.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Papers and reports published, code and data sharing facility will be set up (probably at data.ilri.org)

Partners contributing to this deliverable

Partner #1 (Responsible): Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

Partner #2: Giller, Ken <k.giller@wur.nl>, WUR - Wageningen Unversity and Research Centre

Partner #3: Herrero, Mario <m.herrero@csiro.au>, CSIRO - Commonwealth Scientific and Industrial Research Organisation

Deliverable Ranking

Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Intellectual Property Rights (confidential information)

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <u>\<Not defined></u>	

Deliverable Metadata
Description: \<Not defined>
Creator / Authors: \<Not defined>
Author Identifier: \<Not defined>
Publication / Creation date: \<Not defined>
Language: \<Not defined>
Coverage: \<Not defined>

Deliverable Data sharing
Deliverable files \<Not defined>

Deliverable #4

Main Information
Title: Reports on Ex-ante assessment of CSA practices in 9 African CCAFS benchmark sites
MOG # 2: Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report

Year of expected completion: 2015
Status: Complete

Next-user
Colleague scientists
Knowledge, attitude, skills and practice changes expected in next-user: Improved insight in future target population of interventions and projected changes in food security levels to be expected from interventions: improved insight into what agronomic interventions can really change in poor farm households
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Similar to activity 189, embedding into the outreach platforms being developed within Flagship 4 projects in WA and EA; his project is too small and too short of duration to develop it's own strategy

Partners contributing to this deliverable
Partner #1 (Responsible): Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

Deliverable dissemination
Open access restriction: Intellectual Property Rights (confidential information)
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Science colleagues for now. the new PNAS paper created quite a buzz (already 4000 downloads, 4 news items in newspapers, >10 blog posts, etc); is in the 95% category in term of outreach of papers published at the same moment, and in the 75% category of papers published at the same moment in PNAS)
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Contacts through PACCA (in collaboration with ICRAF and CIAT) have good potential for concrete outreach through the CSA alliance, furthermore concrete workshops are now planned in collab with IITA targeting ZOA, medium sized international NGO. Results generated in 2015 in terms of data analyses and data collection tools are now resulting in many parties being interested in using, data, results and tools for their own purpose
Reported deliverables serve as evidence towards this achieved change: Frelat et al., 2016, PNAS paper.
Lessons and implications for the next planning cycle: Building partnerships is absolutely key, joint work with ICRAF and IITA is now starting pay off

5.4 Project highlights

6. Activities

Activity #1
Title: Food security analyses in African CCAFS benchmark sites
Description: Detailed farm household level food security analyses will be performed in all 9 CCAFS benchmark sites in sub Saharan Africa, now and under different scenarios of future change

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 30-11-2015

Leader: Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute
Status: Complete

Activity #2
Title: Ex-ante assessment of CSA technologies
Description: Quantification of the effects of different CSA technologies on food security, both in terms of average estimates and in terms of risk of falling below certain thresholds

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 30-11-2015

Leader: Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute
Status: Complete

Activity #3
Title: BILATERAL Further development of analysis framework for food security analysis
Description: This year a basic setup and a series of applications of simple food security analyses across populations of surveyed farmers in a wide range of systems has been developed. This has led to a database of more than 25000 panel data, which by the end of 2015 have been used in the food security analysis. New, spatially explicit analyses will be performed for at least 2 countries (e.g. Niger and Ethiopia) thereby allowing us spatially map key activities of different farmer wealth groups, and further differentiation in the priorization analyses we are performing

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 30-11-2015

Leader: Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

Status: Extended	**Justification:** The spatial analysis framework has now been set up and applied to Uganda. This year this set up will be used to analyse the Worldbank LSMS ISA data of Tanzania, Niger, Nigeria and Ethiopia.

Lessons regarding your project activities and possible implications for the coming planning cycle: Developing frameworks always takes longer than expected...

7. Leverages
<Not defined>