Title: ICRAF: East Africa NAMA for Dairy Development with UNIQUE

1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2018	RP EA	Radeny, Maren <M.Radeny@cgiar.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2	On-going	ICRAF - World Agroforestry Centre - Kenya	Neufeldt, Henry <h.neufeldt@cgiar.org>

Project is working on

Flaship(s)
F3 (Lini): Low emissions development

Region(s)
EA: East Africa

Project summary

This project will support national and local stakeholders in Kenya to design and pilot activities to reduce GHG emissions from dairy production through implementation of a NAMA. The project will support the development of a NAMA proposal and align sectoral policies with low-emission development pathways, provide analysis to prioritize low-emissions dairy development options and effective business models for replication, and support development of monitoring and MRV approaches from farm to national level. The dairy sector in Kenya provides a good environment for CCAFS support. National development strategies and policies (e.g. Vision 2030, National Climate Change Action Plan, National Dairy Masterplan) are supportive of climate resilient and productivity enhancing investments, whilst a dynamic agribusiness sector provide a supportive environment and - at farm level - dairy development is associated with increased incomes and nutritional benefits for the rural poor.

2. Partners

Partner #1 (Leader)

Institution: ICRAF - World Agroforestry Centre

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Neufeldt, Henry <h.neufeldt@cgiar.org>	Activity 2014-433 *Leader*. Activity 2014-443 *Leader*.	HQ
Partner	Rosenstock, Todd <t.rosenstock@cgiar.org>	Activity 2014-220 *Partner*.	HQ
Partner	Chenevoy, Audrey <a.chenevoy@cgiar.org>	Support project leader	HQ
Project Coordinator	Van Dijk, Suzanne <suzanne.vandijk@uniqueue-landuse.de>	Support project leader	HQ

Partner #2

Institution: Livelihoods Fund-France

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Giraud, Bernard <Bernard.GIRAUD@danone.com>	Private sector partner - co-funding in 2015-2016 with 90,000 USD.	HQ

Partner #3

Institution: MALF - Ministry of Agriculture, Livestock and Fisheries

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Mbae, Robin <robinmbae@yahoo.com>	Activity 2014-211 *Partner*. Activity 2014-220 *Partner*.	HQ

Partner #4

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

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Kinguyu, Stephen <stephen.kinguyu@gmail.com>	Activity 2014-211 *Partner*. Activity 2014-220 *Partner*.	HQ

Partner #5

Institution: FAO - Food and Agriculture Organization of the United Nations

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Opio, Carolyn <carolyn.opio@fao.org>	Partner in capacity building/training for the Ministry of Agriculture, Livestock and Fisheries on NAMAs and alignment of GHG emission reductions with dairy development. Co-funding in 2015-2016 35,000 USD.	HQ

Partner #6

Institution: KDB - Kenya Dairy Board

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Cherono, Philip <pcherono@kdb.co.ke>	Activity 2014-211 *Partner*. Activity 2014-218 *Partner*.	HQ

Partner #7

Institution: ILRI - International Livestock Research Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Radeny, Maren <M.Radeny@cgiar.org>	CCAFS liaison	HQ

Partner #8

Institution: UNIQUE - Unique Forestry and Land Use GmbH

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Tennigkeit, Timm <timm.tennigkeit@uniq ue-landuse.de>	Activity 2014-211 *Leader*. Activity 2014-218 *Leader*. Activity 2014-220 *Leader*.	HQ

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

Year	Lesson(s)
2016	Active engagement of the private sector is crucial to ensure that NAMA interventions can continue on a commercial basis following the withdrawal of project support.

Partnerships overall over the last reporting period:

The project is fully owned by the State Department of Livestock. Throughout the project design phase, numerous stakeholders were consulted on specific aspects of the project including government officials (Ministry of Agriculture, Livestock and Fisheries (MoALF), Ministry of Environment and Natural Resources (MENR)), dairy processors, dairy sector association representatives, commercial hay growers, financial institutions, biogas companies, development organizations and national and international research organisations. All partners performed their roles as expected.

3. Locations

This project is not global

Project level	Latitude	Longitude	Name
Country			Kenya

4. Outcomes

4.1 Project Outcomes

Project Outcome statement:
Government, non-government and private sector stakeholders in the dairy sector are supporting farmers to deploy climate finance to adopt climate-resilient practices that increase the productivity and farm-level profitability of dairy production, while significantly reducing the GHG intensity of dairy production in Kenya. Increasing numbers of dairy farmers are adopting improved feeding, animal health, livestock management and marketing practices, with support of cooperatives and other value chain actors.

Annual progress towards outcome (end of 2016*): In 2016, a dairy NAMA proposal will be finalized and submitted for climate finance. For this, institutional arrangements have been made, and a draft NAMA proposal has been discussed and elaborated with national and sector level partners incl. the Ministry of Agriculture, Envi-ronment as well as private sector. In this NAMA proposal, assessments of suitable value propositions and business models, finance modalities and NAMA finance have been taken into consideration. Furthermore an MRV framework has been developed.

Annual progress towards project outcome in the current reporting cycle (2016*): In 2016, the project started by identifying initiatives with a proven track record in improving dairy productivity, commercial fodder production, biogas promotion, and energy efficiency in cooling and processing, that have potential for scaling up and that are willing to partner in proposal development. In March 2016, a workshop was organized to (1) introduce all (private sector) partners to each other, (2) ensure that all partners have a common understanding of the requirements for climate finance and the process of delivery of the GCF concept note and (3) agree on a plan for joint development of this concept note. Technical feasibility studies were undertaken to elaborate on various aspects of each key initiative. Further activities included (i) a systematic review on adoption of ?best dairy management practices?, (ii) a financial assessment of dairy-related investments, (iii) a survey to (1) assess the financing needs of the main processors and their supplying farmer organizations/farmers involved in the dairy NAMA and (2) assess the current involvement of financial institutions in providing debt finance to the dairy sector, (iv) an evaluation of the financial viability of private-sector led extension services, (v) an assessment of the potential scale of demand for technical assistance in conducting energy audits and energy efficiency investments in processing, (vi) a survey of commercial hay companies? business and finance needs and preparation of a social and environmental impact assessment framework. A draft of the dairy NAMA concept was presented for feedback to numerous stakeholders as part of the Multi-Stakeholder Platform in August 2016. The dairy NAMA concept was finalized and reviewed by the Ministry of Agriculture, Livestock and Fisheries (MoALF), Ministry of Environment and Natural Resources (MENR) and the National Treasury in December 2016. Mid-February 2017 the concept note will be submitted to the GCF for feedback.
How communication and engagement activities have contributed to achieving your Project outcomes:* The partner workshop in March, Multi-stakeholder platform meeting in August as well as numerous bilateral meetings served to engage stakeholders in the design of the dairy NAMA.
Evidence documents of progress towards outcomes:*

https://marlo.cgiar.org/data/ccafs/projects//13/projectOutcome/Kenya%20dairy%20NAMA%20GCF%20Concept%20Note%20January%202017.pdf

Annual progress towards outcome (end of 2015): In 2015, the focus will be on all three activity streams: Activity 1: Developing a strong institutional framework, Activity 2: value proposition and investment framework, and activity 3: monitoring and MRV framework at farm, cooperative, county and national level. At the end of 2015, the project has supported Kenya's INDC submission (resulting in a short policy note), the multistakeholder platform has deliberated a draft NAMA proposal and the initial draft NAMA proposal is finalized. FOR REPORTING IN AUG 2015: Development of nationally appropriate mitigation action in the dairy supply chain and developing capacities for monitoring, reporting and verification of mitigation outcomes (and through that improved dairy production and feed regimes to improve livelihoods for 600,000 farmers while reducing methane in dairy supply chains).

Annual progress towards outcome (end of 2017): The MRV system has been tested at farm, milk hub, county and national level, data has been collected and a first review of data quality has been done. This information feeds into a first revised MRV system.

Annual progress towards outcome (end of 2018): Further testing of the MRV system is done, results are evaluated and a final revised MRV system is designed. Lessons learned on NAMA development are shared during a broad international stakeholder consultation.

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:* Development of a NAMA project is a dynamic process; among others due to cooperation with numerous (private sector) partners and regular new insights, planned activities need to be revised. It is important that projects like these are allowed to have this flexibility in activities as well as subjects of publications.

4.2 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: # 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: 3 **Cumulative target to date:** 4 **Target narrative:** Either the Tanzania or Uganda national plans include emissions reductions in the dairy sector. The plans will have solid evidence for how to achieve the 5% reduction base 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 dairy sector in climate change investments. Through the plans and across the region different projects will reach: 200k farmers within the EADD; 30k within Danone; 54k with New KCC; 45k within KACD; ?? within IFAD; ? within Campina (Tanzania); 167k within Brookside (overlap with EADD) **The expected annual gender and social inclusion contribution to this CCAFS outcome:** -

2015
Target value: 0 **Cumulative target to date:** 0 **Target narrative:** <Not Defined> **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 1 **Cumulative target to date:** 1 **Target achieved:** 1.0 **Target narrative:** 1 NAMA proposal will be handed in for climate finance. GHG emission reductions will have been assessed. The NAMA will focus on 22 counties with **Narrative for your achieved targets, including evidence:** The dairy NAMA concept was finalized and reviewed by the Ministry of Agriculture, Livestock and Fisheries (MoALF), Ministry of Environment and Natural Resources (MENR) and the National Treasury in December 2016. Mid-February 2017 the concept note will be submitted to the GCF for feedback. **Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** Over the 10-year implementation period, the project components focusing on dairy extension services, fodder production, and household biogas technology, will directly benefit 173,952 households with a population of about 1,043,000 people, of which approximately 521,000 will be women. This represents about 17% of the total target population of dairy farmers in the country and with women representing about 50% of the direct project beneficiaries. Indirect beneficiaries will include the 12,000 jobs that will be created in the dairy processing sector due to increased milk supply. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** 60% of farmers/dairy cooperative members targeted will be women. Youth (both women and men) will also be included.

Major Output groups:

- F3 (Lini): Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways:
<Not Defined>

Collaborating with other CRPs

Climate Change, Agriculture and Food Security
Description of collaboration: Funding from CCAFS, collaboration with relevant projects at ILRI and ICRAF.

4.4 Case Studies

Case Study #93

Title: Kenya prepares GCF concept note for low-emission and climate resilient dairy development

Year: 2016

Project(s): P12

Outcome Statement: With four years of technical and financial support from CCAFS, Kenya's State Department of Livestock has completed the development of a Green Climate Fund (GCF) concept note for a dairy NAMA. The NAMA, titled "Low-emission and climate resilient dairy development in Kenya," will catalyze investments of USD222.6 million in Kenya's dairy sector, directly impact over 150,000 households and reduce emissions by 8.80 MtCO2e over the 10-year implementation period.

Research Outputs: 1. Smallholder dairy methodology: Draft methodology for quantification of GHG emission reductions from improved management in smallholder dairy production systems using a standardized baseline (http://hdl.handle.net/10568/77602) 2. Systematic review of the factors influencing the adoption of technologies, management practices and marketing channels in smallholder dairy production 3. 6 feasibility studies for the components of the NAMA, included as annexes in the GCF concept note. Studies a, b, and c will also be published as CCAFS info-briefs. a. Processor-led provision of gender-inclusive extension services to their suppliers b. Financial assistance for on-farm investments by farmers and cooperatives c. Increased commercial production and marketing of fodder d. Energy efficiency and renewable energy in cooling and processing facilities e. Adoption of biogas technologies by male and female dairy farmers f. Strengthened institutional and stakeholder capacities for scaling up low-emission dairy development 4. GCF Concept note (available on request but not yet for public dissemination)

Research Partners: ICRAF: Project leader (2015-onwards), project P13 ILRI: Conducted research on best climate-smart dairy practices, maintained partnerships with Kenyan ministries UNIQUE Forestry and Land Use: Research leader FAO: Partner in capacity building/training for the Ministry of Agriculture, Livestock and Fisheries on NAMAs

Activities: This outcome was the result of nearly 4 years of research and engagement by CCAFS, ICRAF, ILRI and UNIQUE Forestry and Land Use with ministries, donors, dairy companies, and producers' organizations. Numerous stakeholder consultations informed project design, including: • A multi-stakeholder platform meeting (September 2015), attended by 47 farmers, dairy, biogas and financial companies, and national and county government officials, served to raise awareness and obtain feedback on the scope and objectives of the project. • Consultations (November 2015) were held with 45 farmers, farmer organization and county government representatives from 8 counties (Muranga, Nyeri, Nyandarua, Kirinyaga, Meru, Embu, Tharaka Nithi, Machakos) to integrate the project with ongoing initiatives at county level. • A second multi-stakeholder platform meeting (August 2016), attended by 71 representatives of dairy and biogas companies, financial institutions, civil society organizations, development partners and government institutions, at which the draft project concept was shared and discussed.

Non-Research Partneres: 1.Kenya's National Treasury: GCF National Designated Authority, responsible for submission of the concept note to GCF 2. Dairy processors (e.g. Brookside, New Kenya Cooperative Creameries): Involved in technical design of the concept note and dissemination of best practices to suppliers 3. IFAD: GCF Accredited Entity for the project

Output Users: The State Department of Livestock, part of the Ministry of Agriculture, Livestock and Fisheries (MoALF): Executing Entity for the NAMA; co-developed the concept note and submitted to the National Treasury 2. Kenya Dairy Board: Dissemination of project practices and lessons throughout the sector and across counties to support wider replication

Evidence Outcome: (1) The concept note for the dairy NAMA, as submitted by Kenya's State Department of Livestock to the National Treasury and (2) a letter accompanying the concept note submission from the Principal Secretary of the State Department of Livestock, citing support from CCAFS. NOT YET FOR PUBLIC DISSEMINATION

Output Used: Outputs were used directly by the State Department of Livestock and Kenya Dairy Board to formulate the GCF concept note and disseminate practices. IFAD and Government of Kenya have committed USD 14.58 million and USD 2.23 million, respectively, in project co-financing.

References Case: Kenya's Dairy Nationally Appropriate Mitigation Action (NAMA) Concept Note: A Proposal for a Green Climate Fund Project. January 2017 NOT YET FOR PUBLIC DISSEMINATION

Primary 2019 outcome indicator(s):
● # 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.

Link between outcome story and and the FP Outcome(s): Enhancement of equitable access to assets and participation in decision making for women in household dairy enterprises will be a key focus of the gender-inclusive extension approaches promoted by the NAMA. Benefits are expected for 152,700 households, with an estimated population of about 800,000 people, including 400,000 women and youth.

Annex uploaded:
https://marlo.cgiar.org/data/ccafs/projects//111/caseStudy/NAMA%20Kenya%20Dairy%20NAMA%20GCF%20concept%20%20Note,January%202017.pdf

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019

F3 (Lini): 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`2019 plan of the gender and social inclusion dimension of the expected annual output: <Not Defined>

Major Output groups - 2016

F3 (Lini): 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: - Identification and assessment of best climate-smart dairy management practices - Assessment of renewable energy use in the dairy value chain

Brief summary of your actual 2016 contribution towards the selected MOG: A systematic review was done to identify best climate-smart dairy management practices as well as factors influencing adoption of these practices. An assessment was done of the potential scale of demand for technical assistance in conducting energy audits and developing renewable energy (RE)/energy efficiency (EE) investments in the processing sector.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: 60% of farmers/dairy cooperative members are expected to be women. Also jouth (men and women) will be targeted.

Summary of the gender and social inclusion dimension of the 2016 outputs: In the systematic review, the relevance of social differentiation including the role of gender and youth was incorporated.

Major Output groups - 2015

F3 (Lini): 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: A systematic review was done to assess the scientific evidence and the private sector experience with regard to ready to adopt best climate-smart dairy management practices, considering fodder production, feeding practices, animal health and breeding. Furthermore, a review was done to identify existing financing mechanisms within the dairy sector.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: Mitigation practices (improved feed quality, animal health and husbandry, manure management, grazing management) to reduce CH4 and N2O emissions in dairy supply chains of East Africa were analyed on their potential impact on gender equity and social justice among smallholder livestock farmers (work of Cathy Farnworth).

Major Output groups - 2014

F3 (Lini): 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`2014 plan of the gender and social inclusion dimension of the expected annual output: <Not Defined>

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

5.2 Deliverables

D1385 - Factors influencing the adoption of technologies, management practices and marketing channels in smallholder dairy production

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth

Gender level(s):

- Diagnostics/analysis to understand gender issues

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: Technology adoption in Kenya's dairy sector: A review of factors influencing the adoption of technologies and management practices by smallholder dairy producers in Kenya
Description / Abstract: <Not Defined>
Publication / Creation date: 2017-03-01
Language: English
Country: Kenya
Keywords: technology, adoption, dairy, Kenya
Citation: Kiff, L., Wilkes, A., van Dijk, S.M. and C. Bateki (2017) Technology adoption in Kenya's dairy sector: A review of factors influencing the adoption of technologies and management practices by smallholder dairy producers in Kenya.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Kiff - Laura
- Wilkes - Andreas
- van Dijk - Suzanne Marjolein
- Bateki - Christian

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
UNIQUE - Unique Forestry and Land Use GmbH	Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>	Responsible

D410 - NAMA proposal for engagement with climate finance

Main Information

Type: Reports and other publications
Subtype: Policy brief/policy note/briefing paper
Status: Complete
Year of expected completion: 2016
New expected year: <Not Defined>

Cross-cutting dimension:
- Gender
- Youth

Gender level(s):
- Diagnostics/analysis to understand gender issues

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: Low-emission and climate resilient dairy development in Kenya
Description / Abstract: <Not Defined>
Publication / Creation date: 2016-12-01
Language: English
Country: Kenya
Keywords: NAMA, low-emission, dairy
Citation: <Not Defined>
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
UNIQUE - Unique Forestry and Land Use GmbH	Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>	Responsible
MALF - Ministry of Agriculture, Livestock and Fisheries	Mbae, Robin<robinmbae@yahoo.com>	Other
FAO - Food and Agriculture Organization of the United Nations	Opio, Carolyn<carolyn.opio@fao.org>	Other
KDB - Kenya Dairy Board	Cherono, Philip<pcherono@kdb.co.ke>	Other
ILRI - International Livestock Research Institute	Radeny, Maren <M.Radeny@cgiar.org>	Other

5.3 Project Highlights

No project highlights added

6. Activities

A211 - Developing a strong institutional framework

Description: For the project to be successful, all the institutions involved have to be engaged and they need to know their roles and responsibilities. Key activities include 1.1 alignment of NAMA targets and measures with national policies, national and regional public and private sector investment frameworks; 1.2 building national organisations' capacity to engage and coordinate diverse stakeholders, 1.3 Development of a NAMA proposal suitable for fast start climate finance mechanisms, and support for discussions with potential investors. In 2017 support to the State Department of Livestock (MoALF) will be provided in full proposal development of the NAMA. Specific assistance e.g. in relation to linking the dairy NAMA to NDCs and other national policy processes will be provided.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: UNIQUE - Unique Forestry and Land Use GmbH Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>
Status: On-going

Overall activity or progress made during this cycle: In March a workshop was organized to (1) introduce all partners to each other, (2) ensure that all partners have a common understanding of the requirements for climate finance and (3) agree on a plan for joint development of this concept note. Bilateral meetings were held with the Principle Secretary of the State Department of Livestock, Kenya Dairy Board and numerous other stakeholders. Bilateral meetings were held with AFD and IFAD to discuss possibilities of them being the accredited entity for GCF application. A second Multi-Stakeholder Platform meeting was convened in August to share the draft dairy NAMA concept note and to discuss feedback. In december a national consultative workshop was convened to review the dairy NAMA concept note. Participants included representatives from the Ministry of Agriculture, Livestock and Fisheries (MoALF), the Ministry of Environment and Natural Resources (MENR), the National Treasury and Kenya Dairy Board.

Deliverables in this activity:

- D1998: Contribution to the development of a full Green Climate Fund proposal

A218 - Value proposition and investment framework

Description: This activity line identies and assesses effective on-farm practices and business models for delivery through NAMA support, ensuring that on-farm practices promoted support resilience, profitability and increased efficiency of production, and delivered in ways that promote equitable access to dairy development opportunities. Activities in 2017 will include (i) a study on extension services, its effectiveness and the potential for improvement and (ii) piloting gender sensitive measures (As a follow up on the gender and social inclusion study in dairy in 2016 during which processors and biogas companies have done action research and identified the gender business model, specific measures to promote gender and social inclusion will be tested.)

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: UNIQUE - Unique Forestry and Land Use GmbH Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>
Status: On-going

Overall activity or progress made during this cycle: Together with partners, technical feasibility studies were undertaken to elaborate the following aspects of each key initiative: a. Target group, their needs and barriers faced b. Activities, investments and outcomes for the intervention c. Financial and economic analysis d. Estimation of GHG mitigation benefits and MRV requirements e. Description of implementation arrangements f. Social and environmental risk analysis. Further activities included a systematic review on barriers to adoption of ?best dairy management practices/technologies?, financial asssessments and surveys, development and evaluation of private-sector led extension services, an assessment on the potential of energy audits and investments in energy efficiency/renewable energy at processor level, a survey of commercial hay companies? business and finance needs and development of

Deliverables in this activity:

- D1385: Factors influencing the adoption of technologies, management practices and marketing channels in smallholder dairy production
- D2120: Monitoring milk supply in the context of processor-led extension activities

A220 - Monitoring and MRV framework

Description: This activity line will support development of a monitoring and MRV system suited to the local institutional context and meeting climate finance requirements. Key activities in 2017 will include testing the MRV system at farm and milk collection center levels.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: UNIQUE - Unique Forestry and Land Use GmbH Tennigkeit, Timm <timm.tennigkeit@unique-landuse.de>
Status: On-going

Overall activity or progress made during this cycle: In cooperation with UN FAO and ILRI, a methodology for quantification of GHG emission reductions from smallholder dairy productivity improvements was drafted and passed internal and external reviews by the Gold Standard. The methodology was formally approved by the Gold Standard in November 2016. A broader MRV framework has also been developed quantifying GHG and socio-economic development benefits.

Deliverables in this activity:

- D432: Kenya Dairy NAMA MRV system: guidelines for users.
- D2119: Estimation of GHG emission intensity from dairy production in the context of the dairy NAMA

A433 - Project management and facilitation, communication and outreach

Description: ICRAF-CCAFS related management, representing project in ICRAF, with external stakeholders, supporting communications for outcomes, e.g. SHAMBA Shakeup, any other supporting activities to help ensuring outcome by end of 2018. Communication activities for the project include radio communication, website maintenance, blogs and newspaper articles as well as co-authorship of scientific papers and policy briefs.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Neufeldt, Henry <h.neufeldt@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: Internal and external communication and management contributed to the achievement of project results. Communication activities included the organisation of and support during the Multi-stakeholder platform and publishing of blogs/news.

Deliverables in this activity:

<Not defined>

7. Leverages

Leverage 75 - Capacity building for NAMA development

Partner name: FAO - Food and Agriculture Organization of the United Nations

Year: 2016

Flagship: F3 (Lini): Low Emissions Agricultural Development

Budget: 35,000.00

Leverage 76 - Reducing Enteric Methane for improving food security and livelihoods

Partner name: Agresearch - New Zealand Pastoral Agriculture Research Institute Limited

Year: 2016

Flagship: F3 (Lini): Low Emissions Agricultural Development

Budget: 10,000.00

ICRAF-F2 (before F1 - Andy)-WA-P34 - Research Project

Submitted on 2017-02-16 at 09:16 (Reporting cycle 2016)

Title: (ICRAF - WA) Building resilient agro-sylvo-pastoral systems in West Africa through participatory action research (BRAS-PAR).

1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2018	RP WA	Zougmore, Robert <R.Zougmore@cgiar.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2	On-going	ICRAF - World Agroforestry Centre - Kenya	Bayala, Jules <j.bayala@cgiar.org>

Project is working on

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

Region(s)
WA: West Africa

Project summary

This project seeks to develop up-scalable technological and social innovations of climate-smart agriculture integrating crop-livestock-tree systems through improved understanding of farmer's perceptions and demands, by addressing barriers to adoption taking into consideration gender and social differentiation. The specific objectives are to: 1) test, evaluate and validate with rural communities and other stakeholders, scalable climate-smart models of integrated crop-livestock-tree systems, the dominant farming systems in the region, that include climate-risk management strategies; 2) simulate options for improving water and crop-livestock-trees systems under different climate and socio-economic scenarios using models (WaNuLCAS, SWAT, etc.) for informed decision making; 3) assess the conditions of success and failure of technological interventions on adaptation to climate change. The work here will focus on research that evaluates climate smart practices and technologies that will be defined through participatory identification by multi-stakeholders in each site.

2. Partners

Partner #1 (Leader)

Institution: ICRAF - World Agroforestry Centre

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Bayala, Jules <j.bayala@cgiar.org>	Activity 2014-174 *Partner*. Activity 2014-196 *Partner*. Activity 2014-195 *Leader*. ICRAF will coordinates all activities of the program and be in charge of testing and validating transformative climate smart water and crop-livestock-tree gender sensitive and specific options. ICRAF will be designing the testing approaches and modelling. ICRAF will also look at the feedbacks to help developing supporting tools and guidelines for targeting local priorities. ICRAF is going take in charge the activities of ILRI as this partner does not have budget for 2016 due to budget cut	HQ

Partner #2

Institution: INERA - Institut de l'Environnement et de Recherches Agricoles

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Bationo Babou, André <babou.bationo@gmail.com>	Activity 2014-174 *Partner*. Activity 2014-195 *Partner*. Activity 2014-196 *Partner*. INERA will be the local implementing institution in charge of the following up, collecting data of tested practices. INERA will also collect the feedbacks in such a way continual adjustment is realized to meet the needs of all categories of farmers. INERA will also conduct some trainings on some of the technologies	HQ

Partner #3

Institution: INRAN - Institut National de la Recherche Agronomique du Niger

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Abasse, Tougiana <abasse.tougiani@gmail.com>	Activity 2014-174 *Partner*. Activity 2014-195 *Partner*. Activity 2014-196 *Partner*. INRAN will be the local implementing institution in charge of the following up, collecting data of tested practices. INRAN will also collect the feedbacks in such a way continual adjustment is realized to meet the needs of all categories of farmers. INRAN will also conduct some trainings on some of the technologies	HQ

Partner #4

Institution: ISRA - Institut Senegalais de Recherche Agricole

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Diaminatou, Sanogo <sdiami@yahoo.fr>	Activity 2014-174 *Partner*. Activity 2014-195 *Partner*. Activity 2014-196 *Partner*. ISRA will be the local implementing institution in charge of the following up, collecting data of tested practices. ISRA will also collect the feedbacks in such a way continual adjustment is realized to meet the needs of all categories of farmers. ISRA will also conduct some trainings on some of the technologies	HQ

Partner #5

Institution: SARI - Savannah Agricultural Research Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Siaka, Buah <ssbuah@gmail.com>	Activity 2014-174 *Partner*. Activity 2014-195 *Partner*. Activity 2014-196 *Partner*. SARI will be the local implementing institution in charge of the following up, collecting data of tested practices. SARI will also collect the feedbacks in such a way continual adjustment is realized to meet the needs of all categories of farmers. SARI will also conduct some trainings on some of the technologies	HQ

Partner #6

Institution: AGRHYMET - Centre regional AGRHYMET

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Traore, Seydou <S.Traore@agrhymet.ne>	Activity 2014-174 *Partner*. Activity 2014-196 *Partner*. Support national meteorology services in providing climate forecast and evaluating the impacts of its use in planning the cropping activities in the four different countries	HQ

Partner #7

Institution: IWMI - International Water Management Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Mul, Marloes <m.mul@cgiar.org>	Activity 2014-195 *Partner*. Collaborating with our project on water management related issues	HQ

Partner #8

Institution: ILRI - International Livestock Research Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Augustine, Ayantunde <A.Ayantunde@cgiar.org>	Activity 2014-174 *Leader*. Activity 2014-195 *Partner*. Activity 2014-196 *Partner*. ILRI will jointly with the national research institutes implement research activities related to the integrated analysis of the current agroforestry, land and water management, cropping and livestock practices. Its focus will be in strengthening the capacity of key stakeholders through multi-stakeholders platforms to promote climate smart agriculture for joint learning and lessons sharing, and to enhance income generating activities with special focus on gender and social differentiation. With the budget cut, ILRI will have no funds for 2016	HQ

Partner #9

Institution: IUCN - International Union for Conservation of Nature

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Somda, Jacques <jacques.somda@iucn.org>	Activity 2014-196 *Leader*. Activity 2014-174 *Partner* Activity 2014-195 *Partner*. IUCN is leading the implementation and monitoring of the participatory M&E approaches. This includes some trainings on the methods of the four participating countries.	Ouagadougou, Burkina Faso

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

Year	Lesson(s)
2016	There was limited budget which did not allow going beyond the inventory of climate smart technologies/practices. Again agreement signature with partners intervened around June. These two constraints have hampered maintaining an active partnership throughout the year despite the good will of the field actors.

Partnerships overall over the last reporting period:

Through activities conducted until 2016, contacts were established with many organizations with which we are hoping to strengthen the already existing partnership for further implementing specific activities. For instance we can list the following institutions for Burkina Faso: APROS, OCADES, ONG HELP, PROFIL, RESEAU MARP, SDEEVCC (ENVIRONNEMENT), SOS-SAHEL Int BF, TREE AID BURKINA, IUCN - BURKINA Representative of Gov Agric, Livest and Env at district level, Yatenga, local radios. Similar list can be provide for the three other countries involved in our project.

3. Locations

This project is not global

Project level	Latitude	Longitude	Name
Village	10.567	-2.75	Doggoh
Village	13.444	2.648	Kampa Zarama
Village	13.796	-2.348	Tibtenga
Village	14.125	-15.579	Toune Mosquee

4. Outcomes

4.1 Project Outcomes

Project Outcome statement:
- National agricultural research institutions institutionalize the principles of PAR through integration of non-traditional partners in technologies development to generate wider context specific information to be fed into programs and policies to create the enabling environment for the scaling of CSA technologies. - National extension services, development projects and farmer's organizations widely disseminate and ensure better access to information on best fit CSA portfolios to cope with climate change. By so doing the adaptive capacity of ca. 1 million (50% women and 500,000 per country) smallholder farmers will be strengthened allowing them to make tactical and strategic planning of their farming activities based on the knowledge of CSA technologies. - The private sector including NGOs (FNGN, Larwaal, ARCAD, Care international), micro-credit institutions, agro-dealers, rural radios are scaling up/out relevant CSA portfolios through new incentive programs. The micro-financing will support the initial cost of long-term and costly operations like water ponds.

Annual progress towards outcome (end of 2016*): - At least 3 NGO have adopted the identified mechanisms and new business models/markets in their plans to explicitly promote climate-smart approaches along the value chain in four countries. Using evidence and advice on the climate smart and gender inclusive approaches, the engaged partners will be taken through learning processes that will help identify the most cost-effective ways of adopting the identified incentives schemes in their plans.

Annual progress towards project outcome in the current reporting cycle (2016*): Help – Hilfe zur Selbsthilfe e.V. in the communes of Koumbri, Barga, Oula, Kaïn in Burkina Faso is willing to promote climate smart approaches in his project: Projet « Sécurité alimentaire et nutritionnelle du Yatenga ». Similar engagement has been observed with ADRA and OXFAM in Northern Ghana. In Niger, an Alliance for Climate Smart Agriculture is being established with the following partners: OXFAM, CRS, Care, Concern, WV, FAO and ICRAF. Our experience in developing climate smart practices has been valorised in such consortium through the active participation of ICRAF-Niger focal person who is also the lead of the PAR-CSA as been developed through BRAS-PAR in the region.
How communication and engagement activities have contributed to achieving your Project outcomes:* Partners came to know about our experience and CSA through three channels: face-to-face formal and informal meetings, ICRAF and CCAFS websites and trainings on certain modules like the ones on PICSA conducted for the all region in Senegal and in three countries: Burkina Faso, Mali and Senegal.
Evidence documents of progress towards outcomes:* <Not Defined>

Annual progress towards outcome (end of 2015): We expect and will work to see at least 2 boundary partners, that is one national NGO and one public agricultural services (forestry, livestock and crop) per country (Burkina Faso, Ghana, Niger and Senegal) that are actively participating in the design and implementation incentive schemes to promote climate smart water, crop-livestock-tree and gender inclusive agricultural approaches using the information generated by the project beyond the project sites. This will be accomplished through engaging NGOs and national extension services from the beginning of the design and implementation to the evaluation of the program activities so that they can learn best practices and buy in and include CSA concepts in their own agenda. NGOs will be engaged on the basis of their geographical coverage at each country level and engagement strategy will be developed for each NGO to ensure future scaling out and up of the identified incentive mechanisms and new business models. We will also involve on-going resilience development projects through training their extension staff to capacitate them to promote climate smart water, crop-livestock-tree and gender inclusive agriculture approaches using the information generated by the project (ILRI). This is already happening for instance in Burkina Faso where the team started with one village and in the third year was able to cover 7 villages with the funding support of IUCN and the ministry in charge of Agriculture. Such approach must be expanded to the 3 remaining countries and monitored closely (IUCN).

Annual progress towards outcome (end of 2017): - The number of NGO adopting the new mechanisms like 2016 will be at least 4 (FNGN, Larwaal, ARCAD, Care International).

Annual progress towards outcome (end of 2018): - National agricultural research institutions (INERA, SARI, INRAN, ISRA) institutionalize the principles of participatory action research for their programs. - National development partners in four countries widely disseminate and ensure better access to information on best fit CSA portfolios/interventions to cope with climate variability and change. The adaptive capacity of ca. 1 million (50% women and 500,000 per country) smallholder farmers will be strengthened. - The private sector including NGOs are scaling up/out relevant CSA portfolios through new incentive programs.

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:* Our assumption about the need for innovative incentives and mechanisms for scaling up and out that address the needs of farmers, including women and marginalised groups while still valid proved to be a difficult one because of the scale at which it should be addressed in the context of limited resources both in terms of expertise and financial resources

4.2 CCAFS Outcomes

RP WA Outcome 2019: Public (MoAgr, MoLiv, MoEnv, MoRuD, MoPla, NARS) institutions and stakeholders, NGOs use CCAFS decision support tools to prioritize and design national level investments on CSA that will strengthen smallholder farmers adaptive capacity. Local decentralized Gov. services, NGOs and extension services partner to promote and scale up CSVs models using portfolios of CSA technologies and practices for local adaptation planning.

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

2019
Target value: 4 **Cumulative target to date:** 9 **Target narrative:** At least 4 national or sub-national institutions are using equitable and transformative CSA options and CCAFS tools to plan and prioritize CSA initiatives in 4 countries (Burkina Faso, Ghana, Niger and Senegal) **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2015
Target value: 2 **Cumulative target to date:** 2 **Target narrative:** At least 2 national or subnational institutions are using equitable and transformative CSA options and CCAFS tools to plan and prioritize CSA initiatives in 5 countries (Burkina Faso, Ghana, Niger and Senegal) **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 3
Cumulative target to date: 5
Target achieved: 3.0
Target narrative: At least 3 national or subnational institutions are using equitable and transformative CSA options and CCAFS tools to plan and prioritize CSA initiatives in 4 countries (Burkina Faso, Ghana, Niger and Senegal)
Narrative for your achieved targets, including evidence: CORAF-WECARD has commissioned the writing of a proposal to add climate smartness to its largest program: West African Agricultural Productivity Program. At the start, the submitted proposal will cover six countries (Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger and Nigeria) but ultimately will target the 13 countries of WAAPP in West and Central Africa. This came after long exchanges and the visit of the regional coordinator of WAAPP to our Daga-Birame CSV of Senegal in August 2016.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: At least 30% of the interviewees during the inventory and prioritization of climate smart technologies/practices were women. That allows accommodating the views of women. Representatives from the community were composed of key social groups/ethnic groups in the community including crop and livestock farmers. For all trainings activities and exchange visits, the inclusion of women and youth has always been seriously considered. A regional annual report has been produced and loaded in Dataverse. The assessment of the use of climate information has also used similar gender sensitive sampling of the interviewees.
The expected annual gender and social inclusion contribution to this CCAFS outcome: This will be done through a reduction of inequity among actors especially women and youth in access to and control of information and technologies as most of the cropping operations are realized by these categories. The use of ICT will help as everyone will freely have access to information which is aired.

Indicator #2: # 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: 9
Target narrative: At least 4 private actors (NGOs, local rural radios, agro-dealers, etc.) are using new incentive mechanisms or business models/markets that explicitly promote equitable and transformative CSA approaches along the value chain
The expected annual gender and social inclusion contribution to this CCAFS outcome: Women will be targeted as they are much better in reimbursing borrowed money

2015
Target value: 2 **Cumulative target to date:** 2 **Target narrative:** At least 2 private actors (NGOs, local rural radios, agro-dealers, etc.) are using new incentive mechanisms or business models/markets that explicitly promote equitable and transformative CSA approaches along the value chain **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 3
Cumulative target to date: 5
Target achieved: 3.0
Target narrative: At least 3 private actors (NGOs, local rural radios, agro-dealers, etc.) are using new incentive mechanisms or business models/markets that explicitly promote equitable and transformative CSA approaches along the value chain
Narrative for your achieved targets, including evidence: During the inventory of climate smart technologies/practices, the value chains of interest were identified by the local communities during the workshops (except in Niger where such exercise was not conducted). WV staff was trained in June 2016 on CSA and has decided to implement some of the concepts developed during the training. A partial evaluation indicated that 1,272 farmers (936 M + 336 F) have tried to applied these concepts despite the late delivery of the training. A Niger CSA alliance has been established including: OXFAM, CRS, Care, Concern, WV, FAO and ICRAF.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: CSA technologies prioritization has considered gender-sensitive practices. In addition, women being the most activities in marketing of agricultural and tree commodities, value chain developed activities are dominated by women and to a certain extent youth.
The expected annual gender and social inclusion contribution to this CCAFS outcome: This will be done through a reduction of inequity among actors especially women and youth in access to and control of information. Gender sensitive incentive and business opportunities will be developed to target the various categories of users.

Major Output groups:

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

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

● F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

● F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

● F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways:
Activity 2014-174 will contribute to CCAFS IDO2 by (1) integrating the women and other marginalized group in the communities of practices by capacitating them through training and awareness raising campaigns; (2) developing and testing gender sensitive equitable CSA options in ways that recognize their specific challenges. Activity 2014-195 will address CCAFS IDO1 through learning by doing using participatory testing to facilitate uptake by smallholder farmers and will enable a range of stakeholders to make more appropriate decisions. Activity 2014-196 will contribute to CCAFS IDO3 by fostering enhanced adaptive capacity to climate risks among smallholder farmers and organizations supporting them.

Collaborating with other CRPs

Forests, Trees and Agroforestry
Description of collaboration: The dominant parkland system that typifies the farming systems in the Sahel constitutes an agroforestry practice. Part of the tested climate smart options are tree-based and fall under FTA domain of activities. But there is nothing formalized with a FTA project in the regional.

Dryland Cereals
Description of collaboration: Even though Dryland cereals is not yet functioning as a CRP, we intend from this year to include testing bio-fortified varieties of some cereals like sorghum and millet.

Livestock and Fish
Description of collaboration: Because of the integrated nature of the production systems with tree-crop-livestock together, we also deal with livestock in the options tested or to be tested. Here also no formal link has been established "Livestock and Fish" CRP. ILRI was partner of the project but withdrew because of funding cuts.

Maize
Description of collaboration: No formal relationship established but we intend from this year to include testing bio-fortified varieties of maize where requested by farmers.

4.4 Case Studies

Case Study #108

Title: The CCAFS Climate-Smart Village approach inspired the World Bank funded CSA project in Niger

Year: 2016

Project(s): P34

Outcome Statement: The learning agenda capitalized from the agricultural research for development (AR4D) in Kampa Zarma CSV served to inform the design of a $111 million World Bank-funded project on climate-smart agriculture in Niger. Through a pilot within two communes, the approach will inform the ground implementation within the 60 communes covered by the project in Niger. Direct beneficiaries are estimated to 500,000 farmers and agro pastoralists (including producer organizations, women, youth, and vulnerable groups) who will benefit from integrated commune sub-projects.

Research Outputs: Based on the principles of the Climate-Smart Village (CSV) approach designed by CCAFS as a means to addressing the need for proven and effective CSA options in the context of climate change, we conducted agricultural research for development (AR4D) in the Kampa-Zarma CSV in Niger since 2012. A model synthesizing the vision of such CSV by the community was designed through a participatory diagnosis. The research across years resulted into documenting how different practices, technologies, services, processes and institutional arrangements contribute to the pillars of CSA, and the synergies and trade-offs between these pillars. Evidence on which options generate CSA-related outcomes, where the options should be targeted, the costs involved, and their expected co-benefits or disbenefits (including gender and labour aspects) were also assessed. The above knowledge and learning agenda from the CSV were seen enough authoritative to inform the larger CSA project.

Research Partners: ICRAF was leading the overall project across West Africa, in collaboration with the WA Regional Program based at ICRISAT INRAN is the national agricultural research institute in Niger; INRAN coordinated the ground AR4D implementation in the CSV

Activities: In 2015, the world bank requested the support of CCAFS for the design of its CSA project in Niger. in this line, CCAFS attended the stakeholders concertation workshop for the project development. As a follow up request, CCAFS organized a field visit to the Kampa Zarma CSV AR4D site to show to a World Bank team, how concretely the CSV is being developed and what are current achievements. Participants visited various CSA options implemented in farmers' fields including FMNR, zaï and improved varieties of millet; but also discussed with communities. From the visit, the world bank representatives were convinced to adopt the CSV approach within the Niger CSA project. In addition to backstopping the project design, CCAFS is expected to develop 2 "climate-smart communes" that will serve to testing, through participatory methods, technological and institutional options. The project will start during 2017.

Non-Research Partneres: Nigeriens Nourish Nigeriens (3N)", an agricultural program initiated by Niger President. 3N leads and coordinate the overall CSA support project Ministry of agriculture of Niger, ministerial department superseding the overall project. The above two national institutions approved the inclusion of CCAFS Program in the implementation of the CSA support project.

Output Users: The "3N" initiative, leader of the CSA support project ICRISAT Niamey is also expected to contribute to the scaling up of proven technological packages and may use the CSV AR4D approach to reaching beneficiaries of the project.

Evidence Outcome: The final project document mentioning CCAFS as contributor to the CSA support project in Niger The agreement of the government of Niger and ICRISAT Information note on the official approval with project document downloadable (http://www.reca-niger.org/spip.php?article1047)

Output Used: The WB office in Niger used the knowledge generated by CCAFS through the Niger CSV and other scientific evidences relating to the CSV AR4D approach to inform the development of the CSA support project. The field visit to the CSV site was insightful about the approach relevance and communities interests.

References Case: IDA 2016. Climate-smart agriculture support project in Niger. Rapport no 1745. Project appraisal document on a proposed credit. World Bank. Blog - A real opportunity to scale up Climate-Smart Villages in Niger. Available at: https://ccafs.cgiar.org/blog/real-opportunity-scale-climate-smart-villages-niger#.WKS32PK8SHQ

Primary 2019 outcome indicator(s):

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

Link between outcome story and and the FP Outcome(s): <Not Defined>

Annex uploaded:
https://marlo.cgiar.org/data/ccafs/projects//87/caseStudy/PASEC_PAD_CSA_version_approuvee_EN.pdf

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

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

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

Major Output groups - 2016

F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - At least two financial incentive mechanisms to promote CSA are developed in participating countries

Brief summary of your actual 2016 contribution towards the selected MOG: The Senegal team has been supported to develop a CN to tape into the Green Climate Funds to promote CSA. This CN has gone through the second stage of selection at which the team was asked to collaborate with an NGO. Such approach will be extended this to other countries.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Gender specific technologies will be considered in designing the incentive schemes

Summary of the gender and social inclusion dimension of the 2016 outputs: The key principle for deploying incentives to promote CSA is the disaggregation of beneficiaries/participants by sex, income status, and age group.

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - at least 2 local radios have developed a program around CSA in the participating countries - at least 2 mobile companies have developed a knowledge sharing platforms

Brief summary of your actual 2016 contribution towards the selected MOG: Local radios are used to broadcast CI throughout the year. They are also associated with key planning and assessment events of the project. However, there is no permanent program developed yet. For the time being, Eseko has developed a platform in Ghana (Etwire et al. 2016)

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Focus on raising the awareness of the women about the existence of these programs

Summary of the gender and social inclusion dimension of the 2016 outputs: A survey was conducted to assess the usefulness, constraints, and factors likely to influence farmers' decisions to patronize mobile phone-based weather and market information. Data were disaggregated in the analysis by sex, income status, and age group (Etwire et al. 2016).

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - at least 2 CSA options co-developed and being used for increase food production

Brief summary of your actual 2016 contribution towards the selected MOG: An inventory and prioritization of climate smart technologies for phase 2 have been completed. Meanwhile there are some indications of larger use of some of the co-tested options like combining fertilization, association and improved varieties (Barry 2016a&b; Sanou et al. 2016) and combining tillage and fertilization (Buah et al. 2016)

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Women will be involved in the community of practices developing the CSA options in such a way their specificity is considered

Summary of the gender and social inclusion dimension of the 2016 outputs: At least 30% of the interviewees for the inventory were women. Some activities are directed to vulnerable groups. For instance, fruit trees introduced in Senegal for women. In Ghana women have been capacitated in soybean production, use of drought tolerant varieties. The baseline survey on knowledge-attitude-practices included 37% of women.

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - One customized decision support to tool developed for CSA and used in the four countries - A tradeoffs analysis conducted in one of the four participating countries

Brief summary of your actual 2016 contribution towards the selected MOG: A consolidated regional report on the inventory of climate smart options was produced and will be turned into a working paper to serve other actors in the selection suitable options. Surveys were conducted in three countries to assess the impact of the use of CI by farmers in their activities

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Women and other marginalized groups concerns will be considered in the prioritization of the CSA options

Summary of the gender and social inclusion dimension of the 2016 outputs: All the above mentioned surveys have included at least 30% of women. Different groups (ethnic, age, migrant-autochthone, sex, etc.) were also considered during the survey of the use of CI and its impacts.

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

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

Brief summary of your actual 2016 contribution towards the selected MOG: Our first approach to go to scale is through capacitating actors of on-going projects and NGO's by training them on CI, PICSA and CSA and reports of all these events are in Dataverse. Second angle is by submitting CN to CORAF-WECARD for funding of activities beyond sites and countries.

Brief`2016 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 2016 outputs: All the above mentioned surveys have included at least 30% of women. Different groups (ethnic, age, migrant-autochthone, sex, etc.) were also considered during the survey of the use of CI and its impacts. Through wealth ranking, existing categories according to local criteria are identified and used in the implementation phase.

Major Output groups - 2015

F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, 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: Our project got delayed as the go ahead to sign agreements with partners was given in June 2015 when the rainy season had already started. The agreements are signed, the methodology to conduct the inventory and prioritization climate-smart practices has been developed. The countries teams are currently conducting the inventory.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: The methodology developed for the inventory, which is the starting point of the activities, requires that gender and social inclusion are considered (for instance 30% of the participants at the workshop should be women). The rest of the process will be based on this gender differentiation and sensitive approach

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (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: Local rural radios and mobile are used and a consortium of at least 10 partners involved in a process of 9 steps going from establishing the partnership and planning to the evaluation of the results of the activities in each site. Connection with the national level is still weak

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

Summary of the gender and social inclusion dimension of the 2015 outputs: The starting point which is a workshop for the inventory of climate smart practices requires that 30% of the participants should be women. Such gender differentiation and sensitive approach will be pursued throughout the lifespan of the project

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

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

Brief summary of your actual 2015 contribution towards the selected MOG: Methodology to conduct the inventory and prioritization of the climate-smart crop-livestock-agroforestry practices has been developed and shared with the countries teams' leaders. They are now in the process of conducting their inventory workshops in their respective countries.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: The methodology developed for the inventory workshop requires that gender and social inclusion are considered (for instance 30% of the participants at the workshop should be women).

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

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

Brief summary of your actual 2015 contribution towards the selected MOG: Methodology to conduct the inventory and prioritization of capacity building needs of the stakeholders (in adaptation planning to promote climate smart agriculture) has been developed and shared with the countries teams' leaders. They are now in the process of conducting their inventory workshops in their respective countries.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: The methodology developed for the inventory workshop requires that gender and social inclusion are considered (for instance 30% of the participants at the workshop should be women).

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, 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: Current phase is just starting however based on the past activities, the World Food Program has helped the Burkina Faso team to go from 1 to 7 villages. Similarly in Senegal ENRACCA-WA project has adopted the participatory action research approach on climate smart agriculture

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

Summary of the gender and social inclusion dimension of the 2015 outputs: The starting point which is a workshop for the inventory of climate smart practices requires that 30% of the participants should be women. Such gender differentiation and sensitive approach will be pursued throughout the lifespan of the project

Major Output groups - 2014
F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>
F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

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

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

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

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

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

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

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

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

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

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

5.2 Deliverables

D371 - List of promising and prioritized climate smart crop-livestock-agroforestry practices for testing

Main Information

Type: Reports and other publications

Subtype: Research workshop report

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth
- Capacity Development

Gender level(s):

- Collection of sex-disaggregated data
- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/AAE8DQ

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa

Description / Abstract: Inventory workshops were conducted in different CCAFS benchmark sites to (i) engage key stakeholders in inventorizing promising climate smart crop-livestock-agroforestry practices that could be tested under the project and (ii) prioritize the promising climate smart technologies based on a set of criteria pertinent to climate smart agriculture (food security, adaptation and mitigation) and feasibility in the context of farmers-managed on-farm research. A consolidate report has been produced for the 4 countries

Publication / Creation date: 2016-11-01

Language: English

Country: Burkina Faso, Ghana, Niger and Senegal

Keywords: climate smart, context, option, practices, technology, innovation

Citation: Dayamba et al. 2016. Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa

Handle: <Not Defined>

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

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Augustine, Ayantunde <A.Ayantunde@cgiar.org>	Responsible
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other

D373 - List of promising crop, livestock and agroforestry value chains

Main Information

Type: Reports and other publications

Subtype: Research workshop report

Status: Complete

Year of expected completion: 2016

New expected year: 2016

Cross-cutting dimension:

- Gender
- Youth

Gender level(s):

- Collection of sex-disaggregated data
- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/AAE8DQ

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Dayamba et al. 2016. Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa

Description / Abstract: Inventory workshops were conducted in different CCAFS benchmark sites to (i) engage key stakeholders in inventorizing promising climate smart crop-livestock-agroforestry practices that could be tested under the project and (ii) prioritize the promising climate smart technologies and value chains based on a set of criteria pertinent to climate smart agriculture (food security, adaptation and mitigation) and feasibility in the context of farmers-managed on-farm research. A consolidate report has been produced for the 4 countries

Publication / Creation date: 2016-11-01

Language: English

Country: Burkina Faso, Ghana, Niger and Senegal

Keywords: climate smart, context, option, practices, technology, innovation, value chain

Citation: Dayamba et al. 2016. Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Augustine, Ayantunde <A.Ayantunde@cgiar.org>	Responsible
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other

D374 - Accurate and relevant climate information

Main Information

Type: Data, models and tools

Subtype: Database/Dataset/Data documentation

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth

Gender level(s):

- Collection of sex-disaggregated data
- Diagnostics/analysis to understand gender issues

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/OQTUSE

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Training workshop on historical climate data analysis and Participatory Integrated Climate Services for Agriculture (PICSA)

Description / Abstract: Staff of 5 NHMS were trained on statistical analysis of historical climate records to but this information in the format of graphs of past long cycle of climate records to help guide the tactical selection livelihood options including agricultural ones (type of crops, varieties, etc.). The manual to conduct the training is available translated into French.

Publication / Creation date: 2016-03-01

Language: English

Country: Burkina Faso, Ghana, Mali, Niger and Senegal

Keywords: crop cycle, rainfall, temperature,

Citation: Dayamba et al. 2016. Training workshop on historical climate data analysis and Participatory Integrated Climate Services for Agriculture (PICSA)

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Process of data quality assurance: ● Yes, but not documented
Data dictionary: ● Yes, but not documented
Are the tools used for data collection available: ● Yes, but not documented

Partners contributing to this deliverable:

Institution	Partner	Type
AGRHYMET - Centre regional AGRHYMET	Traore, Seydou <S.Traore@agrhymet.ne>	Responsible
ICRAF - World Agroforestry Centre	Bayala, Jules<j.bayala@cgiar.org>	Other

D375 - Trainings

Main Information

Type: Reports and other publications

Subtype: Research workshop report

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth
- Capacity Development

Gender level(s):

- Collection of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/AAE8DQ

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Agriculture Climato-Intelligente, Pratiques Agroforestières et Chaines de Valeurs des Produits Agroforestiers

Description / Abstract: Within the frame of its project "Eco-Agriculture", World Vision staff were trained during two on the concepts of climate smart agriculture and value chains of agroforestry products. A total of 31 agents participated in this training.

Publication / Creation date: 2016-06-01

Language: French and English

Country: Mali

Keywords: agroforestry, climate change, CSA, value chain

Citation: Dayamba D.,and Dembele C. 2016. Agriculture Climato-Intelligente, Pratiques Agroforestières et Chaines de Valeurs des Produits Agroforestiers.

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Bayala, Jules <j.bayala@cgiar.org>	Responsible
AGRHYMET - Centre regional AGRHYMET	Traore, Seydou<S.Traore@agrhymet.ne>	Other
ILRI - International Livestock Research Institute	Augustine, Ayantunde<A.Ayantunde@cgiar.org>	Other
IUCN - International Union for Conservation of Nature	Somda, Jacques <jacques.somda@iucn.org>	Other

D376 - Data on the impact of using climate information in planning agricultural activities

Main Information

Type: Data, models and tools

Subtype: Database/Dataset/Data documentation

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth
- Capacity Development

Gender level(s):

- Collection of sex-disaggregated data
- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: <Not Defined>
Description / Abstract: A M&E workshop is available but the list of indicators is still being finalized
Publication / Creation date: 2015
Language: French and English
Country: <Not Defined>
Keywords: <Not Defined>
Citation: Database on the use of climate information
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Process of data quality assurance: ● Yes, but not documented
Data dictionary: ● Yes, but not documented
Are the tools used for data collection available: <Not Defined>

Deliverable Data sharing

Deliverable files:

<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
AGRHYMET - Centre regional AGRHYMET	Traore, Seydou <S.Traore@agrhymet.ne>	Responsible
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other
IUCN - International Union for Conservation of Nature	Somda, Jacques <jacques.somda@iucn.org>	Other

D504 - Framework to co-design, test, monitor transformative CSA water and crop-livestock-tree gender sensitive and specific options

Main Information

Type: Reports and other publications

Subtype: Research workshop report

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Youth
- Capacity Development

Gender level(s):

- Collection of sex-disaggregated data
- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/AAE8DQ

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: (1) Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa and (2) M&E guide

Description / Abstract: Methodology of the inventory available as well as a report of the M&E workshop

Publication / Creation date: 2016-12-01

Language: French and English

Country: Burkina Faso, Ghana, Niger and Senegal

Keywords: climate smart, context, option, practices, technology, innovation

Citation: Dayamba et al. 2016. Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa ICRAF, IUCN and ILRI 2015. Planning, monitoring and evaluation framework for "Building resilient agro-sylvo-pastoral systems in West Africa through participatory action research-BRAS-PAR"

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Bayala, Jules <j.bayala@cgiar.org>	Responsible
IUCN - International Union for Conservation of Nature	Somda, Jacques <jacques.somda@iucn.org>	Other
ILRI - International Livestock Research Institute	Augustine, Ayantunde<A.Ayantunde@cgiar.org>	Other

D506 - Support tools, approaches, guidelines for climate smart agriculture targeting/prioritization and local adaptation and investment planning

Main Information

Type: Training materials

Subtype: User manual/Technical Guide

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Collection of sex-disaggregated data
- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Dataverse (Harvard)

Dissemination URL: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/AAE8DQ

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: (1) Methodology for technologies inventory and section and (2) guide for planning, monitoring and evaluation

Description / Abstract: A methodology document is available and has been used by the national teams to conduct the inventory of the promising climate smart practices. A guide of planning, monitoring and evaluation has also been elaborated and the base lining conducted in the 4 countries

Publication / Creation date: 2016-12-01

Language: French and English

Country: Burkina Faso, Ghana, Niger and Senegal

Keywords: climate smart, context, option, practices, technology, innovation

Citation: Dayamba et al. 2016. Promising climate-smart crop-livestock-agroforestry technologies / practices in CCAFS benchmark sites in West-Africa ICRAF, IUCN and ILRI 2015. Planning, monitoring and evaluation framework for "Building resilient agro-sylvo-pastoral systems in West Africa through participatory action research-BRAS-PAR"

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors: <Not Defined>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Augustine, Ayantunde <A.Ayantunde@cgiar.org>	Responsible
ICRAF - World Agroforestry Centre	Bayala, Jules<j.bayala@cgiar.org>	Other
IUCN - International Union for Conservation of Nature	Somda, Jacques <jacques.somda@iucn.org>	Other
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other

D509 - Best climate smart integrated crop-livestock-agroforestry practices

Main Information

Type: Data, models and tools

Subtype: Database/Dataset/Data documentation

Status: Cancelled

Year of expected completion: 2016

Justification of new expected date of completion: Because it is the same deliverable already reported in 505

Cross-cutting dimension:
<Not Defined>

Deliverable dissemination

Is this deliverable already disseminated: No

Open access: Yes

License adopted: <Not Defined>

Deliverable Metadata

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

Deliverable Quality check

FAIR Compliant: F A I R

Process of data quality assurance: <Not Defined>
Data dictionary: <Not Defined>
Are the tools used for data collection available: <Not Defined>

Deliverable Data sharing

Deliverable files:
<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type

ICRAF - World Agroforestry Centre	Bayala, Jules <j.bayala@cgiar.org>	Responsible
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other

D510 - Support tools, approaches and guidelines for CSA targeting/prioritization and local adaptation and investment planning

Main Information

Type: Training materials
Subtype: User manual/Technical Guide
Status: Cancelled
Year of expected completion: 2016
Justification of new expected date of completion: Because the similar to 506 already reported

Cross-cutting dimension:
<Not Defined>

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: <Not Defined>

Deliverable Metadata

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

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
ILRI - International Livestock Research Institute	Augustine, Ayantunde <A.Ayantunde@cgiar.org>	Responsible

IUCN - International Union for Conservation of Nature	Somda, Jacques <jacques.somda@iucn.org>	Other
ICRAF - World Agroforestry Centre	Bayala, Jules<j.bayala@cgiar.org>	Other
INERA - Institut de l'Environnement et de Recherches Agricoles	Bationo Babou, André<babou.bationo@gmail.com>	Other
INRAN - Institut National de la Recherche Agronomique du Niger	Abasse, Tougiana<abasse.tougiani@gmail.com>	Other
ISRA - Institut Senegalais de Recherche Agricole	Diaminatou, Sanogo<sdiami@yahoo.fr>	Other
SARI - Savannah Agricultural Research Institute	Siaka, Buah<ssbuah@gmail.com>	Other

5.3 Project Highlights

No project highlights added

6. Activities

A174 - Strengthen the capacity of stakeholders through multi-stakeholders platforms to promote CSA for joint learning

Description: This activity will cover the following aspects: 1. Multi-stakeholders engagements to inventorize promising climate smart crop-livestock-agroforestry practices and to prioritize practices for testing. 2. Assessment of needs to build the capacity of the stakeholders in adaptation planning to promote climate smart agriculture. 3. Analysis of promising crop, livestock and agro-forestry value chains. 4.Generate accurate and relevant climate information and assess the impact of its use in planning agricultural activities

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Bayala, Jules <j.bayala@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: The inventory of the promising climate smart options has been conducted, 4 national reports and one consolidated regional report produced. During the inventory of the technologies, promising value chains were also identified and will guide future actions in the sites. Capacity of the staff of 5 NHMS was strengthened in the statistical analysis of historical climate records to support farmer's decision making in selecting options. Two refreshing trainings in Ghana and 3 trainings in Senegal, Burkina Faso and Mali have been conducted on Participatory Integrated Climate Services for Agriculture (PICSA) within the frame of CASCAID. Meteo staff are well equipped to generate more accurate information for the planning of the cropping activities. A training on CSA was also provided to 31 staff of World Vision. The impact of the use of CI has been evaluated using a questionnaire in 3 countries (Burkina Faso, Ghana, Niger). The data is being processed

Deliverables in this activity:

- D371: List of promising and prioritized climate smart crop-livestock-agroforestry practices for testing
- D373: List of promising crop, livestock and agroforestry value chains
- D375: Trainings
- D510: Support tools, approaches and guidelines for CSA targeting/prioritization and local adaptation and investment planning
- D372: List of capacity building needs of the stakeholders in adaptation planning to promote CSA

A195 - Test and validate transformative climate smart water and crop-livestock-tree gender sensitive and specific options

Description: 1. Participatory design, testing and monitoring of transformative climate smart water and crop-livestock-tree gender sensitive and specific options (agroforestry, water harvesting, livestock nutrition). 2. Modelling response of integrated crop-livestock-agroforestry options under different climate change and socio-economic scenarios. 3. Feedback workshops on results from participatory action research. 4. Developing support tools, approaches (including strategic engagements and partnerships) and guidelines for climate smart agriculture targeting/prioritization and local adaptation and investment planning

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Bayala, Jules <j.bayala@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: The inventory been completed, the participatory design of transformative climate smart water and crop-livestock-tree gender sensitive and specific options (agroforestry, water harvesting, livestock nutrition) will be conducted for the coming cropping season. Meanwhile, national teams have pursued the activities they were already conducting. An occasional paper on the PAR approach was published. A special issue on CSA in the regional has been developed and will be released soon. The drastic reduction of the budget will not allow collecting huge data required for modelling using CRP money. This will be envisaged when bilateral funds we have applied will be secured. As every year, feedback workshops on results of the last rainy season have been held at site/district level for participatory action research. Inventory and prioritization methodology for selecting technological options and value chains, M&E guide, a questionnaire for evaluating the use CI have been generated and made available on Dataverse.

Deliverables in this activity:

- D371: List of promising and prioritized climate smart crop-livestock-agroforestry practices for testing
- D373: List of promising crop, livestock and agroforestry value chains
- D509: Best climate smart integrated crop-livestock-agroforestry practices
- D510: Support tools, approaches and guidelines for CSA targeting/prioritization and local adaptation and investment planning

A196 - Plan, monitor and evaluate the changes in behavior using participatory, gender-sensitive approaches and develop social-learning

Description: 1. Baseline and endline surveys to characterize changes in knowledge, attitude and skills of the farmers in the climate smart villages on adaptation planning and on integrated crop-livestock-agroforestry options to promote climate smart agriculture. 2. Assessment of the socio-economic and institutional conditions of success-optimization and failure to adoption of incremental climate smart water and crop-livestock-tree technological options

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: IUCN - International Union for Conservation of Nature Somda, Jacques <jacques.somda@iucn.org>
Status: On-going

Overall activity or progress made during this cycle: A planning, monitoring and evaluation guide document has been produced and made available to the country teams and on Dataverse. Using the developed guide, four surveys were conducted in the 4 countries (Burkina Faso, Ghana, Niger and Senegal) to establish the baseline for the M&E. The focus was on Knowledge, Attitude and Practices (KAP) related to adopting climate-smart technologies for which socioeconomic parameters of the respondents were collected with the view to conduct an analysis of the data based gender and social differentiation. The results will be used to develop the social learning framework for scaling up climate smart agriculture in the four countries and the whole West Africa. The assessment of the socioeconomic and institutional conditions for the success and failure of the integrated crop-livestock-agroforestry climate smart technologies adoption will also build on the results of the KAP surveys.

Deliverables in this activity:

- D504: Framework to co-design, test, monitor transformative CSA water and crop-livestock-tree gender sensitive and specific options
- D508: Framework to co-develop, evaluate transformative climate smart water and crop-livestock-tree gender sensitive and specific options
- D510: Support tools, approaches and guidelines for CSA targeting/prioritization and local adaptation and investment planning

7. Leverages

Leverage 84 - ICRAF

Partner name: IUCN - International Union for Conservation of Nature

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 20,585.00

Leverage 85 - IUCN

Partner name: ICRAF - World Agroforestry Centre

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 5,000.00

Leverage 86 - SARI

Partner name: ICRAF - World Agroforestry Centre

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 2,500.00

Leverage 87 - ISRA

Partner name: ICRAF - World Agroforestry Centre

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 2,500.00

Leverage 88 - INERA

Partner name: ICRAF - World Agroforestry Centre

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 1,250.00

Leverage 89 - INRAN

Partner name: ICRAF - World Agroforestry Centre

Year: 2016

Flagship: F2 (before F1 - Andy): Climate-smart practices **Budget:** 1,250.00

ICRAF-F4 (before F2 - James)-SEA-P48 - Research Project

Submitted on 2017-02-17 at 11:17 (Reporting cycle 2016)

Title: Enhancing adaptive capacity of women and ethnic minority smallholder farmers through improved agro-climate information in South--East Asia

1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2018	RP SEA	Tan Yen, Bui <y.bui@irri.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2, Bilateral	On-going	ICRAF - World Agroforestry Centre - Kenya	Simelton, Elisabeth <e.simelton@cgiar.org>

Project is working on

Flaship(s)
F4 (before F2 - James): Climate services and safety nets

Region(s)
SEA: Southeast Asia

Project summary

This initiative will enhance the adaptive capacity of women and ethnic minority (W&EM) farmers to better anticipate and respond to risks and opportunities from climatic variability. Agricultural and meteorological service providers will work directly with W&EM farmers, engaging them in meteorological observations and decision--making on agricultural management options. Through a phased approach, agro-climatic information systems (ACIS) are demonstrated in Vietnam, then customised for Cambodia and Laos, covering four different agro--ecosystems. Social learning processes are used for capacity development of farmers and related agencies to benefit 200,000 farmers by 2018. Research will improve the understanding of farmer decision--making processes with recommendations for upscaling.

2. Partners

Partner #1 (Leader)

Institution: ICRAF - World Agroforestry Centre

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Simelton, Elisabeth <e.simelton@cgiar.org>	Activity 2014-114 *Partner*. Activity 2014-117 *Partner*. Activity 2014-150 *Partner*. Activity 2014-116 *Leader*. Activity 2014-118 *Leader*.	Vietnam, Vietnam
Project Coordinator	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	.	HQ

Partner #2

Institution: CARE

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Noorlander, Jan <Jan.Noorlander@careint.org>	Activity 2014-114 *Partner*. Activity 2014-116 *Partner*. Activity 2014-117 *Partner*. Activity 2014-118 *Partner*. Activity 2014-150 *Partner*.	Copenhagen, Denmark
Partner	Aus Der Beek, Robin <Robin.ausderBeek@careint.org>	Activity 2014-114 *Partner*. Activity 2014-116 *Partner*. Activity 2014-117 *Partner*. Activity 2014-118 *Partner*. Activity 2014-150 *Partner*.	Copenhagen, Denmark
Partner	Nielsen, Flemming Gjedde <fnielsen@care.dk>	Activity 2014-116 *Partner*. Activity 2014-118 *Partner*. Activity 2014-114 *Leader*. Activity 2014-117 *Leader*. Activity 2014-150 *Leader*.	Copenhagen, Denmark
Project Coordinator	Madsen, Erik Junge <emadsen@care.dk>	Project coordinator	Copenhagen, Denmark
Partner	Le, Hieu Xuan <LeXuan.Hieu@careint.org>	Bugdet responsible and contact point for CARE Vietnam	Hanoi, Vietnam

Partner #3

Institution: MONRE - Ministry of Natural Resources and Environment

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Duong, Kham Van <Kham.duongvan@imh.ac.vn>	Agroclimate zoning	HQ

Partner #4

Institution: FU - Farmers' Union Ha Tinh

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Le, Hoa Dinh <dinhhoafuht@gmail.com>	Local partner	HQ

Partner #5

Institution: CCD - Center for Community Development in Dien Bien Province

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Loi, Vu Dinh <loiccd@gmail.com>	Activity 2014-150 *Partner*.	HQ

Partner #6

Institution: CEDAC - Cambodian Centre for Study and Development in Agriculture

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Samath, Pol <samathpol@cedac.org.kh>	Responsible for community engagement and PSP workshops	HQ

Partner #7

Institution: NAFRI - National Agriculture and Forestry Research Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Inthavong, Thavone <i_thavone@yahoo.com>	contact point for national partner in Laos, work with itnegrating dynamic crop calendar/Participatory Scenario Planning (PSP)	HQ

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

Year	Lesson(s)
2016	Considering the different set-ups this project will generate a number of lessons learned for "implementing participatory agro-climate information in different contexts". Start-up with a phased approach allowed piloting context-specific solutions, partners to learn from each other, adapting some material. Budget turns out too small to make direct institutional impact (buy-in) at national level in three countries. We continue to promote the project and actively participate at international and national policy consultations & donor forums, while we may focus more on documenting evidence that provincial policymakers and investors need to scale out.

Partnerships overall over the last reporting period:

This project involves a diverse type of partners (national institutes, farmer-development-and-research NGOs) in five different settings - all with different modes of operandi, human and technical capacity, including language (English as well as ethnic). We now have clearer understanding of each others' roles, and what alterations to the original concept are needed to function within the institutional settings and budget frameworks.Weather data (charges or unavailable) remains a challenge.

3. Locations

This project is not global

Project level	Latitude	Longitude	Name
Climate Smart Village Sites	17.997	106.161	My Loi
Climate Smart Village Sites	18.358	102.463	Ekxang
District	21.4335	103.0663	Vietnam - Dien Bien, Dien Bien province
District	13.6091	106.8178	Cambodia - Kone Mom district, Ratanakiri province
District	21.754977	102.115723	Laos - Phongsaly

4. Outcomes

4.1 Project Outcomes

Project Outcome statement:
By 2019 women and ethnic minority (W&EM) farmers in the three countries can better anticipate, respond to risks and opportunities from climatic variability through agro-climatic information systems (ACIS). Dialogues between will the met-office and extension services translating locally relevant weather forecasts and agricultural information into format(s) and language(s) that all farmers understand, validate, and use to make informed proactive decisions about farm management. Next-users have access to and are able to communicate effectively agro-climatic information. Project farmers will have a logbook/plan for reducing crop failures compared to a pre-intervention baseline. Changes in weather-related costs and yield stability are monitored. Local government bodies acknowledge the benefits of better preparedness and planning resulting in updated policy interventions for ACIS. Donor, partners and Civil Society Organisations are willing to outscale ACIS.

Annual progress towards outcome (end of 2016*): By 2016 some initial lessons learned from Vietnam have helped informing the project activities in Laos and Cambodia. Local partners are trained and training packages tested. The ACIS is refined in Vietnam and initial evaluations of ACIS through M&E of participatory scenario planning. Through promotional activities engaging media and training of local governmental and non-governmental partners, interest is generated from other locations and organisations.

Annual progress towards project outcome in the current reporting cycle (2016*): The national-provincial met-office training is followed-up with mentor-support and handbooks, and works thanks to devoted individuals, who are motivated to experiment with forecast methodologies. This has overcome some issues with understaffed public institutions or when project activities are seen as additional work. Local stakeholders were for the first time involved in seasonal planning, and see the need for this new cross-sectoral interaction. In 2016, 10 participatory advisories were distributed reaching at least 3500 households. Gaining lessons learned from setting up the project at village level in Vietnam helped starting up the process in Laos and Cambodia, including refining research and process documentation. As the project has evolved, M&E and research protocols are refined and more efficiently linked.
How communication and engagement activities have contributed to achieving your Project outcomes:* The provincial seasonal forecast - planning meetings were the first time that met-office and extension were sitting together, in addition with farmer representatives, led to more understandable and timely forecast indicators and agriculture advise. Our direct operations at village level enables us to test and develop different ways to (i) modify agricultural advice for local needs and (ii) disseminating those (e.g. bulletins, loud speaker messages, information boards, PSP-meetings). In 2017 alternatives are explored in three countries. External interest in the project is evident in the bilateral funding and interests expressed from donors and other organisations such as UNDP and FAO.
Evidence documents of progress towards outcomes:* https://marlo.cgiar.org/data/ccafs/projects//48/projectOutcome/MARLO-reporting%20for2016summary.docx

Annual progress towards outcome (end of 2015): By 2015 the project is established in Vietnam and preparations made for Laos and Cambodia. This phased approach enables us an adaptive learning process that also reflects on lessons learned for outscaling. Research protocol and M&E plans are informed by needs assessments and baseline surveys, to ensure relevant research, policy and capacity gaps are raised that inform the testing and adoption of farmer-relevant, locally appropriate and equitable agroclimatic services. By investing in multi-faceted capacity development of local partners (ToT) we gain lessons learned among agroecological zones. By having national meteorological services mentor provincial colleagues, we test forms under which agroclimatic-zone mapping and seasonal advisories can be decentralised to more user-relevant scale. This will inform the processes for institutionalisation of ACIS. The local agrometeorological staff and farmer groups are benefiting from mutual learning opportunities. Extension workers value WEM farmer knowledge and practices. Farmers are beginning to reflect on the forecast and their current adaptation strategies through managing on-farm met stations, Farmer Learning Networks (FLN) and the first Participatory Scenario Planning (PSP) meeting. The Women Champions are capacitated and confident to represent FLN in the PSP. Stakeholder consultations create interest and buy-in from various stakeholders.

Annual progress towards outcome (end of 2017): Preliminary cost-and-benefits of ACIS and adaptation options are available and providing evidence for investment models, project proposals and policy recommendations. Media campaigns in Laos and Cambodia generate interest from regional donors and NGOs and coordinated activities within CCAFS. Training packages are available for wider outscaling.

Annual progress towards outcome (end of 2018): By the end of the project (2018) ACIS, or parts of ACIS, has the capacity to reach 200000 farmers in the project sites and provinces. Primary target for outscaling is neighbouring communes and provinces. Outscaling will be facilitated through local partners, capacity development and materials, expanded policy dialogues and inclusive investment models.

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:* The "ACIS-model" will be more diverse and context-specific than we expected, in particular as the "gender issues" and opportunities to integrate capacity-building for farmer champions/extension, and policy processes vary considerably. Testing ACIS in the different contexts (implemented in research/CSV/development settings, in 3 countries, ethnic diversity etc) however, should result in a range of ACIS-business models. The traditional scaling strategies top-down or bottom-up will need to be refined as many bottlenecks as well as potential leverages are mid-ways (typically province level).

4.2 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: 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: 5

Cumulative target to date: 7

Target narrative: Evidence-based policy recommendations are internalised by national and subnational government units who are willing to co-invest in upscaling. The model for outscaling and upscaling that we develop will build on local resources and identify integrated business models. Of the potential users, at least 2 new initiatives can be created. At the end of the project, we will first capitalise on neighbouring provinces and NGO networks for outscaling more widely in the region.

The expected annual gender and social inclusion contribution to this CCAFS outcome: Participatory planning and implementation of climate-related plans by W&EM farmers are regarded as a priority by authorities in the target areas. W&EM farmers are able to validate, and use translated weather forecasts to make informed, proactive decisions about farm management.

2015

Target value: 0

Cumulative target to date: 0

Target narrative: In the 2 project sites in Vietnam, local boundary partners will be trained on agroclimatic zoning begin to deliver project outputs but also to be able to outscale in other districts in the province, participatory methodologies to engage farmers, in particular women to set up the Farmer Learning Networks, developing and using the climate advisory. The M&E and documentation plans as well as scaling strategy will be designed carefully to follw up on training needs and progress indicators, including enabling partners to conduct ToTs for outscaling. There is potential for buy-in from several partners so that initiatives that include the whole or parts of ACIS can reach >50k farmers in Ha Tinh and Dien Bien provinces in 2016.

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

2016

Target value: 2

Cumulative target to date: 2

Target achieved: 2.0

Target narrative: Second year project starts being implemented on the ground in Vietnam,Laos and Cambodia. Local boundary partners are gaining experience in using parts of ACIS. The initial results create interest from media and other projects. Representatives from neighbouring villages and communes will be invited to the project sites. We expect that ACIS is implemented in at least two other non-CCAFS sites CARE & ICRAF sites. We seek funding from donors and/or collaboration with organisations for outscaling.

Narrative for your achieved targets, including evidence: ACIS as part of CCAFS/CSV-projects generated interest from national and local TV (e.g. https://youtu.be/cQxBfutM7W8 and https://youtu.be/cQxBfutM7W8). Preliminary PSP-results suggest higher rice yields in project vs control villages, and avoided crop failures - partly because of adjusted farming calendar and village meteorological stations) in 2016. Seasonal agroadvisories are partly being introduced in neighbouring villages. By 2016 two bilateral projects were funded (Cambodia, Laos = reported above). Project implemented in 24 villages Vietnam, 15 villages in Cambodia in 2016, setting up for 21 villages in Laos (2017). Ongoing dialogues with 4 boundary partners for scaling out in 2017 in Vietnam and Laos.

Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Language, gender, and ownership of mobile phones restricts the access to ACI among certain ethnic and lower-income groups. Context-specific variations are tested: PSPs developed by ethnic women, and mixed women and men-groups. Farmer Learning Networks have 55% women (n=91 in VN), with full access to training and agroadvisories, these advisories reach ~3600 households. Our social learning and baseline studies showed that many women prefer to talk/ask women (no preference for men), by targeting women-groups +gender-awareness training we expect their chances increase to access and influence on agroadvisories. By encouraging women's participation whenever possible, 8/15 training-events had >50% women participants.

The expected annual gender and social inclusion contribution to this CCAFS outcome: W&EM farmers are given equal opportunities to participate. Special considerations are take to ensure that W&EM can contribute their specific needs into the formulation of ACIS

Indicator #2: Increase in research-informed demand-driven investments in climate services for agriculture and food security decision-making (millions)

2019
Target value: 5 **Cumulative target to date:** 7 **Target narrative:** With several investment models for demand-driven agro-climate information services tested and evaluated, other practitioners appreciate the methodology and donors invest resulting in outscaling and/or upscaling. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Ensured that W&EM farmers's use and needs of ACIS are taken into account in out- and upscaled versions of ACIS, and the role of equitable and actionable ACIS is communicated

2015
Target value: 0 **Cumulative target to date:** 0 **Target narrative:** Concept notes and proposal development for leverage and separate funding submitted by CARE and ICRAF **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 2
Cumulative target to date: 2
Target achieved: 0.66
Target narrative: Preliminary evidence generated for investment models for out- and upscaling are being developed and consulted with donors, NGOs and CG-partners
Narrative for your achieved targets, including evidence: Two bilateral projects for Cambodia and Laos (in total 659.563 USD) directly targeting gender and ethnic minority groups secured by CARE. Evidence generated, investment models for modified versions of ACIS are being developed, concrete dialogues with at 3 boundary partners for scaling in 2017, one proposal submitted.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: We are testing variations. Both language and ownership of mobile phones restricts the access to ACI for certain ethnic and lower-income groups. In Dien Bien the PSP is developed by ethnic women while in Ha Tinh the groups have both women and men mixed. Farmer Learning Networks with full access to training and agroadvisories have 55% women (n=91 in VN), these advisories reach ~3600 households. Our social learning and baseline studies showed that women prefer to talk/ask women (no preference for men), hence targeting women at the first level likely increases their chances of having access to and influence agroadvisories.
The expected annual gender and social inclusion contribution to this CCAFS outcome: Specific needs of W&EM into the formulation of ACIS (e.g. content, language, format) identified and tested.

Major Output groups:

- F4 (before F2 - James): 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

- F4 (before F2 - James): New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed

- F4 (before F2 - James): Weather related Insurance products are designed, tested, and brought to scale with implementing partners

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways:
Components of ACIS are used by national institutions as decision support to identify locally appropriate CSA-options. The research gives evidence for collaboration among civil society-public-private institutions to reach wider impact among end users and their support network. Rigorous and participatory M&E allows next-users to monitor and evaluate the cost, benefits, effectiveness and contribution to women's empowerment. Regional synthesis of the value of ACIS presents evidence for policy and CSA-interventions. Interaction sought through CCAFS, RIMES and other regional forums and donors and private agri-businesses.

Collaborating with other CRPs

Forests, Trees and Agroforestry
Description of collaboration: Cross-site exchange, shared learning, demonstration and potential sites for outscaling and testing

4.4 Case Studies

Case Study #95

Title: Donors and NGOs acknowledge the potential of R4D on gender in agroclimate information

Year: 2016

Project(s): P48

Outcome Statement: Despite early stages of implementation and uncertainty in CCAFS-funding, Fondation Ensemle approved a bilateral grant in 2016 to support the work in Cambodia. This was possible through a rigorous 3-country baseline research that highlighted the need and potentials for R4D to address certain gender & social inclusion inequalities through improved agroclimate information. The project-design is flexible both horisontally and vertically, to be easily adapted to different contexts. Recognising the role of development-NGOs, CARE became a CCAFS-partner for Phase2.

Research Outputs: Scoping studies and Project proposal for P48 and Project Information sheet Baseline studies in Vietnam (Deliverable 2015), Cambodia (see deliverable 2016) and Laos. A synthesis of the three baselines is in preparation (Deliverable in 2017). Research protocol for ACIS (under refinement as projects are being implemented in Cambodia and Laos, draft available on request)

Research Partners: CARE Cambodia : work with the Ministry of Water Resources and Meteorology (MoWRAM) and local partners (CEDAC) to implement the project and facilitate training, with technical backstopping from ICRAF and CARE Vietnam as required ICRAF Vietnam : contributes to research, documentation and support, making connection with other CCAFS-projects/partners and CSVs. CARE Denmark : resource mobilisation and communicating findings to donor networks

Activities: The outcome is the result of research-and-development collaboration, leading to strong evidence for the needs for agroclimate information and potential knowledge/capacity gaps as well technical limitations. The start-up in Vietnam provided some show-cases. This particular funding was possible through CARE Denmark's active interaction with donors based in Europe.

Non-Research Partneres: Cambodian Centre for Study and Development in Agriculture (CEDAC) is the main partner for implementation on the ground in ACIS and many other projects in Cambodia

Output Users: The outputs ensured bilateral funding in 2016 (and CARE Laos in 2015). Both CARE and ICRAF's active contributions ensures that ACIS-outputs reach policy consultations and a wider audience (extension, NGOs, Monsoon Forum, ASEAN-CRN, UNDP, FAO, IFAD). Our combined experiences of research-development-collaboration opens up for better targeted communication to specific usergroups.

Evidence Outcome: Direct evidence in approved funding. from Fondation. We observe new invitations to (1) consultation meetings and information-sharing events regarding ACI e.g. FAO/GACSA Webinar and Compendium http://www.fao.org/gacsa/webinars/en/; (2) invitations to join project proposals with ACI-components, e.g. with UNWomen and UNDP.

Output Used: Research outputs are constantly updated and used to demonstrate the need for ACIS in socially, environmentally and economically exposed areas at networking and presentations at donor forums (events and bilateral meetings), in policy dialogues.

References Case: Coulier M & Wilderspin J. 2016. Baseline Study. Findings and recommendations for ACIS project Cambodia. File uploaded below.

Primary 2019 outcome indicator(s):

● 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

Link between outcome story and and the FP Outcome(s): <Not Defined>

Annex uploaded:
https://marlo.cgiar.org/data/ccafs/projects//48/caseStudy/7.%20ACIS%20project%20-%20Baseline%20report%20Cambodia%20(final).pdf

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
F4 (before F2 - James): 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:** Understanding and clear evidence-based recommendations on equitable agro-advisories and climate information for the region is expected to help policymakers see what type of investments they need **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** Local weather agencies are aware of and do address various needs for agroclimate information
F4 (before F2 - James): 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:** Extension and agrometeorologists have the capacity to provide and scale out equitable ACIS **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F4 (before F2 - James): Weather related Insurance products are designed, tested, and brought to scale with implementing partners **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

Major Output groups - 2016

F4 (before F2 - James): 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: Agroclimate handbooks tested. Monitoring farmers use of forecasts and seasonal action/adaptation plans and deviations between weather forecast, farmer-managed met station and local meteorological observations starts to inform local agriculture advisors. Farmers self-evaluation tools are tested.

Brief summary of your actual 2016 contribution towards the selected MOG: Agroclimate handbooks (in Vietnamese) are tested on local partners (complete in 2017). Baseline information collected on use of village meteorological station, to be compared at end of project. Village met-stations proven useful, as enabling village leaders to monitor cold spells and flooding in 2016 and take action.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Distributed information material is tested on W&EM and male farmers before disseminated W&EM farmers roles for disseminating and leading farmer learning networked monitored Capacity building to raise awareness of W&EM among extension/agricultural advisors

Summary of the gender and social inclusion dimension of the 2016 outputs: 3 training on gender mainstreaming for FLN-farmers and project partners including government staff. In Cambodia 500 women trained on agriculture techniques, in VN 700 women members of saving groups access weather forecast/advisory. Gendered decision making monitored (baseline study), support to promoted women leadership in mixed groups.

F4 (before F2 - James): 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: The first downscaled seasonal scenarios with agroadvisories distributed

Brief summary of your actual 2016 contribution towards the selected MOG: Since the project was designed we are testing the potential to use online weather forecasts available in local language as additional information sources for seasonal and updated forecasts. If forecast skills are acceptable, this opens up possibility for extension & farmers to directly use them and updates PSPs.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: W&EM farmer Champions are trained on facilitating farmer learning groups Participation monitored to ensure W&EM participation

Summary of the gender and social inclusion dimension of the 2016 outputs: By end of 2016, 6 FLNs established (65W/56M) in VN and Cambodia (>6 ethnic groups represented). These members have direct access to all training on gender, agroadvisories. Training on gender mainstreaming for FLN-farmers and project partners including government staff. Gender-share on all trainings 50%+/-10%.

F4 (before F2 - James): Weather related Insurance products are designed, tested, and brought to scale with implementing partners

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

Brief summary of your actual 2016 contribution towards the selected MOG: This project doesn't have an insurance component

Brief`2016 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 2016 outputs: This project doesn't have an insurance component

Major Output groups - 2015

F4 (before F2 - James): 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: Agroclimatic handbook and methods for downscaled agroclimate zone maps are starting to be derived (these do not exist) Local knowledge is integrated with scientific knowledge in handboks

Brief summary of your actual 2015 contribution towards the selected MOG: Vietnam: Agroclimate zones and agroclimatic handbook with integrated local knowledge, are being developed and piloted both provinces.

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: W&EM farmers needs and uses of agroclimate information,content and formats included in baselines and gender action plan

Summary of the gender and social inclusion dimension of the 2015 outputs: 597 women and men farmers' needs and use of agroclimate information, preferred formats and contents are covered in the baseline study in two provinces.

F4 (before F2 - James): 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: First assessments of climate-yield impacts National met-office staff begin to mentor province partners

Brief summary of your actual 2015 contribution towards the selected MOG: Climate-yield impacts based on statistical data. Mentorship between national and province meteorological officers in place and functioning.

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: nothing this year due to delayed start Gender included in baseline survey

Summary of the gender and social inclusion dimension of the 2015 outputs: The baseline survey highlighted where it is relevant and less relevant to gender-differentiate agroclimate information interventions.

F4 (before F2 - James): Weather related Insurance products are designed, tested, and brought to scale with implementing partners

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: Not relevant for this project

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

Summary of the gender and social inclusion dimension of the 2015 outputs: Not relevant for this project

Major Output groups - 2014

F4 (before F2 - James): Weather related Insurance products are designed, tested, and brought to scale with implementing partners

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

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

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

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

F4 (before F2 - James): 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: <Not Defined>

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

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

F4 (before F2 - James): 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`2014 plan of the gender and social inclusion dimension of the expected annual output: <Not Defined>

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

5.2 Deliverables

D2722 - Baseline Cambodia

Main Information

Type: Reports and other publications
Subtype: Research workshop report
Status: Complete
Year of expected completion: 2016
New expected year: <Not Defined>

Cross-cutting dimension:
- Gender
- Capacity Development

Gender level(s):
- Collection of sex-disaggregated data
- Development of innovations/ interventions/ policies with explicit gender targeting

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: No
Open access restriction: Intellectual Property Rights (confidential information)
License adopted: No

Deliverable Metadata

Disseminated title: Baseline study Findings and recommendations (Cambodia)
Description / Abstract: Baseline study for Cambodia in project and control villages.
Publication / Creation date: 2016-11-01
Language: English
Country: Cambodia
Keywords: <Not Defined>
Citation: Coulier M & Wilderspin J. 2016. Baseline study. Findings and recommendations. ACIS Cambodia. (internal report) CARE Cambodia and World Agroforestry Centre (ICRAF). 47pp.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:
- Coulier - Miguel
- Wilderspin - James

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//48/deliverableDataSharing/7.%20ACIS%20project%20-%20Baseline%20report%20Cambodia%20(final).pdf

Partners contributing to this deliverable:

Institution	Partner	Type
CARE	Noorlander, Jan <Jan.Noorlander@careint.org>	Responsible

D2482 - Blog: The last drop is what makes the cup run over

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://blog.worldagroforestry.org/index.php/2016/12/05/last-drop-makes-cup-run/

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: The last drop is what makes the cup run over

Description / Abstract: Floods hit Central Viet Nam: what can we learn? Researchers in the climate-smart village program are working with farmers to protect them and their farms from extreme weather.

Publication / Creation date: 2016-12-01

Language: English

Country: Vietnam

Keywords: <Not Defined>

Citation: Le TT. 2016. The last drop is what makes the cup run over. World Agroforestry Centre. Blog http://blog.worldagroforestry.org/index.php/2016/12/05/last-drop-makes-cup-run/

Handle: http://blog.worldagroforestry.org/index.php/2016/12/05/last-drop-makes-cup-run/

DOI: <Not Defined>

Creator / Authors:

- Le - Thi Tam

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2485 - Collaboration with local partners in extension

Main Information

Type: Articles and Books

Subtype: Book chapter (non-peer reviewed)

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://www.fao.org/3/a-bl361e.pdf

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Farmers' organizations and CSA: a case study from Viet Nam

Description / Abstract: The Compendium provides examples of more than 20 different approaches of how agricultural extension can support climate-smart agriculture, with contributions from seventeen institutions and over 30 contributors worldwide. This chapter describes the close collaboration with local partners Farmers' Union in the implementation of CSA and ACIS.

Publication / Creation date: 2016-06-01

Language: English

Country: Vietnam

Keywords: <Not Defined>

Citation: Simelton E. 2016. Farmers' organizations and CSA: a case study from Viet Nam. Chapter 3.5. In: Sala S, Rossi F & David S (eds) ?Supporting agricultural extension towards Climate-Smart Agriculture. An overview of existing tools?. GACSA Compendium climate smart agriculture & extension

Handle: http://www.fao.org/3/a-bl361e.pdf

DOI: <Not Defined>

Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Publication Metadata

Volume:

Issue:

Pages:

Journal/Publisher name: FAO/GACSA

Indicators for journal articles: <Not Defined>
Publication acknowledge: Yes
Flagships contribution: ● CCAFS - F2 (BEFORE F1 - ANDY)

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible

D2486 - Collaboration with local partners

Main Information

Type: Outreach products

Subtype: Multimedia

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: https://www.youtube.com/playlist?list=PLzp5NgJ2-dK6DqAa-irbkbwPvMQaQ2NTn

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Agents of change in climate-smart villages

Description / Abstract: GACSA Knowledge Action Group has organised to attend two webinars in May 2016.The purpose of the webinars is to share the knowledge gained over the last year, developing and testing climate-smart techniques in various contexts. This video is one of 4 videod of the webinar ''Promoting Climate-Smart Agriculture Through Extension: An Overview of Existing Tools and Services'' - describing the collaboration with Farmers' Union

Publication / Creation date: 2016-05-01

Language: English

Country: Vietnam

Keywords: <Not Defined>

Citation: Simelton E. 2016. Agents of change in climate-smart villages. In GACSA Webinar series of the Knowledge Action Group. Webinar 1- ''Promoting Climate-Smart Agriculture Through Extension: An Overview of Existing Tools and Services''. May 5 2016.

Handle: https://www.youtube.com/playlist?list=PLzp5NgJ2-dK6DqAa-irbkbwPvMQaQ2NTn

DOI: <Not Defined>

Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible

D2443 - Blog: Building participatory climate scenarios workshop

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://hoinongdanhatinh.vn/vi/news/Tin-hoat-dong/Hoi-thao-xay-dung-kich-ban-khi-hau-co-su-tham-gia-2159/

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Hoi thao xay dung kick ban khi hau co su tham gia

Description / Abstract: Blog describing the first participatory scenario planning organised in Ha Tinh province for project partners, including representation of national and province meteorologist, agriculture extension, leaders and farmers. Posted on Farmer Union's website

Publication / Creation date: 2016-03-01

Language: Vietnamese

Country: Vietnam

Keywords: Participatory Scenario Planning

Citation: Le VH and Le DH. 2016. Hoi thao xay dung kick ban khi hau co su tham gia. Hoi Nong Dan Ha Tinh. http://hoinongdanhatinh.vn/vi/news/Tin-hoat-dong/Hoi-thao-xay-dung-kich-ban-khi-hau-co-su-tham-gia-2159/

Handle: http://hoinongdanhatinh.vn/vi/news/Tin-hoat-dong/Hoi-thao-xay-dung-kich-ban-khi-hau-co-su-tham-gia-2159/

DOI: <Not Defined>

Creator / Authors:

- Le - Van Hai

Partners contributing to this deliverable:

Institution	Partner	Type

FU - Farmers' Union Ha Tinh	Le, Hoa Dinh <dinhhoafuht@gmail.com>	Responsible

D2444 - Blog: Better weather information helps save animals during cold spells

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://blog.worldagroforestry.org/index.php/2016/03/09/better-weather-information-helps-save-animals-during-cold-spells/

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Better weather information helps save animals during cold spells
Description / Abstract: Blog on the role of farmer-managed village level automatic weather stations during the cold spells, for village leaders to monitor temperatures and take precautionary action. No animals died in the villages with met-stations.
Publication / Creation date: 2016-03-01
Language: English
Country: Vietnam
Keywords: extreme weather events, cold spell, AWS
Citation: Simelton E. 2016. Better weather information helps save animals during cold spells. World Agroforestry Centre. Blog: http://blog.worldagroforestry.org/index.php/2016/03/09/better-weather-information-helps-save-animals-during-cold-spells/
Handle: http://blog.worldagroforestry.org/index.php/2016/03/09/better-weather-information-helps-save-animals-during-cold-spells/
DOI: <Not Defined>
Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Partners contributing to this deliverable:

Institution	Partner	Type

ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible

D2445 - Blog: First time meteorologist, extension and farmers sit together to make seasonal plan

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://blog.worldagroforestry.org/index.php/2016/04/26/viet-nam-learning-the-importance-of-weather-forecasts-with-agricultural-advice/

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Vietnam learning the importance of weather forecasts with agricultural advice

Description / Abstract: For the first time, farmers, meteorologists and government agricultural planners in Ha Tinh, Viet Nam are working together to provide locally-specific weather forecasts and accompanying agricultural advice in a bid to help farmers adapt more rapidly to changes in climate and weather.

Publication / Creation date: 2016-04-01

Language: English

Country: Vietnam

Keywords: <Not Defined>

Citation: Simelton E. 2016. Vietnam learning the importance of weather forecasts with agricultural advice. World Agroforestry Centre. Blog http://blog.worldagroforestry.org/index.php/2016/04/26/viet-nam-learning-the-importance-of-weather-forecasts-with-agricultural-advice/

Handle: http://blog.worldagroforestry.org/index.php/2016/04/26/viet-nam-learning-the-importance-of-weather-forecasts-with-agricultural-advice/

DOI: <Not Defined>

Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Partners contributing to this deliverable:

Institution	Partner	Type

ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible

D398 - Research protocol for developing ACIS including data analysis (living document)

Main Information

Type: Outreach products

Subtype: Factsheet, Project Note

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Capacity Development

Gender level(s):

- Monitoring/impact assessment of gender outcomes of research/innovations/interventions/polices
- Diagnostics/analysis to understand gender issues

Deliverable dissemination

Is this deliverable already disseminated: No

Open access: Yes

License adopted: No

Deliverable Metadata

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

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible
CARE	Madsen, Erik Junge<emadsen@care.dk>	Other

D2143 - Assessment of variations between weather observations and forecasts sources (MSc thesis)

Main Information

Type: Reports and other publications

Subtype: Thesis

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: No

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: A statistical assessment of variations between weather observations and forecast sources available to farmers in the village of My Loi, Vietnam, to facilitate climate-smart agriculture interventions

Description / Abstract: Agricultural production is heavily influenced by changes in weather conditions and climate. In order to protect agriculture against the impacts of climate change, purposeful farm level adaptation is necessary to protect farmers' livelihoods. In order for specific adaptation interventions to take place in the form of climate-smart agriculture, accurate and trustworthy weather forecasts and climate information must be provided to farmers. To do that, it is necessary to improve the current skill and accuracy of forecasts. This research uses My Loi climate-smart village in the K? Anh district of the Hà T?nh province in North Central Vietnam. My Loi CSV has a history of extreme weather events and also faces harsh climatic conditions, which lead to water and temperature stresses, flooding and droughts. Statistical tests were used to assess the accuracy of three web-based forecast sources including Windyty, AccuWeather and NCHMF. The forecasts of rainfall, mean, maximum and minimum temperature are the weather variables evaluated in this study. The statistical tests show that no single source is best at predicting the forecasts of all the weather variables assessed at the various lead times. AccuWeather produced more accurate temperature forecasts compared to Windyty, whereas Windyty displayed more accurate rainfall forecasts. Minimum temperature forecasts on NCHMF were more reliable compared to forecasts of maximum temperature. Therefore, farmers are advised to use a combination of weather forecast sources to inform agricultural decision-making.

Publication / Creation date: 2016-08-01

Language: English

Country: UK

Keywords: <Not Defined>

Citation: Roy A. 2016. A statistical assessment of variations between weather observations and

forecast sources available to farmers in the village of My Loi, Vietnam, to facilitate climate-smart agriculture interventions. MSc Thesis SOEE5020M. School of Earth and Environment, University of Leeds.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:
● Roy - Antika

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//48/deliverableDataSharing/RoyMasters%20Dissertation_200623806.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Simelton, Elisabeth <e.simelton@cgiar.org>	Responsible

5.3 Project Highlights

No project highlights added

6. Activities

A114 - CAP - Action-oriented capacity strengthening (farmers, institutional, partners)

Description: Capacity needs assessment and phased action plan developed,using diverse capacity strengthening approaches. Likely topics for public institutional partners: agroclimatic zoning, processing and using agroclimate information for agroadvisories, gender and ICT skills; for local CSO-partners: technical topics, facilitation and community engagement skills including gender, ToT for farmers on agroclimate information and planning, women?s empowerment and household economic management. To encourage informed decision-making and action on livelihood planning, the trainings are complemented by behavioral change initiatives. Particular attention will be paid to promoting women's empowerment, positive attitude towards ethnic minorities and engaging-with-men strategies. A training package is developed, tested and refined for wider dissemination and replication.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: CARE Madsen, Erik Junge <emadsen@care.dk>
Status: On-going

Overall activity or progress made during this cycle: Vietnam: ToT and a number of tailormade training events and participatory workshops were organised, including I. preparedness for storm & flood, and cold spell; II. agro-climate information and preparing/interpreting seasonal bulletins; III. Gender mainstreaming for technical task force and farmer champions/networks; dialogues with men. Training manuals and leaflets are being developed/adopted. (see summary information attached to Project Outcomes) Cambodia: ToT on gender mainstreaming for 28 farmers and 17 government staff (50%women)

Deliverables in this activity:

- D318: Needs-based action-oriented capacity development program providing qualitative and quantitative evidence on ACIS adoption
- D321: Functional farmer learning networks ensuring participatory and equitable ACIS
- D2116: Needs and approaches for gendered and socially inclusive agroclimate information in 3 countries (baseline synthesis)
- D2443: Blog: Building participatory climate scenarios workshop

A116 - ACZ - Agro-Climate Advisories for each Agro-Climatic Zone

Description: The Agro-Climate Information System (ACIS) includes activities that can be subdivided into agro-advisories within institutional systems (vertical operations) and Farmer Learning Networks (FLN, horizontal operations). Activities for developing agro-climatic advisories includes testing four initial steps: (1) Updating or setting up agro-climatic zones (ACZ) map. (2) National met-office staff mentors provincial staff to ground-truth the ACZ-map, developing and linking seasonal weather forecasts with agro-climatic information. Alternative solutions to distribute forecasts will be developed depending on available resources. (3) Forms for participatory FLN and Scenario Planning (PSP) are tested before and after each season, fostering vertical and horizontal co-learning opportunities. (4) Various user-relevant formats and channels to communicate the agroclimate advisory are developed, tested and distributed in collaboration between farmer groups and local agricultural extension services. The steps are developed, monitored and refined in one ACZ then outscaled.

Start date: May 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Simelton, Elisabeth <e.simelton@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: All steps (1-4) implemented in Vietnam. ACZ-maps and seasonal forecasts developed at district scale enables the scaling out of forecast activities (2 districts). Evidence of vertical and horizontal learning through province seasonal forecast meetings. Lessons learned for scaling locally, and in particular for prioritising this part of the project in other countries, such as that the ACZ-maps are useful guides for agriculture planners, but not proven to be a requirement for "downscaling seasonal forecasts", which is a helpful realisation for project implementing in places with less climatic data available (especially Cambodia). MSc study ocomparing online forecasts and village met station shows big differences. Windyty is pedagogic for training extension and farmers (realtime visualisation allows synoptic forecasting).

Deliverables in this activity:

- D320: Tried and tested agro-climate advisory products
- D2115: InfoBrief: Which forecast represents the local weather best?
- D2137: Blogs on project activities and impacts
- D2143: Assessment of variations between weather observations and forecasts sources (MSc thesis)
- D2444: Blog: Better weather information helps save animals during cold spells
- D2445: Blog: First time meteorologist, extension and farmers sit together to make seasonal plan

A117 - FLN - Farmer Learning Networks

Description: Farmer Learning Networks (FLN) is the horizontal community-driven axis of the ACIS (1) Two types of meteorological observation equipment are installed: (i) Automatic weather stations (AWS) with loggers. (ii) Low cost farmer-designed weather monitoring kits are installed for farmer-monitoring purposes. (2) A number of villages are selected to represent an agroadvisory for ACZ/crops (FLNs may take different forms in the project sites). The village level ensures wider reach of advisory distribution and targeted behavior change initiatives. (3) Women Farmer Champions or Male Gender Champions are selected from each farmer interest group who, to represent the FLN and Participatory Scenario Planning (PSP) meetings and facilitate knowledge exchange within their group. (4) Meeting minutes and farmer logbooks are analysed as evidence for the learning process (KAP). Extension/agricultural advisors and local CSOs support FLNs. (5) Phased approach with FLN (and PSP) is piloted in one village/ACZ, expected to expand to other villages/ACZ.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: CARE Madsen, Erik Junge <emadsen@care.dk>
Status: On-going

Overall activity or progress made during this cycle: (1) Automatic weather stations installed in 2 sites in Vietnam. The village automatic weather stations were worthwhile investment to highlight local deviations from forecasts and monitoring during extreme weather events (while also providing data for the project) - also proved that farmers can manage and understand a data-logger. Cambodia also have farmer-managed rain gauges. (2) In Vietnam agroadvisories are developed in two steps (i) province level with met-officer, extension and farmer representative, (ii) village level in PSPs. A similar approach will initially be tested in Cambodia and Laos. (3) PSP-leaders (women and men) have been trained in gender awareness. (4) Farmer and/or facilitator logbooks, and the agroadvisories are used to document the PSP meetings. (5) Scaling out begins in 2017 in Vietnam. Vietnam: >1380 households in 24 villages have access to agroadvisory bulletines, 3 FLN (50 W/31M); Cambodia: 15 villages, 3 FLN (15W/15M) Laos: 21 villages

Deliverables in this activity:

- D321: Functional farmer learning networks ensuring participatory and equitable ACIS
- D2149: Roles of social learning for the adoption of climate-smart agriculture innovations
- D2444: Blog: Better weather information helps save animals during cold spells

A118 - SCALE - Evidence-based and research-informed policy and advocacy for institutionalized ACIS

Description: Scaling and sustainability strategy and plan - revised regularly based on on-going learning and recommendations. Evidence include quality and use of scientific and farmer-generated local knowledge, cost and benefits, understanding of adaption strategies, impact on agriculture production, contribution to women empowerment and equity, incentives and barriers for ACIS uptake, institutionalization and scaling. Communication and Documentation plan - ensures that project outputs are available in user-relevant formats and channels. Synthesized lessons learned are shared through vertical and horizontal knowledge exchanges at sub-national national and regional levels. Investment strategies are developed to further outscale ACIS nationally and regionally.
Evidence-based policy recommendations are formulated and agreed through policy reviews and iterations of informal and formal policy dialogues mainly at sub-national and national levels. These recommendations have potential to contribute to CSA portfolio (FP2).

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Simelton, Elisabeth <e.simelton@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: As the project gradually is settling in Vietnam, project is gaining progress 2017 will be more for more systematic comparison and documentation for targeted audiences. The most important scaling activity was to take opportunities through active networking, presentations and other collaborations, to routinely promote the potentials of ACI (e.g. FAO, GACSA, IFAD, UNDP, CCAFS invitation to Thailand, ASEAN-CRN). While we continue to actively contribute to international and national policy consultations, our strategy for policy dialogue will focus more on developing the evidence for province (mid-level) policymakers to recommend policy. Based propositions in such dialogues, ACIS is included in the CSA Portfolio (FP2). Two bilateral projects (2015-16) for helps scaling from start in Cambodia and Laos.

Deliverables in this activity:

- D322: Recommendations for developing evidence and knowledge products on effectiveness and impact of equitable ACIS
- D2116: Needs and approaches for gendered and socially inclusive agroclimate information in 3 countries (baseline synthesis)
- D2137: Blogs on project activities and impacts

A150 - KGP - Knowledge Generation Platform

Description: The Knowledge Generation Platform involves Scientific knowledge generation - the (i) Research Protocol is a living document stating research methodology and major research, institutional and capacity gaps. (ii) Policy Research for identifying policy gaps with regards to gender inclusion and ACIS. (iii) Scientific cost and benefit analysis of ACIS compared to Business-As-Usual with recommendations and identification of co-investment needs for up/outscaling. Under M&E specific tasks are: (i) M&E and Sustainability plans will monitoring project activities on Women's Empowerment Agriculture Index and a progress tracker on Gender & Equity integration; (ii) Baseline surveys: on M&E indicators and existing ACIS with pre-KAP institutional and farm assessments (capacity gaps); (iii) farmers-self monitoring and evaluation of their use of ACIS through farmer logbooks.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Simelton, Elisabeth <e.simelton@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: Baseline surveys completed in 3 countries (1335 households) and will be turned into a synthesis. Cost-benefit and Policy Research started in late 2016. Research protocol (a living document) and M& E-indicators (including Activity Tracking System) will be refined to correspond better, and downsized to be manageable in Cambodia & Laos sites. Different logbook options and formats are tested: PSP-facilitators encourage voluntary farmers, individually or in group, to keep logbook throughout each season. For research documentation we developed a logbook for the PSP-facilitator with Facilitator's guide.

Deliverables in this activity:

- D398: Research protocol for developing ACIS including data analysis (living document)
- D320: Tried and tested agro-climate advisory products

7. Leverages

No leverages added

ICRAF-F2 (before F1 - Andy)-SEA-P55 - Research Project

Submitted on 2017-02-20 at 03:26 (Reporting cycle 2016)

Title: Generating evidence base for upscaling local adaptation through Climate-Smart Agriculture

1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2018	RP SEA	Tan Yen, Bui <y.bui@irri.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2	On-going	ICRAF - World Agroforestry Centre - Kenya	Catacutan, Delia <d.c.catacutan@cgiar.org>

Project is working on

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

Region(s)
SEA: Southeast Asia

Project summary

This research aims to deepen and build upon current knowledge base on undertaking gender-sensitive community-based adaptation (CBA) and local-level CSA upscaling, through participatory action research (PAR) in two sites (Philippines & Vietnam). Social learning methods & participatory approaches will be used to generate knowledge on upscaling approaches. Proof-of-concept sites will also be established as learning platforms for scaling-out CSA & CBA to subnational levels. A "community innovations fund" to expedite CSA scaling-out will be tested. Participatory approaches for facilitating a local adaptation planning process that is guided by science-derived information will also be tested and developed. This project will generate a portfolio of CSA technologies &practices that demonstrate evidences of multi-scalar development outcomes from CSA & CBA. Knowledge products on CSA & CBA upscaling as well as on local adaptation planning will be produced and widely shared to Governments, INGOs, CSOs, and CCAFS Networks.

2. Partners

Partner #1 (Leader)

Institution: ICRAF - World Agroforestry Centre

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Catacutan, Delia <d.c.catacutan@cgiar.org>	Activity 2014-115 *Partner*. Lead implementation in My Loi: building partnerships, planning, stakeholder analysis & institutional mapping, capacity building of farmers& partners. Activity 2014-233 *Partner*. Lead implementation in My Loi: methodological assessment, scaling out, sensitization campaigns, innovation & learning activities, generating portfolio of CSA best practices. Activity 2014-232 *Leader*. Lead implementation in My Loi: technological assessment, adaptation programming, proof-of-concept sites establishment, capacity building on CSA, piloting "CIF". Lead analysis on ecosystems services: both sites. Activity 2014-231 *Leader*. Facilitate PVA & sensitization activities in My Loi. Provide technical guidance: data-generation and analysis of outputs (both sites). Activity 2014-404 *Leader*. Lead implementer.	Los Baños, Philippines
Project Coordinator	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Coordinate project activities.	HQ

Partner #2

Institution: IIRR - International Institute of Rural Reconstruction

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Gonsalves, Julian <juliangonsalves@yahoo.com>	Activity 2014-231 *Partner*. Lead implementation in Guinayangan: PVA & sensitization activities. Activity 2014-232 *Partner*. Lead implementation in Guinayangan: technological assessment, adaptation programming, proof-of-concept sites establishment, capacity building on CSA, piloting "community innovations fund" (CIF). Activity 2014-115 *Leader*. Lead implementation in Guinayangan: building partnership, planning activities, stakeholder analysis & institutional mapping, capacity building of farmers& partners. Lead joint planning activities (both sites). Activity 2014-233 *Leader*. Lead implementation in Guinayangan: methodological assessment, scaling out, sensitisation campaigns, innovation & learning activities, generating portfolio of CSA best practices. Lead knowledge exchange and generation of knowledge products (both sites).	HQ
Project Coordinator	Vidallo, Rene <rene.vidallo@iirr.org>	Coordinate project activities.	HQ

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

Year	Lesson(s)
2016	Sharing of interim outcomes and experiences to targeted development partners such as the Department of Agriculture (DA) proved beneficial to influencing the national program for adaptation and mitigation in agriculture (AMIA). IIRR's involvement in project implementation in AMIA program has also increased significantly & similar activities done in the CSV will most probably be replicated in other localities. IIRR's CSA work in the Philippines in 2017 may also include more partners aside from CCAFS, particularly DA offices engaged in CSA promotion such as the Systems Wide Climate Change Office, Agricultural Training Institute and Bureau of Agricultural Research.

Partnerships overall over the last reporting period:

The partnership in the project has been successfully strengthened between ICRAF, IIRR and multi-level local government, ministries of agriculture (Philippines & Vietnam), national research instituions, social associations and farmers in the project sites from both countries. In Vietnam, local government staff and farmers actively participated in workshops, trainings and study tours and contributed great ideas to the implementation of the project. In the Philippines, sharing of project experiences in Climate-Smart Agriculture (CSA) promotion in Climate-Smart Village (CSV) and interim knowledge products resulted to direct partnership with the Department of Agriculture's Adaptation & Mitigation Initiative in Agriculture program.

3. Locations

This project is not global

Project level	Latitude	Longitude	Name
Climate Smart Village Sites	17.997	106.161	My Loi
District	13.8987	122.4481	Guinayangan, Quezon Province, Philippines

4. Outcomes

4.1 Project Outcomes

Project Outcome statement:
The project expects to reach around 500,000 farmers in the Philippines & Vietnam, of which 40% are women, and influence them on various CSA practices: through engagement in training & extension programs of Government and CSO networks that utilize project-derived proof-of-concept sites on CSA co-benefits & other knowledge products. The project also expects to influence development programming of key national agencies and international organizations to incorporate CSA, community-based adaptation (CBA) and local adaptation planning. Project interventions are expected to be accounted in respective NAMAs of Philippines & Vietnam. This action research project aims to demonstrate strategies to facilitate wide scale sustainable intensification of CSA at the communities through participatory farmer-centered approaches; and methodologies to facilitate various scales of wider promotion of CSA adoption and community-based adaptation from village to sub-national levels, ultimately targeting upscaling to national (for PH) and provincial (for VN) levels.

Annual progress towards outcome (end of 2016*): Local governments (MAO & MPDO in Guinayangan, DDARD in Ky Anh) engaged in identifying opportunities for drawing up climate-smart local agricultural development plans; modalities for process identified. Proof-of-concept sites established & used for CSA & CBA learning/extension programs targeting 44 villages outside research sites. Intermediate outputs (technological assessment, PVA, social learning & scaling up) are used by NARS, international partners, INGO/CSO networks & CCAFS network. Engaged 18 local governments in scaling out activities. Developed scaling up working frameworks (both countries).

Annual progress towards project outcome in the current reporting cycle (2016*): Twelve villages are being developed into proof-of-concept sites where impacts of CSA practices are being generated through testing CSA practices by 16 groups of 255 farmers (PH) and 4 groups of 43 farmers (VN). Scaling out is facilitated through on-site activities featuring farmer-to-farmer learning and sharing; on-site technology-specific training and orientation; field days for widescale CSA promotion. Local government uptake of CSA in local extension program allows CSA promotion to other villages. CSV-experiences have guided implementation of CSA-interventions in 13 other villages in Ivisan. Guinayangan is considered a key learning site for the DA's AMIA program, which defines the country's national program for climate change adaptation in the agricultural sector. Project-derived experience & knowledge products informed the design & implementation of Caritas' typhoon Haiyan recovery program for 4 provinces in Philippines; and has reached ~200 local&international development professionals. On-/off-site farmer-to-farmer learning and CSA-promotion to village and municipal local governments have resulted to the uptake of CSA practices in 21 new villages (Guinayangan,8; Capiz,13). My Loi was included in CCAFS-SEA's Roving Workshop (May 2016) for 19 village leaders and farmers from six CSVs in Vietnam, Laos and Cambodia, aiming to share CSA-techniques and practices to adapt in their own communities. The visit gained interest in CSV/A in TV. The English PVA-report for My Loi is being translated into Vietnamese for local stakeholders. Synthesis-report for all sites in preparation. Scaling up working frameworks have been developed for both countries. The project was invited by Global Alliance for

Climate-Smart Agriculture (GACSA) to share initial results. The International Fund for Agricultural Development (IFAD) and the Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH has turn to us for recommendations on CSA practices and using Community Innovation Fund for implementing CSA. Collaborative arrangement include ICRAF evaluating its project interventions against the CSA criteria and indicators.

How communication and engagement activities have contributed to achieving your Project outcomes:* During the Roving Workshop and through a TV-program that featured the CSV, My Loi-farmers were able to convey the multiple benefits of vermiculture, which resulted in uptake in other CSVs and neighbouring province. Sixteen knowledge-sharing events in Guinyanangan were conducted in 2016. Events targeting the DA specifically provided the opportunity for the CSV to be included as a CSA learning site for the government's national climate change adaptation program for agriculture. Project activities have been featured in local TV shows and published blog articles (links below) have altogether generated 2433 views in social media.

Evidence documents of progress towards outcomes:*

https://marlo.cgiar.org/data/ccafs/projects//55/projectOutcome/Blog%20+%20news%20links.docx

Annual progress towards outcome (end of 2015): Local community-based groups (e.g. farmers, women, youth, faith-based, agri traders/business), local partner CSOs, nearby academic and research institutions, and local media outfits are engaged as project stakeholders. Commodity and theme-based learning groups (e.g. rice farmers, cassava growers, fruit-tree growers, small livestock growers, fishers, agri traders, women, young farmers) organized and capacitated for collective actions. Mapped and analysed existing and locally available climate smart and gender sensitive CSA practices and options in terms of adaptation and mitigation potentials based on identified risks and vulnerabilities, as well as its scalability. Pathways for local adaptation and mitigation in research sites mapped out, implementation plans are formulated. Thematic participatory research & learning sites within the Philippine action research sites established (e.g. agroforestry learning sites, cassava learning sites, low external input rice site, intensive feed garden for livestock sites, etc.) and used to educate local constituency and village local governments (at least 10 nearby villages) on CSA and community-based adaptation. Increased awareness (through widescale IEC campaigns) of local constituencies in research sites on climate change, CSA and community-based adaptation. ? Project implementing team together with direct local project partners capacitated on facilitating CSA and community based adaptation through learning exchanges. sub-national offices of Agriculture ministries (DA Regional Director for PH, CDARD Commune Official for VN) are engaged in drawing up institutional commitments and support to local governments in developing 11 villages as proof-of-concept sites for CSA out/upscaling. Mapped institutions and organizations with potential for engaging as indirect project partners. UN agencies (FAO, IFAD) and other international agencies/partners (IDRC) are informed on the site-based action research.

Annual progress towards outcome (end of 2017): Proof-of-concept sites with scalable models in CSA programming, CBA, &local adaptation planning are established & used as learning venues by local governments, researchers, farmers? networks, and academe. Intermediate outputs & knowledge products documenting evidences of CSA co-benefits in these sites produced and widely shared to farmers networks, NGO partners, &local governments in 60 target villages for outscaling. 54 local governments practicing project-derived modalities for local adaptation planning (practical guide developed). Key national agencies directly engaged in project activities.

Annual progress towards outcome (end of 2018): Project-derived knowledge products widely shared to government, CSO networks through various information sharing and learning platforms. Proof-of-concept sites and knowledge products also used to influence development programming of government, CSOs through policy and program advocacies, training/extension programs to promote CSA, CBA and lodal adaptation planning (target 100 local governments). Knowledge products promoted to and utilized by UN agencies, international organizations. Mature level of experience of 50 local governments in local adaptation planning. NAMA accounting of carbon benefits from

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:* Vietnam and the Philippines have distinct characteristics that influence/shape the theory of change. In Vietnam, the top-down promotion (directives from national government) of CSA could be an effective pathway for scaling up, and farmer-to-farmer knowledge-sharing via TV programs and field visits can be regarded as more of an ad-hoc appraoch. However, sharing of intermediate knowledge products and project-derived experiences through learning events & capacity building activities were effective strategy for immediately leveraging support to CSA promotion. However, there is a need for practical guidance for local stakeholders on how to design & implement CSA programs. This is where actual experience and proof-of-concepts matter, and thus where CSVs are most valuable.

4.2 CCAFS Outcomes

RP SEA Outcome 2019: Local public and private sector stakeholders (service providers, farmer leaders, etc.) are engaged in identifying and meeting farmer priorities, incl. women and marginalized groups, and using CSA knowledge, technologies, and tools to increase their awareness and capacity to advise on evidence- and knowledge-based climate smart technologies.

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

2019
Target value: 100 **Cumulative target to date:** 111 **Target narrative:** Activity 2014-232: 11 villages with mature experience in utilizing proof-of-concept sites as learning venues for outscaling CSA, CBA and local adaptation planning; project-derived knowledge products used in the process. Activity 2014-233:100 sub-national local governments (village to municipal/commune) levels are developing & improving participatory processes & mechanisms to incorporate CSA and community-based adaptation into their regular development programming. 50 of these local governments have mature level of experience in local adaptation planning. 6 national agencies in PH & VN and 3 international organizations are also utilizing project-derived knowledge products in their respective development programming. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** By this time, proof-of-concept sites would have been able to effectively provide ground evidences of co-benefits of specific CSA practices and CBA strategies and its contributions to significantly increase access and control of women to agricultural production assets. These evidences would have been sufficient to facilitate its replication & adaptation in other areas, and knowledge products are available to guide government, women's groups, CSOs and development stakeholders in the process.

2015
Target value: 0 **Cumulative target to date:** 0 **Target narrative:** Activity 2014-232: local governments covering 11 project-covered villages in Vietnam and Philippines would have been engaged and actively participating in developing these areas into proof-of-concept sites for CSA out/upscaling. In the process, sub-national offices of Agriculture ministries (DA Regional Director for PH, C/DDARD Commune / District Official for VN) are engaged in drawing up institutional commitments and support to these local governments. Activity 2014-233: UN agencies (FAO, IFAD) and other international agencies/partners (IDRC & CARE) are informed on the site-based action research. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016

Target value: 11

Cumulative target to date: 11

Target achieved: 11.0

Target narrative: Activity 2014-232: 2 sub-national governments (through MAO & MPDO in Guinayangan and DDARD & DONRE in Ky Anh) engaged in identifying opportunities for drawing up climate smart local agricultural development plans; modalities for process identified. Proof-of-concept sites are established in 11 target villages, which are used (along with intermediate knowledge products) for learning/extension programs on CSA & CBA. Activity 2014-233: 18 villages (PH: 15, VN:3) established as scaling-out areas, where local governments, CSOs, NARS are engaged in on-site learning/extension programs. Intermediate knowledge products are also used to influence 44 more villages.

Narrative for your achieved targets, including evidence: Engagement in government-mandated Local Climate Change Adaptation Planning identified as key strategy for sustaining CSA work at sub-national level. To initiate social learning and scaling, neighboring village-leaders and farmers (9villages) were invited to training and planning events in My Loi (jointly with P48). Technical agro-advisories were co-developed at commune-province level. Twelve villages have been established as CSA proof-of-concept sites in PH. Farmer-to-farmer learning and CSA promotion to village and local governments resulted in uptake of CSA practices in 21 new villages in Guinayangan(8) &Ivisan(13). Local government adopted CSA in its local extension program allowing CSA promotion to 43 other villages.

Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Testing backyard pig production with alternative feed formulation and intensive feed gardening as a climate-smart practice in 3 villages provided additional asset that can immediately be converted to cash in emergency cases. Knowledge of this practice is generated by 88 farmers, of which, 80% are women. Women's participation in knowledge sharing activities is >42%: e.g. orientation, workshops, focus-group discussions and meetings (43%); technology specific training and orientation (42%); and field days for widescale CSA-promotion (52%).

The expected annual gender and social inclusion contribution to this CCAFS outcome: Women groups in the 11 project villages are formed and/or strengthened (through capacity building) and significantly contributing to the establishment of proof-of-concept sites. They are also managing women-specific interventions that provide scalable models for addressing climate-induced gender issues/concerns. They are also actively leading the promotion of women-led CSA practices to 44 villages engaged in CSA extension programs.

RP SEA Outcome 2019: The public sector at various level are coordinating efforts towards supporting project implementation, providing incentives mechanisms/schemes, encouraging private sector participation and developing local adaptation plan to promote widespread adoption and investment on CSA interventions

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

2019
Target value: 100 **Cumulative target to date:** 111 **Target narrative:** Activity 2014-232: 2 sub-national local governments covering the 11 CCAFS project villages have developed and demonstrated institutional capacity for facilitating "community innovations funds" as incentive for wide-scale adoption of best-bet gender sensitive CSA options. Activity 2014-233: around 100 local governments from various levels (village to province) would have been introduced to the experience of the local governments of Guinayangan and Ky Son in facilitating "community innovations funds" as incentive for CSA outscaling. Half of these local governments would also have started adopting this strategy in facilitating community based adaptation among their respective constituents. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Significant experience on

2015
Target value: 0 **Cumulative target to date:** 0 **Target narrative:** Activity 2014-232: The subnational governments covering the 11 action research sites (through the Municipal Agriculture Office & Municipal Planning & Development Office in Guinayangan and CDARD & CDONRE officials in Ky Son commune) would have been introduced and are on board in developing the framework for "community innovations fund **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 11 **Cumulative target to date:** 11 **Target achieved:** 11.0 **Target narrative:** Activity 2014-232: 11 villages (covered by 2 subnational governments, through MAO & MPDO in Guinayangan and DDARD &DONRE in Ky Anh) engaged in developing the modalities for implementing “community innovations fund” as an approach and incentive to CSA and CBA. **Narrative for your achieved targets, including evidence:** VN: Four CIF of $2500 each were established to support implementation of 4 CSA-priorities: Home garden improvement,Intercropping/Mixed farming,Livestock and Forestry. Funds can be used as revolving-funds to individuals/group that meet the criteria for CSA-innovations. $7300 have been channeled through the commune People's Committee (groups are not eligible as bank-account holders), and managed by the group (leader, cashier). PH: The operationalization of CIF as a mechanism for facilitating decentralized farmer-led experimentation and innovation of CSA options is being refined in 8 villages, where 48 farmers are engaged in testing 15 CSA technologies through structured PARs. These farmers conduct PAR using CIF. **Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** The experiences of these women farmers are being documented to influence adoption of such practices by more women farmers and the refinement of the municipal agriculture office’s local extension programs targeting women. In Vietnam, to overcome women's reluctance to take leading roles, CSA- and CIF-groups have at least a deputy female leader. However, men and women participated and benefited from gender-training (P48). **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Women's groups in the 11 target villages have developed SMART action plans to address climate-induced gender issues/concerns. The implementation of which can be covered by

Major Output groups:

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

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways:
Experiences in the CSV in terms of farmer-to-farmer scaling out at local level and upscaling at sub-national to national levels can provide guidance for other CSVs in terms of developing its scaling up programming. The project is also generating experience on methodological processes of facilitating community based adaptation that involves mobilizing learning groups, conducting PARes, on-site learning and knowledge sharing, and improvement of existing local extension systems.

Collaborating with other CRPs

Forests, Trees and Agroforestry
Description of collaboration: Bilateral project mapped to both CCAFS and FTA. Joint trainings and workshops have been organized by both the bilateral project and CCAFS./

4.4 Case Studies

No case studies added

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** - Knowledge products on social learning approaches that utilize proof-of-concept sites in CSA scaling out/up utilized by around 100 sub-national local governments in drawing up their respective local adaptation programming. - Knowledge products are also used by 6 national goernment agencies in improving their extension programs. **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** - Knowledge products that highlight gender components in social learning approaches that facilitate CSA upscaling will be produced.
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** Advocacy work and dialogues with target national agencies would have generated commitment to utilize project derived learnings into their respective extension programs. **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** Advocacy work on gender dimensions to CSA upscaling will target gender the regular gender mainstreaming program of governments (e.g. annual gender budgets for all local governments).
F2 (before F1 - Andy): Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** - Knowledge products documenting evidences of co-benefits from CSA & CBA shared widely to governments, CSO networks, UN agenceies and international organizations. This includes documentation of mature level of experience of around 50 local governments in local adaptation planning. - NAMA accounting of carbon benefits from project. **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** Knowledge products that highlight gender components in social learning approaches that facilitate CSA upscaling will be produced.

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

Brief bullet points of your expected annual 2019 contribution towards the selected MOG: - Knowledge products documenting mature level of experience of local governments in local adaptation planning widely shared to national governments, CSO networks, UN agencies and international organizations. - NAMA accounting of carbon benefits from project.

Brief`2019 plan of the gender and social inclusion dimension of the expected annual output: Knowledge products that highlight gender components in social learning approaches that facilitate CSA upscaling will be produced.

Major Output groups - 2016

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - Proof-of-concept sites as an approach to CSA scaling-out is well-defined and have scalable models on the ground; also with intermediate knowledge products produced and used to influence uptake by local governments.

Brief summary of your actual 2016 contribution towards the selected MOG: Proof-of-concepts of CSA-practices and farmer-to-farmer scaling out approaches are generated in at least 11 villages. Communities-of-practice of specific CSA-options are developed as “impact areas,” which serve as nucleus for outscaling and upscaling of CSA-practices. Sites in both countries receive visitors who want to learn about CSA.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: - Women's groups in the 11 target villages will be engaged in testing specific CSA technologies that facilitate increased access to and greater control of agricultural production assets. - Proof-of-concept sites will have components that demonstrate potent strategies for strengthening women participation in community-based adaptation.

Summary of the gender and social inclusion dimension of the 2016 outputs: The CSA-interventions/farmer-groups reflect the preferences (voting) of women and men. The CSA-groups are inclusive, i.e. represented by household (allows women-men to participate together or individually). We found that women tend to prefer female trainers more than men.

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: By this time, proof-of-concept sites will have demonstrated effective farmer-centered social learning approaches that facilitated CSA and CBA outscaling.

Brief summary of your actual 2016 contribution towards the selected MOG: A master's thesis on social learning has been submitted as a project deliverable(D2144). A working paper, technical brief and an infobrief on social learning are in preparation. A key finding from the thesis suggest that farmers usually obtain first-hand knowledge from trainers, and further hone their skills through farmer-to-farmer exchange.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Social learning approaches anchored on established proof-of-concept sites will have to consider the specific needs of women, specialized capacity building activities targeting women will be conducted to increase their roles in social learning activities.

Summary of the gender and social inclusion dimension of the 2016 outputs: Women preference on CSA options are being addressed through the CIF. From the study on social learning, we will ensure that their specific needs are addressed in subsequent activities.

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - Portfolio of community-based adaptation options utilizing CSA technologies will be tested. - Analysis of co-benefits of this portfolio of CSA technologies will be one of the main components of participatory action researches with local stakeholders.

Brief summary of your actual 2016 contribution towards the selected MOG: The portfolio of CSA-practices is being developed. The "Participatory identification of CSA priorities" is translated to vietnamese, to better promote it as reference or guide in conducting PAR with local stakeholders. Experience in testing a portfolio of 16 CSA-practices and knowledge of its co-benefits are being generated through structured PAR.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: Analysis of co-benefits of CSA portfolio will be gender-differentiated.

Summary of the gender and social inclusion dimension of the 2016 outputs: Gender aspects are monitored, so far however differences are minor. Where relevant, gender is addressed in the CSA-portfolio. On average >40% of participants were women in each knowledge sharing event in 2016. Of the >20 tested CSA-practices women preferred smaller livestock and home garden (easily convertible money, labour-efficient near homestead).

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - Modalities for local adaptation planning will be developed, guided by intermediate knowledge products generated from proof-of-concept sites.

Brief summary of your actual 2016 contribution towards the selected MOG: In Guinyangan, CSA has been incorporated in government-mandated Local Climate Change Adaptation Planning (LLCAP) process. In My Loi, CSA options are documented with regards to performance during extreme-weather-events--this is critically important in providing evidence for local adaptation planning. Initial discussions with Farmers Union and NGO partners are underway.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: - Modalities for local adaptation planning will have to result to meaningful participation of women in the process.

Summary of the gender and social inclusion dimension of the 2016 outputs: One (of few identified) key gender differences is longer workday of women. Timing and location of meetings are consulted in advance to ensure women&men can participate equally. Facilitators intervened to ensure all voices are heard and documented. No significant gender-outcome for LAP yet as the process is still being refined.

Major Output groups - 2015

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

Brief bullet points of your expected annual 2015 contribution towards the selected MOG: Established proof-of-concept sites with observable evidences of co-benefits of CSA and CBA, and social learning approaches are developed and tested.

Brief summary of your actual 2015 contribution towards the selected MOG: 8 impact areas are being developed in total of 15 villages (PH:6; VN:2) . Impact areas working definition: contiguous sites with wide scale practice of specific CSA practices; where a community-of-practice (critical mass) of CSA are found and actively involved in farmer-centered extension (social learning approaches) through common-interest groups

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: Women groups will be organized and/or strengthened. they will be engaged in analysis of gender-differentiated climate vulnerabilities and developing adaptation strategies that promote greater access and control of women to agricultural production assets.

Summary of the gender and social inclusion dimension of the 2015 outputs: Both PH & VN research sites are registering 2 key CSA practices that are most relevant to women members of the community: homegarden improvement and livestock raising. Participation is also highest in community-level activities (training, workshop, field days, media days, demonstrations) concerning these 2 CSA practices.

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

Brief bullet points of your expected annual 2015 contribution towards the selected MOG: Farmer-centered extension and learning programs targeted towards CSA scaling out will be initiated.

Brief summary of your actual 2015 contribution towards the selected MOG: Various information campaigns (forum, awareness days, workshops, field days, competitions) in both sites reached around 1,040 farmers, 700 students and teachers, & 50 key village development planners. PH site also utilized in 2 trainings while VN site for seminar for provincial leaders. Information materials were produced considering local contexts.

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: Extension programs that specifically target women groups will be developed.

Summary of the gender and social inclusion dimension of the 2015 outputs: current SCA specific extension services that directly involve women are on wider promotion of homegardening and small livestock raising.

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

Brief bullet points of your expected annual 2015 contribution towards the selected MOG: - Vulnerability assessments will include analysis of traditional coping mechanisms. - CSA options and CBA strategies will be developed based on identified needs and will be built on existing traditional coping mechanisms.

Brief summary of your actual 2015 contribution towards the selected MOG: 14 Relevant existing (on-site and in nearby localities) CSA technologies/strategies identified as key to increasing adaptive capacities of farmers in research site: homegardening, livestock raising, intercropping, forestry, farm economic, agroforestry, landscape, soil improvement, water harvest & management, weather forecast, coffee intercropping, coastal bioshields, community seed bank, media advocacy, coffee rejuvenation

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: Gender differentiated analysis of vulnerabilities will provide basis for drawing up gender-sensitive adaptation strategies.

Summary of the gender and social inclusion dimension of the 2015 outputs: Both PH & VN research sites are registering 2 key CSA practices that are most relevant to women members of the community: homegarden improvement and livestock raising. Participation is also highest in community-level activities (training, workshop, field days, media days, demonstrations) concerning these 2 CSA practices.

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

Brief bullet points of your expected annual 2015 contribution towards the selected MOG: Proof-of-concept sites establishment will incorporate analysis of its implications to local government processes.

Brief summary of your actual 2015 contribution towards the selected MOG: aside from developing impact sites, proof-of-concept site establishment with direct implication to governance still in frameworks and concept level.

Brief`2015 plan of the gender and social inclusion dimension of the expected annual output: Vulnerability assessments, stakeholder analysis and institutional mapping will provide analysis for drawing up strategies to increase participation of women to local government planning processes.

Summary of the gender and social inclusion dimension of the 2015 outputs: active women participation still at group and community levels and too early for local governance processes. Adaptation strategies with gender dimension however point to small livestock and homegardening as key CSA interventions that can be focus of local government support in the future.

Major Output groups - 2014

F2 (before F1 - Andy): Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

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

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

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

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

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5.2 Deliverables

D2145 - Assessing vulnerability to climate change in cropping systems and potential for climate-smart agriculture (MSc thesis)

Main Information

Type: Reports and other publications
Subtype: Thesis
Status: Complete
Year of expected completion: 2016
New expected year: <Not Defined>
Cross-cutting dimension:
<Not Defined>

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: Assessing vulnerability to climate change in cropping systems and potential for Climate-Smart Agriculture: A case study at Ky Trung commune, Ky Anh distrct, Ha Tinh province
Description / Abstract: Ky Trung commune location on top of Ky Anh district, Ha Tinh province, the climate of Ky Trung has two main seasons are winter with heavy rain and summer with high temperature and drought. The research used PRA methods, group discussion, transect walk, secondary data to analyze the current cropping systems of Ky Trung commune and assess vulnerability of cropping systems to climate change based on scenarios RCP8.5. The assessment results were used to propose climate-smart solutions. Through assessing economic, social, environment indicators the research finds out that effective land use of rice (2 crops), tea, acacia is average while peanut and cassava had low effective land use. Under the impact of extreme weather events such as storm, hot spell, cold spell, drought, Rice, Peanut and Tea are the most vulnerable crops, whereas vulnerability of Acacia and Cassava are low. When using climate change scenarios RCP8.5 to assess cropping systems in the future (5 to 10 years later) based on impact of current extreme weather events, participations (farmers) reported that Rice, Tea, Fruit tree are easy to be affected by climate change while Acacia is less affected. Based on the results of the assessment, the climate-smart technologies were suggested such as tea intercrops green bean; acacia intercrops high value timber tree; planting short-day rice, fruit tree intercrops sunflower, grass or vegetables... to improve cropping systems for mitigating and adapting to climate change while still ensuring economic development and food security for local people.
Publication / Creation date: <Not Defined>
Language: vietnamese
Country: Viet Nam
Keywords: climate change, cropping systems, extreme weather events, indicator, vulnerability, climate-smart

Citation: Dao, TT. Assessing vulnerability to climate change in cropping systems and potential for Climate-Smart Agriculture: A case study at Ky Trung commune, Ky Anh distrct, Ha Tinh province. Master's thesis, Vietnam National University of Agriculture, 2016.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:
● Dao - Thi Tham

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//55/deliverableDataSharing/Dao%20TT%20master%20thesis.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2835 - Climate Change Primer (in Vietnamese Language)

Main Information

Type: Training materials

Subtype: Guidebook/Handbook/Good Practice Note

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://www.worldagroforestry.org/region/sea/publications/detail?pubID=3578

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Climate Change Primer (in Vietnamese Language)
Description / Abstract: Introduce basic Climate Change knowledge
Publication / Creation date: 2016-02-01
Language: vietnamese
Country: vietnam
Keywords: climate change, cropping systems, extreme weather events, indicator, vulnerability, climate-smart
Citation: Simelton E, Le VH, Le DH and Vidallo R. Climate Change Primer (in Vietnamese Language) 2016
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Simelton - Elisabeth
- Le - Van Hai
- Le - Dinh Hoa
- Vidallo - Rene

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

D2484 - Blog: Farmers as envoys of climate-smart agriculture to villages in Southeast Asia

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: https://ccafs.cgiar.org/news/farmers-envoys-climate-smart-agriculture-villages-southeast-asia#.WKKGKjuLRhG

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Farmers as envoys of climate-smart agriculture to villages in Southeast Asia
Description / Abstract: A researcher discovers how farmers can be key agents to bringing about positive changes in their own villages, across landscapes.
Publication / Creation date: 2016-07-11
Language: en
Country: Vietnam
Keywords: CSV, CCAFS SEA, roving workshop
Citation: Duong MT. Farmers as envoys of climate-smart agriculture to villages in Southeast Asia. CCAFS, July 2016
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Duong - Tuan

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2836 - Newsletter: My Loi News (October 2015 - April 2016) in English

Main Information

Type: Outreach products

Subtype: Newsletter

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: My Loi News (October 2015 - April 2016) in English
Description / Abstract: Brief information of project's activities in My Loi
Publication / Creation date: 2016-04-01
Language: english
Country: Vietnam
Keywords: Climate-Smart Villages, CSV, Climate-Smart Agriculture, CSA
Citation: Duong MT. My Loi News (October 2015 - April 2016) in English 2016
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Duong - Minh Tuan

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//55/deliverableDataSharing/My%20Loi%20Newsletter%20April%202016.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2838 - Newsletter: My Loi News (October 2015 - April 2016) in Vietnamese

Main Information

Type: Outreach products

Subtype: Newsletter

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: No

Deliverable Metadata

Disseminated title: My Loi News (October 2015 - April 2016) in Vietnamese
Description / Abstract: Brief information of project's activities in My Loi
Publication / Creation date: 2016-04-01
Language: vietnamese
Country: Vietnam
Keywords: Climate-Smart Villages, CSV, Climate-Smart Agriculture, CSA
Citation: Duong, MT. My Loi News (October 2015 - April 2016) in Vietnamese 2016
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Duong - Minh Tuan

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//55/deliverableDataSharing/B?n%20tin%20M?%20L?i%20thang%204%202016.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2135 - Participatory identification of climate-smart agriculture priorities

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/75542

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Participatory identification of climate-smart agriculture priorities

Description / Abstract: With the concept climate-smart agriculture (CSA) being relatively new, there is a need to test and develop practical and systematic methodologies and approaches for documenting and evaluating CSA practices in the field. The implementation of CCAFS' Climate-Smart Villages (CSV) involves identifying, assessing and selecting climate-smart farming practices. This report contains three sections: (i) a framework for identifying and assessing CSA in the field with a long list of CSA indicators in identifying and monitoring CSA interventions; (ii) cost-benefit analysis of some selected climate-smart farming systems; and (iii) the participatory process of prioritizing CSA options with the villagers. The work builds on our experiences from the My Loi CSV and its scaling domains in Ky Anh district, Ha Tinh province, in the north-central region of Viet Nam.

Publication / Creation date: 2016-06-01

Language: en

Country: VIETNAM

Keywords: CLIMATE-SMART AGRICULTURE,PARTICIPATORY APPROACHES,AGRICULTURAL PRACTICES,CLIMATE-SMART VILLAGE,VIET NAM,CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY

Citation: Duong MT, Simelton E and Le VH. 2016. Participatory selection of climate-smart agriculture priorities. CCAFS Working Paper no. 175. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/75542

DOI: <Not Defined>

Creator / Authors:

- Simelton, - Elisabeth
- Duong, - Minth Tuan
- Le VH, -

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Minh Tuan, Duong <D.MinhTuan@cgiar.org>	Responsible

D2139 - Agents of change in climate smart villages (GACSA webinar)

Main Information

Type: Outreach products

Subtype: Presentation/Poster

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: https://www.youtube.com/watch?v=-IaMOsdl5YA

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Agents of Change in Climate-Smart Villages by Elisabeth SIMELTON, Climate change scientist

Description / Abstract: GACSA Knowledge Action Group has organised to attend two webinars in May 2016.The purpose of the webinars is to share the knowledge gained over the last year, developing and testing climate-smart techniques in various contexts. This video is one of 4th video of the webinar ''Promoting Climate-Smart Agriculture Through Extension: An Overview of Existing Tools and Services''

Publication / Creation date: 2016-05-25

Language: en

Country: Vietnam

Keywords: Climate-Smart Villages, CSV, Climate-Smart Agriculture, CSA

Citation: Simelton E 2016. Agents of Change in Climate-smart villages. Presentation at FAO Global Alliance for Climate-Smart Agriculture (GACSA) Knowledge Action Group Webinar, May 2016

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

D2140 - Farmers? organizations and CSA: a case study from Vietnam

Main Information

Type: Articles and Books

Subtype: Book chapter (non-peer reviewed)

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://www.worldagroforestry.org/region/sea/publications/detail?pubID=3590

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Farmers? organizations and CSA: a case study from Vietnam
Description / Abstract: The Compendium provides examples of more than 20 different approaches of how agricultural extension can support climate-smart agriculture, with contributions from seventeen institutions and over 30 contributors worldwide
Publication / Creation date: 2016-05-25
Language: en
Country: Vietnam
Keywords: Farmer organisation, CSA, CSV
Citation: Simelton, E. Farmers' organizations and CSA: a case study from Viet Nam. Chapter 3.5. In: Sala S, Rossi F & David S (eds) ?Supporting agricultural extension towards Climate-Smart Agriculture. An overview of existing tools?.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Simelton - Elisabeth<0000-0002-0486-627X>

Publication Metadata

Volume:
Issue:
Pages:
Journal/Publisher name: Global Alliance For Climate-Smart Agriculture (GACSA) COMPENDIUM Climate-Smart agriculture & extension

Indicators for journal articles: ● This article have a co-author from a developing country National Agricultural Research System (NARS)

Publication acknowledge: Yes
Flagships contribution: ● CCAFS - F2 (BEFORE F1 - ANDY)
● CCAFS - F4 (BEFORE F2 - JAMES)

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

D2830 - Blog: Viet, Khmer, Lao farmer leaders commit to climate-smart agriculture

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: https://ccafs.cgiar.org/blog/viet-khmer-lao-farmer-leaders-commit-climate-smart-agriculture?utm_source=Southeast+Asia&utm_campaign=9ae553a97a-SEAQuarterly_bulletin_March_2016&utm_medium=email&utm_term=0_98832db60f-9ae553a97a-295678653#.WKa4jTuLRhH

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Viet, Khmer, Lao farmer leaders commit to climate-smart agriculture
Description / Abstract: Farmer leaders from Southeast Asia learn about climate-smart agriculture from a five-day roving workshop in Vietnam and plan to share with other farmers.
Publication / Creation date: 2016-06-28
Language: en
Country: Vietnam
Keywords: CSV, CCAFS SEA, roving workshop
Citation: Tran, H.M., Bui, T.Y. 2016. Viet, Khmer, Lao farmer leaders mommit to climate-smart agriculture.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Tran - Ha My
- Bui - Tan Yen

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

D2831 - Blog: Pass the cassava, please!

Main Information

Type: Outreach products

Subtype: Blog

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: https://ccafs.cgiar.org/news/pass-cassava-please#.WKa4mjuLRhG

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Pass the cassava, please!
Description / Abstract: Cassava production is being introduced to farmers as a climate-smart agricultural practice in the Philippines.
Publication / Creation date: 2016-07-5
Language: en
Country: Philippines
Keywords: <Not Defined>
Citation: Cruz, A. 2016. Pass the cassava, please!
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Cruz - Amy

Partners contributing to this deliverable:

Institution	Partner	Type
IIRR - International Institute of Rural Reconstruction	Vidallo, Rene <rene.vidallo@iirr.org>	Responsible

D2832 - Climat Smart Agriculture Primer (in Vietnamese Language)

Main Information

Type: Training materials

Subtype: Guidebook/Handbook/Good Practice Note

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Capacity Development

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://www.worldagroforestry.org/region/sea/publications/detail?pubID=3577

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Climat-Smart Agriculture Primer (in Vietnamese Language)
Description / Abstract: Introduce basic Climate-Smart Agriculture knowledge
Publication / Creation date: 2016-02-01
Language: vietnamese
Country: vietnam
Keywords: climate change, cropping systems, extreme weather events, indicator, vulnerability, climate-smart
Citation: Simelton E, Le VH, Le DH, Vidallo R and Gonsalves J. Climate-Smart Agriculture Primer (Vietnamese language) 2016
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:

- Simelton - Elisabeth
- Le - Van Hai
- Le - Dinh Hoa
- Vidallo - Rene
- Gonsalves - Julian

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

D2144 - The role of knowledge in the adoption of agriculture innovation:implications for climate-smart agriculture in Vietnam

Main Information

Type: Reports and other publications

Subtype: Thesis

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender
- Capacity Development

Gender level(s):

- Diagnostics/analysis to understand gender issues

Deliverable dissemination

Is this deliverable already disseminated: No

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: The role of knowledge in the adoption of agricultural innovation: implications for Climate Smart Agriculture in Vietnam

Description / Abstract: The purpose of this study was to explore farmers? adoption of agricultural innovation in My Loi village in Vietnam. Qualitative tools including interviews, village timeline and observations were used to investigate this issue. As such, this study has empirically demonstrated that farmers in My Loi village are confronted with multiple challenges including both intrinsic and extrinsic factors when attempting to adopt an agricultural innovation. The results showed that determinants and constraints to the adoption of agricultural innovation exist at different levels. An important factor was the use and production of knowledge. The type of knowledge, the strategy employed and the source of knowledge were found to be critical factors for farmers? adoption behaviour. Moreover, the study demonstrated that social networks are valuables influences in the adoption of innovation. This was illustrated by their provision of significant assets such as innovation support, knowledge support and example for imitation or rejection. Lastly, this study showed that institutional structures have been identified as both determinant and barriers to adoption. Overall, the study revealed that institutional structures were found to influence farmers? adoption at various levels of the adoption process, including access to finance and learning; use and application of knowledge; and mobilisation of collective action.

Publication / Creation date: 2016-09

Language: en

Country: Vietnam

Keywords: social learning; climate-smart agriculture; climate-smart village; Ha Tinh; Vietnam

Citation: Tran, H. The role of knowledge in the adoption of agricultural innovation: implications for Climate Smart Agriculture in Vietnam. Master's thesis, The University of Leeds, School of Earth and Environment, September 2016.
Handle: <Not Defined>
DOI: <Not Defined>
Creator / Authors:
● Tran - Helene

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:
https://marlo.cgiar.org/data/ccafs/projects//55/deliverableDataSharing/Research%20project%20FINAL.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Catacutan, Delia <d.c.catacutan@cgiar.org>	Responsible

5.3 Project Highlights

Project highlight 203	
Title: TV-programs inspire CSA practices in neighbouring province	
Author: Elisabeth Simelton	**Subject:** Scaling CSA-practice
Publisher: Ha Tinh TV and VTC16	**Year reported:** 2016
Project highlights types: ● Successful communications	**Is global:** No
Start date: Jan 2016	**End date:** Dec 2016
Keywords: vermiculture, CSA-uptake	**Countries:** Vietnam
Highlight description: The CSA activities in My Loi CSV has attracted the media on several occasions. In one TV program, the family demonstrating vermiculture gained public interest, including farmers from neighbouring province who organised their own trip to My Loi to buy worms and learn about the practice. The evidence of vermiculture as a CSA was demonstrated during the subsequent flooding, where the location of the bed, placed on a slope allowed the water to flow on the sides. Furthermore, it provided supplemental income, additional feed to small animals like ducks, and enabled more efficient resource use.	
Introduction / Objectives: Through this event local and national TV channels were engaged to produce two longer stories putting CSA/CSV in a bigger picture through interviews with the project leader (VTV16) and elaborating it at province level (HA Tinh TV). The aim was to share the experience in My Loi CSV nationally and locally.	
Results: At least ten external visits to My Loi village following the TV-shows has made the vermiculture famous and others call for advice. Farmers in My Loi are motivated to demonstrate practices and share information, and they keep notes of visitors. Particularly interesting to the project team is that several visitors are 'ordinary' farmers who invested in the travel by themselves, to learn. This highlights the importance of training demonstration farmers to facilitate farmer-to-farmer scaling out of CSA.	
Partners: Farmers Union Ha Tinh; Ky Anh district and Ky Son commune People's Committees	
Links / Sources for further information: VTC16: https://youtu.be/cQxBfutM7W8 HTTV: https://youtu.be/eHzmN-dwhZw	

6. Activities

A115 - Strengthening local level processes for CSA and community-based adaptation

Description: Composed of action research site establishment and related activities leading towards the development of proof-of-concept sites, which include constituency building and social preparation, site-specific consultation workshops with local partners and stakeholders, joint planning and project launch, and setting-up of implementation plans & monitoring systems. Strengthening community-based processes for local level adaptation will be done through stakeholder analysis, institutional mapping and preparatory activities leading towards capacitating existing groups, organizations and institutions for collective action. Informal partnerships will be forged with local research establishments and universities/colleges around the two main research sites via multiple stakeholder local platforms for CSA.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: IIRR - International Institute of Rural Reconstruction Gonsalves, Julian <juliangonsalves@yahoo.com>
Status: On-going

Overall activity or progress made during this cycle: Twelve villages are being developed into proof-of-concept sites where knowledge on CSA practices and CSA scaling are being generated through testing of at least 20+ CSA options by a total of 17 Farmer Learning Groups (FLG) in two countries. These villages also serve as learning sites for CSA upscaling. Methodologies for social learning processes that facilitate CSA upscaling are being documented in the CSV such as: mobilizing FLGS, conduct of PAR, conduct of PVA, operationalizing CIF, prioritizing and establishing community support facilities, facilitating on-site learning (roving workshops & field days), and influencing local extension systems. Generation of knowledge products of these processes is next step.

Deliverables in this activity:

- D440: Community IEC on CC vulnerabilities and risks
- D438: Working papers on stakeholder analysis & institutional mapping in My Loi and Guinayangan

A231 - Participatory vulnerability assessments

Description: This involves profiling community vulnerabilities to climate induced risks & identifying the most vulnerable and at-risk. Analysis will target surfacing sources of gender based vulnerabilities and risks. Current and indigenous coping mechanisms to identified vulnerabilities and risks will be analyzed along with the gaps and perceived interventions needed to increase community adaptive capacities. Local government partners & CBO leaders will be part of teams who will facilitate PVAs at village level and other related activities such as analysis of information and identifying adaptation strategies. Outputs will be shared through information campaigns targeting communities, local governments, key government agencies, CSO partners and local research stations in order to not only inform but also engage them in identifying, testing and developing best-bet CSA options.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Catacutan, Delia <d.c.catacutan@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: We have conducted several events for sharing knowledge, such as: CCAFS visit, extension activities, media, training, exchange visits and field days, workshops, research networks, policy dialogues. By then, we have knowledge products like: primers, working papers, manuals, infobriefs, webinars, book chapters and policy briefs. Major source of vulnerabilities in PH is from decreased production or crop failures during 2 extreme events: drought conditions and typhoons. Vulnerability assessments provided basis for communities &/or FLGs in identifying community adaptation agenda, sector-specific agenda, and technology-based action research agenda that guided the process of testing of CSA options for addressing vulnerabilities. A draft synthesis of the vulnerability assessments for both countries will be finalised in 2017.

Deliverables in this activity:

- D439: Participatory Vulnerability Assessment - Case studies from 11 farming communities in Philippines and Vietnam
- D440: Community IEC on CC vulnerabilities and risks
- D2136: Synthesis of Participatory Vulnerability Assessment

A232 - Testing of CSA and community-based adaptation options

Description: Best-bet options for addressing community vulnerabilities will be identified & tested to determine viability for delivering co-benefits, addressing gender-differentiated vulnerabilities, and facilitating scaling-up. Options will be identified & assessed at the onset, & will lend into the development of research protocols for CSA scaling-out through the impact areas/proof-of-concept site and "community innovatioins fund" (CIF) approaches. Developing proof-of-concept sites & facilitating participatory technology/innovations development (PTD/PID) are the core components, wherein farmers & local governments will be provided capacities to conduct participatory action researches to test & develop best-bet CSA options: by integrating local practices with scientific approaches. Linkages with local research institutes will be a key strategy for technology transfer of best-bet options. PTD/PID learnings will be used to inform partner subnational governments in facilitating climate smart local development planning especially in the Phils. Reports & knowledge products will be generated & shared widely to subnational government partners.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Catacutan, Delia <d.c.catacutan@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: Intermediate knowledge of CSA outcomes of 20+ CSA practices are being documented in 12 villages in both countries. Testing is done by 17 FLGs, composed of more than 280 farmers. Analysis is generated through PAR using simplified tools for gathering basic agronomic data used for monitoring and analysis. Methodologies for facilitating CSA testing towards community based adaptation and scaling up are being documented such as: conduct of PAR, operationalization of CIF, establishment of community support facilities, and mobilizing FLGS towards CSA action research scaling. Protocols for these methodologies are currently being developed. In Vietnam, project findings are shared at regular meetings with provincial policy makers. PVA report and CSA-material will be translated in local languages.

Deliverables in this activity:

- D442: Report on tested CSA technological innovations (PTD/PID) and their implications for Vietnam & Philippines
- D441: Research Protocol for facilitating CSA outscaling through impact areas & proof-of-concept sites and CIF
- D1021: Workshop on climate smart local development planning for Phils
- D1026: Training-workshop on understanding how smallholder CS farms deliver ecosystem services
- D2135: Participatory identification of climate-smart agriculture priorities

A233 - Scaling up and dissemination

Description: Current mechanisms that facilitate CSA scaling-out/up will be analysed at the onset & will provide basis for developing social learning approaches for: establishment of proof-of-concept sites & CIF; and development of participatory mechanisms that expedite scaling-out/up of CSA, CBA and local adaptation planning. Knowledge generation will focus on how proof-of-concept sites & CIF approaches lend towards CSA upscaling. Multi-stakeholder learning platforms will be established at sub-national to national levels (through field days, forums, workshops & conferences). On-site advocacy activities such as field days and site visits will be done to faciliate experiential learning targeting local partners. Knowledge products such as CSA scaling resource material and journals that describe methodologies for upscaling CSA & CBA from local to national levels will be produced and widely shared to engage policy makers in multi-stakeholder learning & policy advocacy dialogues.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: IIRR - International Institute of Rural Reconstruction Gonsalves, Julian <juliangonsalves@yahoo.com>
Status: On-going

Overall activity or progress made during this cycle: Preliminary observations point to 5 important factors for local level outscaling: improved access to CSA knowledge&practice, CSA-focused local extension systems, local CSA-leaders/promoters, improved access to infrastructures for CSA-promotion (support systems e.g. CIF, community support facilities); incentives for sustaining capacities and interests of local extension agents. Scaling-up through influencing commune-national policies, programs and investment, public and private stakeholders via donors, mass & development organisations and media is done through knowledge sharing events such as on-site partners' visits, training, media forum, and round-table discussions on CSA, regular dialogues with other implementing agencies to engage uptake of CSA. Communication materials like newsletters and brochures have been found useful in sclaing up. Formats of CSA-portfolio and manuals are being developed in consultation with targeted user groups to recommend practices and activities for scaling out. A scaling-up framework based on project-derived experiences is being developed and has been shared with other CSVs in the region.

Deliverables in this activity:

- D1027: Workshop on how to scale up CSA & community adaptation at subnational levels
- D1028: Scaling-out CSA and community adaptation at municipal (PH) and commune (VN) levels
- D1029: cross-site technical exchanges
- D1030: Journal article on CSA and CBA scaling up from municipal/commune to subnational levels
- D441: Research Protocol for facilitating CSA outscaling through impact areas & proof-of-concept sites and CIF
- D2134: Newsletter from My Loi CSV (bilingual)
- D2135: Participatory identification of climate-smart agriculture priorities

A404 - (BILATERAL) Climate-smart, tree-based, co-investment in adaptation and mitigation in Asia

Description: The Climate-smart, Tree-based, Co-investment in Adaptation and Mitigation in Asia project aims to improve the livelihoods and resilience of smallholding farmers by reducing their vulnerability to climate change. In particular, in Indonesia, The Philippines and Viet Nam, this project focuses on: 1. Obtaining gender-sensitive, scientific assessments of vulnerability, adaptation and mitigation with the help of local people?s ecological knowledge; 2. Enabling local communities to collaboratively devise climate-smart, tree-based, good adaptation practices with local governments and the private sector; and 3. Integrating gender-responsive, culture-sensitive, climate-change mitigation and adaptation actions into mainstream policies and programmes.

Start date: Jan 2015 **End date:** Mar 2017

Activity leader: ICRAF - World Agroforestry Centre Catacutan, Delia <d.c.catacutan@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: In 2016, the Climate-smart, Tree-based, Co-investment in Adaptation and Mitigation project (STIP) in Asia project and our project have jointly conducted several trainings in Ha Tinh. August 2016, five farmers from My Loi CSV were participated in the Pests & Diseases Management training in Huong Khe district, Ha Tinh province. Joint meetings with province and district level authorities have been conducted aimed at scaling up climate-smart tree-based options.

Deliverables in this activity:

<Not defined>

7. Leverages

No leverages added

Title: (GLO-EA-WA- ICRAF) Partnerships for scaling climate-smart agriculture (P4S-CSA)

1. Description

Start date	End date	Management liaison	Mgmt. liaison contact
Jan 2015	Dec 2018	F2	Bonilla, Osana <o.bonilla@cgiar.org>

Funding source types	Status	Lead Organization	Project leader
W1/W2, W3, Bilateral	On-going	ICRAF - World Agroforestry Centre - Kenya	Rosenstock, Todd <t.rosenstock@cgiar.org>

Project is working on

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

Region(s)
EA: East Africa
WA: West Africa

Project summary

The Partnerships for Scaling (P4S) project formalizes new partnerships between national, regional and continental institutions to support the scaling of CSA through co-development and application of analytically rigorous information, models and tools. The primary outcome will be more effective CSA programming, increasing CSA adoption by farmers, and value for money in CSA investments by donors. The project is actively working with the World Bank, USAID, the Africa CSA Alliance, Vuna, among many other organizations. This project targets current decisions facing partners (e.g., what works where) with the goal to mainstream the use of evidence-based approaches for implementing CSA project. The project is based on the CSA-Plan guide to scaling up CSA, developing tools for: (i) situation analysis; (ii) targeting and prioritizing; (iii) project design and implementation; (iv) monitoring, evaluation and learning.

2. Partners

Partner #1 (Leader)

Institution: ICRAF - World Agroforestry Centre

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Leader	Rosenstock, Todd <t.rosenstock@cgiar.org>	Activity 2014-91 *Leader*. Activity 2014-60 *Partner*. Activity 2014-390 *Partner*. Activity 2014-432 *Partner*. Activity 2014-61 *Leader*.	HQ

Partner #2

Institution: CIAT - Centro Internacional de Agricultura Tropical

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Project Coordinator	Girvetz, Evan <e.girvetz@cgiar.org>	CIAT will lead Activity 1 (Baselining and foresight) and provide support on Activities 2 and 3. This division of tasks builds on CIAT's and Dr. Girvetz's strengths in GIS and the design and implementation of spatial tools and analysis. Activity 1 establishes the data foundation for the project and helps P4S develop knowledge products very soon after start up. Activity 2014-60 *Leader*. Activity 2014-390 *Leader*.	HQ

Partner #3

Institution: NEPAD - New Partnership for African Development

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Bwalya, Martin <bwalyam@nepad.org>	Activity 2014-60 *Partner*. Activity 2014-61 *Partner*. Activity 2014-91 *Partner*.	HQ

Partner #4

Institution: ACSAA - Africa CSA Alliance

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Bwalya, Martin <bwalyam@nepad.org>	Activity 2014-60 *Partner*. Activity 2014-61 *Partner*. Activity 2014-91 *Partner*.	HQ

Partner #5

Institution: ILRI - International Livestock Research Institute

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Kinyangi, James <j.kinyangi@cgiar.org>	Activity 2014-432 *Partner*.	HQ

Partner #6

Institution: CIMMYT - Centro Internacional de Mejoramiento de Maíz y Trigo

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Thierfelder, Christian <c.thierfelder@cgiar.org>	Activity 2014-432 *Leader*.	Harare, Zimbabwe
Partner	Stirling, Clare <c.stirling@cgiar.org>	Christian Thierfelder will lead the development of a practical guide to CA and CA with tree implementation for CAADP.	Harare, Zimbabwe

Partner #7

Institution: The World Bank-United States

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Millan, Alberto <a.millan@worldbank.org>	Facilitate partnerships with the World Bank on CSA profiling and investment planning.	HQ
Partner	Choudhary, Vikas <vchoudhary@worldbank.org>	Facilitate CSA County Risk Profile integration into Kenya Climate Smart Agriculture Project ($250 Million WB-IDA loan to Government of Kenya.	HQ
Partner	Baedecker, Tobi <tbaedeker@worldbank.org>	Facilitate uptake of CSA Country Profiles by World Bank	HQ
Partner	Chengula, Ladisy <lchengula@worldbank.org>	Facilitate integration of Kenya Climate Risk Profiles into World Bank Kenya Climate Smart Agriculture Project.	HQ

Partner #8

Institution: Ministry of Agriculture, Kenya-Kenya

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Muthami, Francis <fkmuthami@kapp.go.ke>	Facilitate Kenya county agriculture and climate risk profile integration into World Bank Kenya Climate Smart Agriculture Project	HQ

Partner #9

Institution: WOCAT - World Overview of Conservation Approaches and Technologies

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Liniger, Hanspeter <Hanspeter.Liniger@cde.unibe.ch>	Facilitate Climate Wizard data into WOCAT climate change adaptation module.	HQ

Partner #10

Institution: WFP - World Food Programme

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Hachhethu, Kusum <kusum.hachhethu@wfp.org>	Kusum is the primary WFP contact for implementing research on live operator calls for monitoring and evaluation. She works under mVAM program and JM Bauer.	HQ
Partner	Mwongela, Beatrice <beatrice.mwongela@wfp.org>	These persons are the contact persons for WFP in the mobile data collection project. They organize with the mVAM team and they organize with local contact on the ground.	Nairobi, Kenya

Partner #11

Institution: FAO - Food and Agriculture Organization of the United Nations

Contact(s):

Type	Contact	Responsibilities and contributions	Branch
Partner	Kalisa, Diomedes <dkmuganyi2@gmail.com>	This person is spearheading the FAO section of the USDA-FAS IITA-ICRAF-FAO project on CSA in Tanzania	HQ

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

Year	Lesson(s)
2016	The key lesson is flexibility. The tools, approaches and products P4S develops under CSA Plan (eg. Country Profiles, Prioritization Framework, Compendium, CSA-Dx, etc) have broad applicability and are beginning to mature and gain acceptance among partners. This means that new opportunities arise and we need to figure ways to be adaptable in our planning and implementation. We need to increase our commitment to communications and continue to do more of the what has been successful in terms of building relationships and partners allowing us to be seen a honest brokers of information to support decision making.

Partnerships overall over the last reporting period:

P4S partner landscape is ever evolving. Over the past year, there has been significant changes. We have seen the reduced importance of the ACSAA as a coordinating body at the continental level and the increased importance of ACSAA at the country level. With the iNGOS taking a large role in coordination and co-convening meetings on CSA with governments - for example in Zambia and Tanzania. At the same time, we have continued to develop new relationships that help us achieve scale with CSA such as with the World Bank, World Food Program, Vuna and potentially the One Acre Fund.

3. Locations

This project is not global

Project level	Latitude	Longitude	Name
Country			Kenya
Country			Ghana
Country			Ethiopia
Country			Namibia
Country			Botswana
Country			Uganda
Country			Zambia
Country			Malawi
Country			South Africa
Country			United Republic of Tanzania
Country			Senegal
Country			Mozambique
Country			Mali
Country			Brazil
Country			Rwanda
Country			Niger

4. Outcomes

4.1 Project Outcomes

Project Outcome statement:
Prioritizing and targeting interventions will improve the efficiency and effectiveness of development programming and ultimately increase the uptake of CSA across sub-Saharan Africa. After four years (by 2019), we expect that eleven entities (5 International, 3 in West Africa, and 3 in East Africa including: African Group of Negotiators to UNFCCC, NEPAD, and 3 of 5 of iNGO ACSAA partners (Oxfam, World Vision, CARE, CRS, Concern International), ECOWAS, COMESA, and 1 NGO/CSOs in selected with the respective Regional Economic Communities and 1 public institution such as ministries in national governments for a total of two entities plus the REC in each region, will have used the information, approaches, and tools developed by P4S to guide their CSA-related programming or policies/policy implementation. Achieving this outcomes would meet a significant fraction of (or exceed) CCAFS Flagship 1 Global, West African, and East African 2025 targets related to the number of entities using CCAFS science to inform decisions. Furthermore, we aim for P4S' project activities will be integral to the NEPAD, Regional Economic Community and NGO analytical frameworks for CSA programming and thus will have potential to be applied to non-target components in their CSA portfolios creating additional outcomes across programs and countries. The premise underlying this project is that the better informed programming and policies will have cascading effects on farmers adoption of CSA. Because the first step is about informing programming, we believe the response to project activities will be exponential and thus where we expect 2 million farmers (1 million in each East and West Africa) to be affected by 2019 and extending to an additional 4 million thereafter for a total of 6 million farmers. The prevailing assumption underlying achieving these outcomes is continued progress on the structure and work-plans for the African CSA Alliance, NEPAD Vision 25 x 25, and cooperation for engagement with the selected countries facilitated by the RECs, NEPAD, and CCAFS East and West African Regional Programs.

Annual progress towards outcome (end of 2016*): - Three of five the iNGOs that are part of the African CSA Alliance including CARE, World Vision, Concern, Catholic Relief Service and Oxfam are using decision support tools and information to inform programming. This has led to the development of targeted donor proposals and practices. This assumption is based on continued engagement with iNGOs and their continued interest in the information we deliver (in a timely manner). - CCAFS East Africa Region, P4S, FP4, and University of Leeds have collaborated with African Negotiators to provide a synthesis report on management practices to support agricultural adaptation (March 2016) that will be used to inform the African submissions to SBSTA. - P4S has made contact with the selected countries in each region to begin the engagement and understand the current status of the country policies and identified opportunities for where CCAFS science can contribute. - Feedback from key stakeholders on the utility of decision support tools and recommendations for improvement for decision-specific questions. - Continued refinement of CCAFS CSA Webportal to increase functionality - Country offices of the ACSAA NGO partners have organized around targeting CSA objectives and are working with CSO partners.

Annual progress towards project outcome in the current reporting cycle (2016*): In just two years, P4S has already achieved a significant portion of its outcome targets. For example, this year we report three outcome cases (and contribute to a fourth) that discuss how P4S has contributed to evidence-based CSA policy, programming and investments with national partners (eg, Tanzania MALF), international financial institutions (eg, World Bank x2) and development partners (eg, FAO and ACSAA). These early results suggest that the impact pathway envisaged and implemented responds directly to needs of next users and P4S experts and products provide key inputs in CSA decisions These early outcomes are promising. However, the dynamic nature of CSA implementation has led P4S to consistently reorient itself toward partner needs while maintaining to conduct top-notch innovative science. This means, that we have continued to seek out new and promising partnerships that can help CSA reach scale. Some notable examples that we started to engage with in 2016 and may lead to outcomes going forward are: the World Food Program with innovations in monitoring social and environment change, Kenya County Governments with Climate-Risk Profiles, One Acre Fund integrating the Compendium into their innovation pipeline and the Vuna program through the collaboration on the CSA Papers. Thus P4S has already made good progress but seeks to continue. As the discussion on CSA has matured, so has P4S' approach to partnership and outcomes. Thus, it appears clear there will be additional opportunities for impact in the future.

How communication and engagement activities have contributed to achieving your Project outcomes:* P4S does not have a formal communication strategy, though we are about to launch a website. That being said, P4S seeks to build partnerships with the actors working in this space. That means, P4S spends lots of resources, time and money, to work with partners on their terms. This has given us a good appreciation of what's needed and when, really allowing us to develop demand driven products and answer stakeholder driven questions. All of our progress is due to the partnership and taking time and effort to build relationships.

Evidence documents of progress towards outcomes:* <Not Defined>

Annual progress towards outcome (end of 2015): - P4S and partners have developed/selected/agreed upon processes and tools for decision support across policy, CSA country profiles (readiness), vulnerability, and farming systems assessments. - Signed an agreement (perhaps an MOU) with NEPAD for CCAFS to support the Vision 25 x 25. - P4S and partners have generated targets (#s of farmers by farming system and location) for scaling CSA at multiple levels. - CCAFS East Africa Region, P4S, FP4, and University of Leeds have collaborated with African Negotiators to provide a synthesis report on the vulnerability and impacts of climate change on African Agriculture (March 2015) that will be used to inform the African submissions to SBSTA. - The target countries (1 in each of E and W Africa) have been co-selected with NEPAD and the relevant REC (ECOWAS and COMESA) and USAID. - Together, with FARA and NGO colleagues from the African CSA Alliance and RECs, P4S has identified needs and opportunities for capacity building around CSA decision making and drafted a concise plan. - The iNGOs that are part of the African CSA Alliance including CARE, World Vision, Concern, Catholic Relief Service and Oxfam have used indicators and data (such as country profiles and risk/vulnerability assessments) to prioritize countries and inform practice selection in 'fast start' of Ethiopia, Zambia and Niger. - Guidelines for conservation agriculture have been drafted (C Thierfelder) and presented to African CSA Alliance (D Garrity). TO REPORT ON IN AUGUST 2015: "Guidelines for climate smart agriculture practices (specifically CA with/without trees) used by 8 major development agencies (inc. government departments and NEPAD) and thus guiding 50 million dollar investments in climate smart agriculture" - CCAFS is represented by P4S personnel on the African CSA Alliance's steering committee. - CCAFS has recruited a boundary scientist to be embedded in NEPAD (Pretoria). - Initial decision support tools co-developed with RECs, NEPAD, iNGO partners including bayesian networks/monte carlo methods (ICRAF), index-based (CIAT), and scaling methods that use CSV data and other information (U. of Leeds). - CCAFS Web portal's searchable CSA practices compendium is live. - Development of the 'dynamic' country profile (tentative idea).

Annual progress towards outcome (end of 2017): - Country office of NGOs are using CCAFS information in fast start countries - P4S has worked with RECs and ministries in the selected countries in prioritization to inform policies including NAIPs. - Meetings with global partners (such as World Bank and IFAD and Global Alliance) to socialize CCAFS' approach to decision support for CSA. - Targeted capacity building for countries that aim to revise or establish policy or implementation strategies on CSA (pending on budget availability) . - Two training courses (3 days each, 1 in each region) co-organized with REC partners (e.g., EAC/COMESA) on CSA and decision support. (pending on budget availability) .

Annual progress towards outcome (end of 2018): - Two training courses (3 days each, 1 in each region) co-organized with REC partners (e.g., EAC/COMESA) on CSA and decision support. - P4S has met or exceed all targets set. This is based on the assumption that NEPAD Vision 25 x 25 and ACSAA continues to grow in size and scope because of successes in which CCAFS science contributed to.

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:* The premise underlying our project and theory of change is simply that partnership are the key to scaling CSA; indeed, it is the reason the project is named P4S. Our progress so far has reinforced this assumption. However, P4S has gotten better at spotting real opportunities as the project and discussion on CSA has matured.

4.2 CCAFS Outcomes

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

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

2019
Target value: 3 **Cumulative target to date:** 20 **Target narrative:** This project will engage the regional body COMESA and one yet to be specified countries (likely Zambia or Ethiopia) and a country level NGO partner in the country (potentially CRS or Oxfam for the respective countries). Despite only having 3 as the 2019 target, we can envisage a impact pathway collaborating with COMESA where we reach many more as COMESA has plans to engage 7 countries on CSA beginning in 2015 and CCAFS and COMESA have an established relationship to support this through the CCAFS East Africa Region. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Gender will be one of the outcomes considered in the models and targeting.

2015
Target value: 1 **Cumulative target to date:** 4 **Target narrative:** By the end of 2015, we have made the necessary links with COMESA the EA Regional Economic Community and develop modes of operation for developing portfolios of best-bet CSA with countries within group. In 2015, this will first entail co-selecting one focal country based on regional priorities (hence the target in 2015 is COMESA itself). This assume COMESA-CCAFS relationship continues to develop as started during the regional planning meeting. Also, we will begin working with the country office/CSO of one of the NGO partners in the ACSAA. This is likely to be either Ethiopia or Zambia given these are fast start countries and while the NGO partner is currently unspecified, it may be Oxfam (Ethiopia) and CRS (Zambia) as they have a very strong program in the respective countries. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 2
Cumulative target to date: 9
Target achieved: 2.0
Target narrative: By the end of 2016, we have begun working with the selected country with the relevant ministry and partners in the national government and develop modes of operation for developing portfolios of best-bet CSA that fit within a policy that is being developed or revised. Because COMESA is already engaging 7 countries in the region on CSA in 2015, we expect engagement with this process to yield an outcome in this year. We also expect the NGO engagement set up in 2015 to yield an outcome by using our decision support tools in 2016.
Narrative for your achieved targets, including evidence: We report that we influenced two ministries and development partners used P4S research in 2017. Both are reported in the outcome case on scaling up CSA in Tanzania and include the concept note drafted by the Alliance for CSA in Africa and the CSA Guidelines crafted in partnership between MALF and FAO.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Gender is central to both the CSA Guidelines and the ACSAA concept note. However, this is not the part of P4S' work that contributed to these documents.
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

2017
Target value: 0
Cumulative target to date: 9
Target narrative: <Not Defined>
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

Major Output groups:

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

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

● F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

RP WA Outcome 2019: Public (MoAgr, MoLiv, MoEnv, MoRuD, MoPla, NARS) institutions and stakeholders, NGOs use CCAFS decision support tools to prioritize and design national level investments on CSA that will strengthen smallholder farmers adaptive capacity. Local decentralized Gov. services, NGOs and extension services partner to promote and scale up CSVs models using portfolios of CSA technologies and practices for local adaptation planning.

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

2019
Target value: 3 **Cumulative target to date:** 20 **Target narrative:** This project will reach the regional body ECOWAS by helping them target CSA activities and then will also specifically engage one yet to be specified countries (likely Niger) and a country level NGO partner in the country (potentially Oxfam in NIger). **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Gender will be one of the outcomes considered in the models and targeting.

2015
Target value: 1 **Cumulative target to date:** 4 **Target narrative:** By the end of 2015, we have made the necessary links with ECOWAS the WA Regional Economic Community and develop modes of operation for developing portfolios of best-bet CSA with countries within group. In 2015, this will first entail co-selecting one focal countries based on regional priorities (hence the target is ECOWAS itself). This assume ECOWAS-CCAFS relationship continues to develop as started during the regional planning meeting. Also, we will begin working with the country office/CSO of one of the NGO partners in the ACSAA. This is likely to be in Niger given Niger is a fast start country and while the NGO partner is currently unspecified, it may be Oxfam as they have a very strong program in Niger. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 1
Cumulative target to date: 9
Target achieved: 1.0
Target narrative: By the end of 2016, we have begun working with the selected country with the relevant ministry and partners in the national government and develop modes of operation for developing portfolios of best-bet CSA that fit within a policy that is being developed or revised. We expect this process to be slow moving and not yield an outcome in this year. However, we expect the NGO engagement set up in 2015 to yield an outcome by using our decision support tools in 2016.
Narrative for your achieved targets, including evidence: We worked with stakeholders in Ghana (with USAID) to develop a CSA investment portfolio using cost-benefit analysis.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The workshops as part of this project included people from across sectors, including women and men.
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

2017
Target value: 0
Cumulative target to date: 9
Target narrative: <Not Defined>
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

Major Output groups:

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

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

● F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

● F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

F2 (before F1 - Andy) Outcome 2019: National and subnational development initiatives and public institutions prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools.

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

2019
Target value: 5 **Cumulative target to date:** 20 **Target narrative:** This project will reach at least five major international development programs and initiatives including African Group of Negotiators, NEPAD, and the international components of CARE, Concern, CRS, Oxfam and/or World Vision with CCAFS Science and Decision Support Tools. The assumption here lies in that CSA agenda and the African CSA Alliance will continue to develop into a functioning entity and will begin to receive donor support and P4S is able to maintain good relations with ACSAA, NEPAD and the RECs by providing timely and relevant information to partners. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** Gender will be one of the outcomes considered in the models and targeting.

2015
Target value: 2 **Cumulative target to date:** 4 **Target narrative:** By the end of 2015, this activity of P4S will have compiled and assessed (dq/da) all the necessary background information for the targeting exercises. Furthermore, it will have completed preliminary analysis on our five assessment topics that form the backbone of our engagement with iNGO partners, and NEPAD and the umbrella institutions (African CSA Alliance). We will also have used these assessments and collaborated with CCAFS EA, U of Leeds, and FP4 to engage with NEPAD and will contribute to the vulnerability assessment that African Negotiators will use to support their agriculture submission. The two institutions targets will be the African Negotiators and one unspecified of the iNGOs (Care, Concern, Oxfam, CRS, World Vision) or one of the unspecified USAID Feed the Future countries based on the Bilateral USAID project that scoping is ongoing now. **The expected annual gender and social inclusion contribution to this CCAFS outcome:** <Not Defined>

2016
Target value: 2
Cumulative target to date: 9
Target achieved: 2.0
Target narrative: By the end of 2016, we will have co-developed with partners and piloted multiple models using P4S knowledge products for targeting CSA in Africa through participatory processes. This type of targeting will be the foundation of donor proposal and help determine iNGO consortium priorities. Two of the five iNGOs will use the tools and information in such programmatic actions.
Narrative for your achieved targets, including evidence: Here we report that P4S influenced two initiatives in 2016. One and most notably, P4S and specifically the Kenya Country Risk Profile and Country Profile informed the development of the World Bank $250 m investment in Kenya CSA Program. Two, the preliminary conclusion of the CSA Compendium was cited in World Bank Webinar by Global Agricultural Representative. Both outcomes are written up as outcome cases. Also in 2016, P4S contributed to the ACSAA concept notes written by a multi-stakeholder group in Zambia.
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Gender was consider during the development of the KCSAP and is one of the indicators analyzed in the CSA Compendium though there is not much data on these outcomes.
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

2017
Target value: 0
Cumulative target to date: 9
Target narrative: <Not Defined>
The expected annual gender and social inclusion contribution to this CCAFS outcome: Gender will be one of the outcomes considered in the models and targeting.

Major Output groups:

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

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

● F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

4.3 Other Contributions

Contribution to other CCAFS Impact Pathways:
<Not Defined>

Collaborating with other CRPs

Agriculture for Nutrition and Health
Description of collaboration: The collaboration has not been formalized yet. However, through the bilateral project SCAN we see links between the CSA and A4NH agendas. The link between climate-smart agriculture for nutrition was also highlighted in a policy brief written by the Global Planel on Food Systems for Nutrition and at COP21.

Water, Land and Ecosystems
Description of collaboration: The collaboration is around developing tools for targeting agricultural development interventions (specifically ones that integrate uncertainty). There work occurs informally through the Land Health Decisions group at ICRAF of which Todd Rosenstock and Christine Lamanna tangentially participate.

4.4 Case Studies

Case Study #118

Title: USAID-FTF is orienting its future programming towards encompassing CSA principles using CCAFS tools

Year: 2016

Project(s): P56

Outcome Statement: Strategic FP1 support provided to USAID-FTF in orienting its future programming towards encompassing CSA principles supported by: A review of the FTF programs across its 19 focus countries (US$978km of annual funding); "Deep-dive assessments" carried out in 5 specific countries across 3 continents reviewing (US$128m) projects for their relevance in terms of CSA; and the design, use and promotion of the new CSA Programming and Indicator tools which is supporting CSA mainstreaming into ongoing and new Feed the Future investments.

Research Outputs: - Deep Dive Assessment: CSA in the USAID Feed the Future Portfolio in Zambia - Deep Dive Assessment: CSA in the USAID Feed the Future Portfolio in Senegal - Deep Dive Assessment: CSA in the USAID Feed the Future Portfolio in Rwanda - Deep Dive Assessment: CSA in the USAID Feed the Future Portfolio in Honduras - Deep Dive Assessment: CSA in the USAID Feed the Future Portfolio in Bangladesh - CSA programming and Indicator Tool - CCAFS Synthesis Report on FTF review

Research Partners: CIAT, CCAFS SA, CCAFS SEA, CCAFS LAM,

Activities: - High level workshop with 10 major agencies to develop a common overall CSA metrics framework CSA metrics meeting (Paris, March 2015) - USAID-Feed the Future portfolio across the 19 focus countries analyzed for further promising CSA opportunities and entry points . - CCAFS' experts visits to five USAID missions and development of Deep Dive CSA Assessment in FTF portfolios in Honduras, Zambia, Rwanda, Senegal and Bangladesh. - FS1 was also instrumental in leading a multi-agency effort to develop common CSA metrics which translated in an overall framework and a practical CSA Programming and Indicator Tool for supporting program design using "CSA goggles". This tool allows to examine the program scope through the three dimensional lenses of CSA and how its is currently addressing CSA and how future programming process can be made more climate-smart. - Training sessions held during the two 2016 GLEE events held in Zambia and Cambodia.

Non-Research Partneres: USAID-FTF Implementing partners in Rwanda, Honduras, Zambia, Senegal and Bangladesh

Output Users: USAID Bureau for Food Security and FTF missions staff.

Evidence Outcome: * FTF CSA Framework (Feb 2016): https://agrilinks.org/sites/default/files/resource/files/Framework%20CSA%20paper%20final.pdf * Agenda of GLEE events highlighting key lectures by CCAFS team: https://agrilinks.org/events/resources-climate-smart-agriculture-glee-zambia; https://agrilinks.org/events/climate-smart-agriculture-global-learning-and-evidence-exchange-csa-glee-cambodia-1 - Session 12: Operationalizing Climate-Smart Agriculture: Applications Framework (including CSA tool training): https://agrilinks.org/sites/default/files/FINAL%20CSA%20Operationalizing%20CSA%20and%20metrics%20presentation%20UPDATE_21Nov.pdf

Output Used: * Each deep dive resulted in guidance back to Mission directors on promising opportunities and entry points to bolster CSA outcomes through different systems and agro-ecologies. * Training sessions on the use of the CSA programming and Indicator Tool organized during the USAID 2016 Global Learning and Evidence Exchange events.

References Case: https://cgspace.cgiar.org/handle/10568/75646 https://agrilinks.org/sites/default/files/FINAL%20CSA%20Operationalizing%20CSA%20and%20metrics%20presentation%20UPDATE_21Nov.pdf

Primary 2019 outcome indicator(s):

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

Link between outcome story and and the FP Outcome(s): <Not Defined>

Annex uploaded:

https://marlo.cgiar.org/data/ccafs/projects//101/caseStudy/Framework%20CSA%20paper%20final.pdf

Case Study #119

Title: CIAT-CCAFS CSA Profiles in Kenya drove national/county plans, informed US$ 250 million World Bank investment

Year: 2016

Project(s): P56

Outcome Statement: CIAT-CCAFS developed a national CSA Profile for the World Bank, which contributed to the development the US$ 250 million Kenya Climate Smart Agriculture Project (KCSAP). The World Bank and Government of Kenya asked CIAT to develop county-level Climate Risk Profiles in all 24 counties in the KCSAP to provide a situation analysis for guiding implementation of the project in each county. The KCSAP Project Appraisal Document cites CIAT/CCAFS, including the CSA Prioritization as the first design principle.

Research Outputs: CIAT-CCAFS CSA Country Profile for Kenya: https://ccafs.cgiar.org/publications/climate-smart-agriculture-kenya#.WJzIVVMrJhE County Risk profiles for 15 counties: Busia, Embu, Garissa, Homa Bay, Kilifi, Kwale, Makueni, Meru, Nakuru, Nyandarua, Nyeri, Siaya, Taita Taveta, Tana River, and West Pokot (links in evidence section) County Risk Profiles currently being developed for an additional 16 counties. Key Design Principles in WB KSCAP Appraisal cite CIAT-CCAFS research in: (a) CCAFS-CIAT CSA Prioritization Framework (cited on page 15 of WB report) (b) Value Chain Approach (page 35 WB Appraisal): Innovation platforms and methodologies, such as LINK developed by CIAT, provide approaches for developing innovative business models that consider value chain impacts and link smallholder farmers to markets. (c) CIAT Big Data Site Specific Recommendations (page 55 WB Appraisal): CGIAR Big Data Tools cited, CIAT use of big data to help rice farmers in Latin America cited as example of situational analysis planned in KSCAP.

Research Partners: Kenya Agricultural Productivity Project (KAPP, Ministry of Agriculture, Livestock and Fisheries) Kenya Agricultural and Livestock Research Organization (KALRO) World Bank

Activities: In 2015, CIAT-CCAFS with support from the World Bank, developed a Kenya CSA Country Profile to systematically assess the state of CSA nationally, including agricultural practices that deliver higher productivity, improved resilience, and lower emissions, and assesses the institutional, policy, and finance entry points for taking CSA to scale. The World Bank asked for "downscaled" County Climate Risk Profiles to be developed by CIAT as direct inputs into the Kenya CSA Project (KCSAP). CIAT developed these profiles for 8 of the 24 counties in the KCSAP as part of the GEF $5 million Kenya Adaptation to Climate Change in Arid Lands Project (KACCAL), The World Bank stipulates that any county in the KCSAP must have a County Risk Profile, and prioritize interventions for the specific context of the county. CIAT-CCAFS will develop 16 additional profiles for the remaining KCSAP counties. February 2017, the World Bank board approved the project: http://www.worldbank.org/en/news/loans-credits/2017/02/09/kenya-climate-smart-agriculture-project

Non-Research Partneres: Kenyan Ministry of Agriculture, Livestock and Fisheries World Bank = partner and next users Kenya Agricultural & Livestock Research Organization (KALRO) = next users (hosted inception workshop, peer reviewer – partner?) Counties = next users, participate in workshop and give information (they were involved) Busia, Embu, Garissa, Homa Bay, Kilifi, Kwale, Makueni, Meru, Nakuru, Nyandarua, Nyeri, Siaya, Taita Taveta, Tana River, West Pokot 16 addional counties forthcoming, currently in development

Output Users: Kenyan Ministry of Agriculture, Livestock and Fisheries Kenya Agricultural Productivity and Agribusiness Project (KAPP) Counties governements: Busia, Embu, Garissa, Homa Bay, Kilifi, Kwale, Makueni, Meru, Nakuru, Nyandarua, Nyeri, Siaya, Taita Taveta, Tana River, West Pokot Kenya Agricultural & Livestock Research Organization (KALRO) World Bank

Evidence Outcome: Approved KCSAP Website - http://www.worldbank.org/en/news/loans-credits/2017/02/09/kenya-climate-smart-agriculture-project KSCAP Project Appraisal: http://documents.worldbank.org/curated/en/440241486868444705/pdf/Kenya-PAD-01182017.pdf (CIAT cited pages:5,34,35,39,52,55) County profiles: Busia: https://drive.google.com/file/d/0B8zVN7H9H_6Qek5ONFFpV0sxNzg/view?usp=sharing Embu: https://drive.google.com/file/d/0B9Up_9s6fUQVTlVON2RYbmktSmc/view?usp=sharing Garissa: https://drive.google.com/file/d/0B9Up_9s6fUQVbm5ISGc1MG1MMDA/view?usp=sharing Homa Bay: https://drive.google.com/file/d/0B9Up_9s6fUQVc3ZwX2RQZUJzVW8/view?usp=sharing Kilifi: https://drive.google.com/file/d/0B9Up_9s6fUQVZFR4bGVzU0F2ZzQ/view?usp=sharing Kwale: https://drive.google.com/file/d/0B9Up_9s6fUQVUkZvWHhzYkw0NUE/view?usp=sharing Makueni: https://drive.google.com/file/d/0B9Up_9s6fUQVdUpwX29PZ25jOUU/view?usp=sharing Meru: https://drive.google.com/file/d/0B9Up_9s6fUQVbEw3X0VvVjJMaVU/view?usp=sharing Nakuru: https://drive.google.com/file/d/0B9Up_9s6fUQVSWpVY09McWNXZEk/view?usp=sharing Nyandarua: https://drive.google.com/file/d/0B9Up_9s6fUQVczM5UGktUkZDWlE/view?usp=sharing Nyeri: https://drive.google.com/file/d/0B8zVN7H9H_6QYmhFZGNMMGMyVEU/view?usp=sharing Siaya: https://drive.google.com/file/d/0B9Up_9s6fUQVWGNrV2x6VnhGUms/view?usp=sharing Taita Taveta: https://drive.google.com/file/d/0B9Up_9s6fUQVZExkb2pGS04zMU0/view?usp=sharing Tana River: https://drive.google.com/file/d/0B9Up_9s6fUQVdU1uZDJ4bEpMcTQ/view?usp=sharing West Pokot: https://drive.google.com/file/d/0B9Up_9s6fUQVTlhTY0xwYmNOVm8/view?usp=sharing

Output Used: The Government of Kenyan (GoK) and World Bank used the CSA County Profile as an input into the design of the US$250 million KSCAP. The KCSAP funded CIAT to develop county-level Climate Risk Profiles as inputs to support scaling-out of technologies, interventions and management practices (TIMPs) through KCSAP investments.

References Case: Approved KCSAP Website - http://www.worldbank.org/en/news/loans-credits/2017/02/09/kenya-climate-smart-agriculture-project KSCAP Project Appraisal: http://documents.worldbank.org/curated/en/440241486868444705/pdf/Kenya-PAD-01182017.pdf (CIAT cited pages:5,34,35,39,52,55) CCAFS brief on CSA in Kenya: https://ccafs.cgiar.org/publications/climate-smart-agriculture-kenya#.WJzIVVMrJhE

Primary 2019 outcome indicator(s):

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

Link between outcome story and and the FP Outcome(s): <Not Defined>

Annex uploaded:
https://marlo.cgiar.org/data/ccafs/projects//101/caseStudy/Framework%20CSA%20paper%20final.pdf

Case Study #124

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

Year: 2016

Project(s): P108

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

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

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

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

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

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

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

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

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

Primary 2019 outcome indicator(s):

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

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

Annex uploaded:

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

Case Study #125

Title: World Bank promotes nuanced philosophy for CSA

Year: 2016

Project(s): P56

Outcome Statement: World Bank indicates CSA requires a nuanced philosophy for implementation. In a widely broadcast Webinar, A. Braimoh (WB Ag. Global Practice) used CCAFS-P4S slides to make the statement that, "many interventions can be climate-smart somewhere but none are likely to be climate-smart everywhere". This signals that this nuanced philosophy to CSA has influenced World Bank thinking. The significance is that the World Bank has stated that all of their agricultural programming will be climate-smart by 2019.

Research Outputs: The CSA Compendium. The CSA Copmendium is a meta-analysis that examines the scientific basis of CSA, trying to answer the what is the evidence base for field interventions' impact on productivity, resilience and mitigation. It is the largest agricultural meta-analysis to date. • Rosenstock et al. 2015. What is the scientific basis for CSA? CCAFS InfoNote. • Rosenstock et al. 2016. The scientific basis of climate-smart agriculture: A systematic review protocol. CCAFS Working Paper #138. • Lamanna et al. 2016. Evidence-based opportunities for out-scaling climate-smart agriculture in East Africa. CCAFS Worlking Paper #172. • Countless ppts at partner meetings

Research Partners: ICRAF: Leads implementation of Compendium. FAO: Supports general Compendium analysis, added component on barriers to adoption CIAT: Supported Compendium analysis is Tanzania and Uganda. CCAFS FP2 (Andy): Financial and technical support promoting Compendium CCAFS FP3 (Lini): Financial support plus lead on global mitigation Compendium analysis.

Activities: This outcome is the result of near continuous engagements showing preliminary results of the Compendium with partners. The initial phrase came out of the Alliance for CSA in Africa Technical Partner Meeting in Zambia in February 2015. Then the slide was created for the Montepellier CSA Science conference. It has since been shown at countless partner opportunities such as USAID CSA GLEEs, GIZ training in Southern Africa, International Ferilizer Association Annual Meeting, Tanzania CSA Meetings, ACSAA Technical Meetings, etc.

Non-Research Partneres: Preliminary results from the Compendium have been shown to a large number of non-research partners including but not limited to USAID, World Bank, GIZ, Care, CRS, Oxfam, World Vision, Concern, NEPAD, COMESA, national governments in multiple African Countries, etc.

Output Users: The specific output user for this case is the World Bank. The fundamental conclusion derived from preliminary results of the Compendium was promoted by the World Bank, without P4S actively engaging them on it.

Evidence Outcome: See presentation by A. Braimoh attached and given during webinar.

Output Used: It appears that the outputs and engagements have influenced thinking at the World Bank in ways that representative promote this nuanced view.

References Case: Rosenstock et al. 2015. What is the scientific basis for CSA? CCAFS InfoNote. Rosenstock et al. 2016. The scientific basis of climate-smart agriculture: A systematic review protocol. CCAFS Working Paper #138. Lamanna et al. 2016. Evidence-based opportunities for out-scaling climate-smart agriculture in East Africa. CCAFS Worlking Paper #172.

Primary 2019 outcome indicator(s):

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

Link between outcome story and and the FP Outcome(s): <Not Defined>

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5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>
F2 (before F1 - Andy): Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG:** <Not Defined> **Brief`2019 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined>

Major Output groups - 2016
F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2016 contribution towards the selected MOG:** We will work with partners (e.g. NEPAD, Africa CSA Alliance, World Bank CARE) to develop financing and investment mechanisms that promote the scaling of CSA in Africa. **Brief summary of your actual 2016 contribution towards the selected MOG:** We have continued to work with Alberto Milan and Dorcas Robinson, and will likely submit a proposal for funding of using Care's Village Savings and Loan Association model to scale up CSA interventions. **Brief`2016 plan of the gender and social inclusion dimension of the expected annual output:** Gender and social inclusion are to dimensions that are planned to be included as factors considered by the financing and investment mechanisms. **Summary of the gender and social inclusion dimension of the 2016 outputs:** Savings and loan cooperatives have a major gender component, as women are often very involved. This work is integrating gender considerations in to the design, implementation and monitoring.
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2016 contribution towards the selected MOG:** - In 2016, we will have finalized our clearinghouse of information on CSA that includes the spatial targeting tool, CSA Compendium, and Prioritization Framework **Brief summary of your actual 2016 contribution towards the selected MOG:** We have developed a Partnerships for Scaling CSA website: http://p4s.ccafs.cgiar.org/. This website provides tools, project examples and live science blogging on CSA (the first 'open science' approach in the CGIAR). **Brief`2016 plan of the gender and social inclusion dimension of the expected annual output:** Gender is one of indicators included in data in spatial targeting tool, CSA Compendium (e.g., work hours), and Prioritization Framework. **Summary of the gender and social inclusion dimension of the 2016 outputs:** Tools and approaches that address gender, such as the RHOMIS household survey approach, are included in the P4S website.

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - We will have develop prioritized CSA portfolios for programs and government that attempt to incorporate a range of stakeholder viewpoints and address productivity, adaptive capacity, food security, and social equity needs.

Brief summary of your actual 2016 contribution towards the selected MOG: We worked with stakeholders in Ghana to develop a CSA investment portfolio using cost-benefit analysis. Worked with Ethiopian partners in the government to develop a framework for CSA Prioritization within the context of their national agricultural investment programs.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: - Stakeholders are afforded the option to prioritize base on gender considerations. When they do not select those indicators as priority, an ex post analysis (qualitative) of the potential effect of prioritization will be conducted.

Summary of the gender and social inclusion dimension of the 2016 outputs: We worked with Gallway University (Colm Duffy, Una Murray, and Charles Spillane) to develop a working paper "National level indicators for gender, food security, nutrition and health in Climate-Smart Agriculture (CSA) activities" . The paper is in final revisions before being published through CCAFS.

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG: - We will have develop prioritized CSA portfolios for programs and government using a range of methods including but not limited to Bayesian Networks, Fuzzy Cognitive Modeling and Systematic Review (e.g. Meta-analysis)

Brief summary of your actual 2016 contribution towards the selected MOG: We worked with stakeholders in Ghana to develop a CSA investment portfolio using cost-benefit analysis. Worked with Ethiopian partners in the government to develop a framework for CSA Prioritization within the context of their national agricultural investment programs.

Brief`2016 plan of the gender and social inclusion dimension of the expected annual output: - Gender considerations will be included as both inputs into models and as an option to be prioritize upon when possible.

Summary of the gender and social inclusion dimension of the 2016 outputs: We worked with Gallway University (Colm Duffy, Una Murray, and Charles Spillane) to develop a working paper "National level indicators for gender, food security, nutrition and health in Climate-Smart Agriculture (CSA) activities" . The paper is in final revisions before being published through CCAFS.

Major Output groups - 2015

F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, 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: P4S supported the development of National CSA Framework Programs in 5 African countries (Botswana, Kenya, Namibia, Tanzania, and Uganda). These framework programs provide the framework for scaling CSA within the countries, a basis for developing large funding proposals (e.g. GCF), and integration in to sub-national implementation plans.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: P4S has worked with researchers Royal Galloway University to develop CSA gender indicators for use in the CSA Profiles being developed for six African countries and the CCAFS CSA Prioritization Framework.

F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (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: The Climate Wizard was updated to incorporate the CMIP5 GCMs, and outputs from this were integrated into the CSA National Framework Programs in five African Countries. In addition, a draft version of an interactive web mapping tool has been developed to support the Africa CSA Alliance planning efforts (http://nkoech.github.io/africacsa/)

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

Summary of the gender and social inclusion dimension of the 2015 outputs: This output is very focus on making climate modeling more accessible to policy and planning, and so does not directly include a gender component.

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

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

Brief summary of your actual 2015 contribution towards the selected MOG: P4S has been working with governments in Ghana and Ethiopia to prioritize context specific CSA options for scaling up CSA in the two countries. In addition, we have been working with World Vision in Niger to help them mainstream CSA into their new agricultural strategy.

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

Summary of the gender and social inclusion dimension of the 2015 outputs: Gender is considered as a specific outcome within the CSA prioritization framework and is listed as an outcome in the qualitative matrix developed in collaboration with World Vision and which is used in the NEPAD practical guide.

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

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

Brief summary of your actual 2015 contribution towards the selected MOG: P4S has been working on developing both simple (weighted means) and more sophistical (Bayesian networks) algorithms for targeting CSA. Both approaches have been piloted with the Tanzania Ministry of Agriculture, Livestock, and Fisheries and other ACSAA partners. Both were well received, and have been requested by other partners (e.g., ACSAA-Uganda).

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

Summary of the gender and social inclusion dimension of the 2015 outputs: Gender is considered in both targeting methods. The weighted means analysis, however, depends on availabile data, of which there is very little for gender. The Bayesian network analysis on the other hand allows for integration of qualitative and quantitative data and thus it is easier to include perceptions on gender.

Major Output groups - 2014
F2 (before F1 - Andy): Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>
F2 (before F1 - Andy): Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>
F2 (before F1 - Andy): Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2014 contribution towards the selected MOG:** <Not Defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not Defined> **Brief`2014 plan of the gender and social inclusion dimension of the expected annual output:** <Not Defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not Defined>

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

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

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

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

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

5.2 Deliverables

D2026 - CSA Compendium Protocol Working Paper, CCAFS 138

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Analysis of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/70967

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

Disseminated title: The scientific basis of climate-smart agriculture: A systematic review protocol

Description / Abstract: Background: 'Climate-smart agriculture' (CSA)—agriculture and food systems that sustainably increase food production, improve resilience (or adaptive capacity) of farming systems, and mitigate climate change when possible—has quickly been integrated into the global development agenda. However, the empirical evidence base for CSA has not been assembled, complicating the transition from CSA concept to concrete actions, and contributing to ideological disagreement among development practitioners. Thus, there is an urgent need to evaluate current knowledge on the effectiveness of CSA to achieve its intended benefits and inform discourse on food, agriculture, and climate change. This systematic review intends to establish the scientific evidence base of CSA practices to inform the next steps in development of agricultural programming and policy. We will evaluate the impact of 73 promising farm-level management practices across five categories (agronomy, agroforestry, livestock, postharvest management, and energy systems) to assess their contributions to the three CSA pillars: (1) agronomic and economic productivity, (2) resilience and adaptive capacity, and (3) climate change mitigation in the developing world. The resulting data will be compiled into a searchable Web-based database and analytical engine that can be used to assess the relative effectiveness and strength of evidence for CSA, as well as identify best-fit practices for specific farming and development contexts. This represents the largest meta-analysis of agricultural practices to date. Methods/Design: This protocol sets out the approach for investigating the question: How do farm-level CSA management practices and technologies affect

food production and/or farmers' incomes, resilience/adaptive capacity, and climate change mitigation in farming systems of developing countries? The objective of this ongoing systematic review is to provide a first appraisal of the evidence for CSA practices in order to inform subsequent programming. The review is based on data found in English-language peer-reviewed journals with searches using terms relevant to CSA practices and CSA outcomes. Searches were conducted via Web of Science (WoS) and Scopus. Articles located were screened first by abstract and then full text according to predefined eligibility criteria for inclusion in the review. Data capturing the context of the study (e.g., geographic location, environmental context), management practices, and impacts (e.g., indicators of CSA outcomes) will be compiled from those studies that meet the predetermined criteria. Statistical relationships between practices and impacts will be evaluated via meta-analytical approaches including response ratios and effect sizes. Mechanisms to identify bias and maintain consistency continue to be applied throughout the review process. These analyses will be complemented with an analysis of determinants of/barriers to adoption of promising CSA practices covered in the meta-analysis. Results of the review will be incorporated into a publicly available Web-based database. Data will be publicly available under Creative Commons License in 2016.

Publication / Creation date: 2016-02-01

Language: en

Country: <Not Defined>

Keywords: CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY,CLIMATE-SMART AGRICULTURE,ADAPTATION,MITIGATION

Citation: Rosenstock TS, Lamanna C, Chesterman S, Bell P, Arslan A, Richards M, Rioux J, Akinleye AO, Champalle C, Cheng Z, Corner-Dolloff C, Dohn J, English W, Eyrich AS, Girvetz EH, Kerr A, Lizarazo M, Madalinska A, McFatridge S, Morris KS, Namoi N, Poultouchidou N, Ravina da Silva M, Rayess S, Ström H, Tully KL, Zhou W. 2016. The scientific basis of climate-smart agriculture: A systematic review protocol. CCAFS Working Paper no. 138. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/70967

DOI: <Not Defined>

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- Dohn J, -
- English W, -
- Eyrich AS, -
- Girvetz, - Evan H.
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- Lizarazo, - Miguel

- Madalinska A, -
- McFatridge S, -
- Morris KS, -
- Namoi N, -
- Poultouchidou N, -
- Ravina da Silva M, -
- Rayess S, -
- Ström H, -
- Tully KL, -
- Zhou W, -

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

D667 - Participatory processes used to target climate-smart agriculture: A review

Main Information

Type: Reports and other publications

Subtype: Research workshop report

Status: Cancelled

Year of expected completion: 2016

Justification of new expected date of completion: This paper became redundant with the special issue of Agricultural Systems being published this year, led by Thornton and Prasad. There is still some need to compare and contrast CCAFS tools being used. P4S, as well as other groups, have been talking about this for some time. It might be worth coming together to write something synthetic in the future but that would be beyond P4S. Overall, given the emerging objectives and opportunities in 2017, this output seems unlikely to change the conversation and contribute to outcomes as opposed to other priorities.

Cross-cutting dimension:

- Gender

Gender level(s):

- Collection of sex-disaggregated data

Deliverable dissemination

Is this deliverable already disseminated: No

Open access: <Not Defined>

License adopted: <Not Defined>

Deliverable Metadata

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

Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:

<Not Defined>

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible
CIAT - Centro Internacional de Agricultura Tropical	Girvetz, Evan<e.girvetz@cgiar.org>	Other

D2028 - Evidence-based opportunities for outscaling CSA in East Africa, CCAFS WP #172 - P4S with PACCA

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/77180

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

Disseminated title: Evidence-based opportunities for out-scaling climate-smart agriculture in East Africa

Description / Abstract: Climate-smart agriculture (CSA) is being widely promoted as a solution for food insecurity and climate change adaptation in food systems of sub-Saharan Africa, while simultaneously reducing the rate of greenhouse gas emissions. Governments throughout Africa are writing policies and programs to promote CSA practices despite uncertainty about the ability for practices to meet the triple CSA objectives of CSA. We conducted a systematic review of 175 peer-reviewed and grey literature studies, to gauge the impact of over seventy potential CSA practices on CSA outcomes in Tanzania and Uganda. Using a total of 6,342 observations, we found that practice impacts were highly context (i.e. farming system and location) specific. Nevertheless, practice effect across CSA outcomes generally agreed in direction. While our results suggest that CSA is indeed possible, lack of mitigation data precludes a more conclusive statement. Furthermore, the inclusion of potential adoption rates changes the potential of CSA practices to achieve benefits at scale. Given the uncertainty and variable impacts of practices across regions and outcomes, it is critical for decision makers to prioritize practices based on their desired outcomes and local context.

Publication / Creation date: 2016-10-01

Language: en

Country: TANZANIA,UGANDA

Keywords: AGRICULTURE,FOOD SECURITY,CLIMATE CHANGE,CLIMATE-SMART AGRICULTURE,MAIZE,ADAPTATION,RESILIENCE,DECISION MAKING

Citation: Lamanna C, Namoi N, Kimaro A, Mpanda M, Egeru A, Okia C, Ramirez-Villegas J, Mwongera C, Ampaire E, van Asten P, Winowiecki L, Läderach P, Rosenstock TS. 2016. Evidence-based

opportunities for out-scaling climate-smart agriculture in East Africa. CCAFS Working Paper no. 172. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/77180

DOI: <Not Defined>

Creator / Authors:

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- Namoi, - Nictor
- Kimaro, - Anthony A.
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- Mwongera, - Caroline
- Ampaire, - Edidah L.
- Van Asten, - Piet
- Winowiecki, - Leigh A.
- Läderach, - Peter
- Rosenstock, - Todd S.

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

D2764 - CSA101

Main Information

Type: Outreach products

Subtype: Website

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

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

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://csa.guide

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

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

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible
CIAT - Centro Internacional de Agricultura Tropical	Girvetz, Evan<e.girvetz@cgiar.org>	Other

D2765 - CSA X-ray: Conservation Agriculture

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Monitoring/impact assessment of gender outcomes of research/innovations/interventions/polices

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: http://hdl.handle.net/10568/79900

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

Disseminated title: Conservation agriculture in East and Southern Africa main messages

Description / Abstract: What is and what is not climate-smart agriculture (CSA)? That existential question sparks debate, complicates implementation and fractures the development community. Many institutions are developing 4-10 page 'technical briefs' describing the 'climate-smartness' of interventions (ie, the impact of interventions on indicators of productivity, resilience and mitigation) to answer this question. Oftentimes, technical briefs, however, are data-lite increasing potential for biased assessments. CSA X-Rays were designed to provide a counter point to this: to be pithy and detailed analysis of what science and scientists tell us about the 'climate-smartness' of CSA interventions or CSA in a specific location. In short, this pilot project intended to innovate on the 'CSA technical brief'. This CSA-Xray examine the climate-smartness of conservation agriculture.

Publication / Creation date: 2017-02-01

Language: en

Country: <Not Defined>

Keywords: CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY,CLIMATE-SMART AGRICULTURE

Citation: Lamanna C, Thierfelder C, Rosenstock T. 2016. Conservation agriculture in East and Southern Africa main messages. Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/79900

DOI: <Not Defined>

Creator / Authors:

- Lamanna, - Christine
- Rosenstock, - Todd
- Thierfelder, - Christian

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

D2766 - Climate Smart Agriculture in Tanzania

Main Information

Type: Reports and other publications

Subtype: Policy brief/policy note/briefing paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Monitoring/impact assessment of gender outcomes of research/innovations/interventions/polices

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: http://hdl.handle.net/10568/79902

Open access: Yes

License adopted: No

Deliverable Metadata

Disseminated title: Climate Smart Agriculture in Tanzania main messages

Description / Abstract: What is and what is not climate-smart agriculture (CSA)? That existential question sparks debate, complicates implementation and fractures the development community. Many institutions are developing 4-10 page 'technical briefs' describing the 'climate-smartness' of interventions (ie, the impact of interventions on indicators of productivity, resilience and mitigation) to answer this question. Oftentimes, technical briefs, however, are data-lite increasing potential for biased assessments. CSA X-Rays were designed to provide a counter point to this: to be pithy and detailed analysis of what science and scientists tell us about the 'climate-smartness' of CSA interventions or CSA in a specific location. In short, this pilot project intended to innovate on the 'CSA technical brief'. This CSA-Xray examine the climate-smartness of interventions in Tanzania.

Publication / Creation date: 2017-02-01

Language: en

Country: TANZANIA

Keywords: CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY,CLIMATE-SMART AGRICULTURE

Citation: Lamanna C, Rosenstock T. 2016. Climate Smart Agriculture in Tanzania main messages. Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/79902

DOI: <Not Defined>

Creator / Authors:

- Lamanna, - Christine

- Rosenstock, - Todd

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

D2767 - Surveillance of Climate-smart Agriculture for Nutrition (SCAN): Innovations for monitoring at scale

Main Information

Type: Reports and other publications

Subtype: Policy brief/policy note/briefing paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- Gender

Gender level(s):

- Monitoring/impact assessment of gender outcomes of research/innovations/interventions/polices

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: http://hdl.handle.net/10568/79903

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

Disseminated title: Surveillance of Climate-smart Agriculture for Nutrition (SCAN): Innovations for monitoring climate, agriculture and nutrition at scale

Description / Abstract: Climate change will affect the ability to deliver not only the quantity but also the type and quality of food necessary for nutritious diets. Global and regional 'climate-smart agriculture' initiatives offer an opportunity to mitigate climate impacts and improve nutrition outcomes at scale. The Surveillance of Climate-smart Agriculture for Nutrition (SCAN) project develops new way to acquire, integrate and analyze data to determine what is climate-smart and nutrition-sensitive.

Publication / Creation date: 2017-02-01

Language: en

Country: <Not Defined>

Keywords: CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY,CLIMATE-SMART AGRICULTURE,NUTRITION,MONITORING

Citation: Rosenstock T, Lamanna C, DeRenzi B, Chesterman S, Kadiyala S, Ng'endo M, Chibuye K, Choga N, Van Wijk M. 2016. Surveillance of Climate-smart Agriculture for Nutrition (SCAN): Innovations for monitoring climate, agriculture and nutrition at scale. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/79903

DOI: <Not Defined>

Creator / Authors:

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- Lamanna, - Christine
- DeRenzi, - Brian
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- Kadiyala, - Suneetha
- Ng'endo, - Mary
- Chibuye, - Kayokwa
- Choga, - Ngonidzashe
- Van Wijk, - Mark

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

D1311 - Prioritized list of CSA practices in two target countries that will be specified during project

Main Information

Type: Reports and other publications

Subtype: Discussion paper/Working paper/White paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:
<Not Defined>

Deliverable dissemination

Is this deliverable already disseminated: No
Open access: Yes
License adopted: CC_BY_NC_SA

Deliverable Metadata

Disseminated title: Cost and benefit analysis for climate smart agricultural (CSA) practices in Coastal Savanna Agro-ecological Zone (AEZ) of Ghana
Description / Abstract: Most of the countries in sub-Saharan Africa (SSA) including Ghana depend heavily on agriculture for income and food security. Any effort aiming to sustain and improve the productivity in agriculture is therefore an important crucial step toward improving the people livelihoods. Adoption of climate smart practices is thought to be one of the key steps towards reducing threat to sustainability of agricultural production in Ghana. Yet, despite the concern about the threat caused by climate variability and change, little empirical analysis has been done on how best to tackle it. However, recently many of the development and government programs are being designed in such a way that if adopted can be able to tackle problems associated with climate variability and change. Majority of the farmers have have now adopted these practices. However, a gap exist about the cost effectiveness of adopting these practices – a key key ingredient to the policy making processes. The results presented in this report attempt to bridge this knowledge gap, using ex-ante cost benefit analysis to assess the cost-effectiveness of some of the proposed climate smart agricultural practices. The study's main goal is to focus on private and social benefits and costs of selected climate smart agricultural practices as a step toward understanding their private and potential social benefit and cost and their implication in terms of deterring their adoptions from the farmers' view point and the potential social benefit if adopted.
Publication / Creation date: <Not Defined>
Language: English
Country: Ghana
Keywords: climate-smart agriculture; cost-benefit analysis; investment planning
Citation: <Not Defined>
Handle: <Not Defined>
DOI: <Not Defined>

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Deliverable Quality check

FAIR Compliant: F A I R

Deliverable Data sharing

Deliverable files:

https://marlo.cgiar.org/data/ccafs/projects//56/deliverableDataSharing/Ghana%20CBA%20Draft%20report%2004%20Feb%2017.pdf

Partners contributing to this deliverable:

Institution	Partner	Type
CIAT - Centro Internacional de Agricultura Tropical	Girvetz, Evan <e.girvetz@cgiar.org>	Responsible

D416 - CSA Targets and mapping tool by Farming System and Administrative Unit for Africa

Main Information

Type: Data, models and tools

Subtype: Data portal/Tool/Model code/Computer software

Status: Complete

Year of expected completion: 2015

New expected year: 2016

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: Other

Dissemination URL: http://nkoech.github.io/africacsa/

Open access: Yes

License adopted: CC_BY

Deliverable Metadata

Disseminated title: CSA Targets and mapping tool by Farming System and Administrative Unit for Africa

Description / Abstract: The mapping tool provides information at the national, and two sub-national levels on number of farmers, types of farming systems and future climate change projections. This tool was developed to provide information that support investment planning in climate smart agriculture by development parters, and was developed with the Africa CSA Alliance as one of the primary users (http://AfricaCSA.org).

Publication / Creation date: 2015

Language: English

Country: <Not Defined>

Keywords: <Not Defined>

Citation: Girvetz, E.H., N. Koech, and T. Rosenstock. 2016. Climate-Smart Agriculture Targets and mapping tool by Farming System and Administrative Unit for Africa. http://nkoech.github.io/africacsa/

Handle: <Not Defined>

DOI: <Not Defined>

Creator / Authors:

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Partners contributing to this deliverable:

Institution	Partner	Type

CIAT - Centro Internacional de Agricultura Tropical	Girvetz, Evan <e.girvetz@cgiar.org>	Responsible

D2768 - Evidence- and risk-based planning for food security under climate change

Main Information

Type: Reports and other publications

Subtype: Policy brief/policy note/briefing paper

Status: Complete

Year of expected completion: 2016

New expected year: <Not Defined>

Cross-cutting dimension:

- N/A

Deliverable dissemination

Is this deliverable already disseminated: Yes

Dissemination Channel: CGSpace

Dissemination URL: http://hdl.handle.net/10568/79904

Open access: Yes

License adopted: CC_BY_NC_ND

Deliverable Metadata

Disseminated title: Evidence- and risk-based planning for food security under climate change: Results of a modeling approach for climate-smart agriculture programming

Description / Abstract: Planning robust climate-smart development programs can be done today with existing information. We propose a risk-household-option modeling approach to address household food security under climate change in Africa. hrough a case study in Niger, we demonstrate that prioritizing CSA is possible by taking into account livelihood status, risks, and potential effects of CSA practices.

Publication / Creation date: 2017-02-01

Language: en

Country: <Not Defined>

Keywords: CLIMATE CHANGE,AGRICULTURE,FOOD SECURITY,CLIMATE-SMART AGRICULTURE,HOUSEHOLDS,MODELS

Citation: Lamanna C, Ramirez-Villegas J, Van Wijk M, Corner-Dolloff C, Girvetz E, Rosenstock T. 2016. Evidence- and risk-based planning for food security under climate change: Results of a modeling approach for climate-smart agriculture programming. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Handle: http://hdl.handle.net/10568/79904

DOI: <Not Defined>

Creator / Authors:

- Lamanna, - Christine
- Ramirez-Villegas, - Julian
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- Corner-Dolloff, - Caitlin
- Girvetz, - Evan

- Rosenstock, - Todd

Deliverable Quality check

FAIR Compliant: F A I R

Partners contributing to this deliverable:

Institution	Partner	Type
ICRAF - World Agroforestry Centre	Rosenstock, Todd <t.rosenstock@cgiar.org>	Responsible

5.3 Project Highlights

No project highlights added

6. Activities

A60 - Baselining and foresight

Description: This activity will assemble data, develop five analyses, and package the information into six key products that provide baseline and foresight information on scaling CSA relevant to the Africa CSA Alliance (ACSAA), national level decision makers, and international donors. This will include gathering a wide range of geo-spatial (GIS) information, data on CSA practice effectiveness, and indicators of institutional capacity/need at the national level. This information will be used as a basis for the following 5 analyses: (1) risk and vulnerability analysis; (2) CSA practice assessment; (3) farming systems CSA target setting; (4) National level policy assessment; and (5) institutional readiness analysis. These analyses will be packaged into a set of products to provide the baseline context and foresight for CSA investment decisions. These products will disseminated through various avenues including integration into a website format that is part of the broader ACSAA, P4S and/or CCAFS websites (e.g. http://AfricaCSA.org).

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: CIAT - Centro Internacional de Agricultura Tropical Girvetz, Evan <e.girvetz@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: The P4S project has made good progress on the Baselining and Foresight activity. In particular the CSA Profiles work grew substantially in 2016 with CSA Profiles being developed for nine countries in Africa and many other countries globally. And the profiles work grew by downscaling the approach to the county-level to develop County Climate Risk Profiles were developed for 16 counties in Kenya in collaboration with the Ministry of Agriculture, Livestock and Fisheries as part of the US$ 250 million World Bank Kenya Climate Smart Agriculture Project. This is being written into a CCAFS Outcome. In addition, this activity moved forward the climate change mapping tool Climate Wizard, completed an African-wide mapping of targets for the Africa CSA Alliance, and improved approaches for CSA Practice assessments, among other work. The work in the first two years of the P4S project set us up well for success in CCAFS Phase 2.

Deliverables in this activity:

- D418: The African Perspective on CSA
- D930: Interactive map on CCAFS CSA Website
- D420: Practice by Farming System Research Paper
- D1446: CSA Country Plans (5 Countries)
- D1932: CSA Country Profiles for Africa -- 2017
- D1083: Africa CSA Baseline Targets Update and Assessment
- D1933: Climate Wizard API and Integration WOCAT Climate Change Adaptation Module
- D405: CSA Spatial Database
- D1177: Website for curriculum repository
- D1692: Blog -- The Africa CSA Alliance: path to implementation
- D1930: Kenya County Climate Risk Profiles

A61 - Decision support tool development and implementation

Description: This activity develops and uses co-learning partnerships with the members of the African CSA Alliance (e.g., NEPAD and iNGOs including CARE, Concern, Oxfam, CRS, WorlVision) and the RECs (ECOWAS, COMESA) to co-develop, pilot and revise and apply decision support tools for prioritizing and targeting CSA. It uses the assessments developed in Activity 1: risk and vulnerabilities, farming systems, practice and technology assessment and country readiness assessment as input data to help countries and development programs target their programming and policies in an efficient and effective way and to provide an interface between the information gathered under Activity 1 and the main decision makers. The immediate outputs of this activity are refined participatory processes for co-developing CSA project and investment portfolios optimized for next-user's objectives.

Start date: Jan 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Rosenstock, Todd <t.rosenstock@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: The P4S project has made some progress on the Decision Support activity. In particular, the CSA Compendium began to mature. Though much of the data are still being cleaned, preliminary results are being shown to next users including GIZ, GACSA, Ministry of Agriculture, Livestock and Fisheries in Tanzania, One Acre Fund, and CARE, etc with very positive from all. The Compendium was included in AGRA's annual report. At the same time, we started to work on innovations in monitoring that would help inform decisions. This approach to decision support, to facilitate adaptive management was a new angle P4S took based on expressed needs of partners on metrics and monitoring. There is still a ways to go to refine decision support tools for CSA. Currently the decision timeframe space is too short and the tools still too theoretical to be sufficiently responsive. We will need to simplify approaches to match need.

Deliverables in this activity:

- D418: The African Perspective on CSA
- D675: Participatory workshops to co-develop and pilot prioritization tools
- D1123: Practical guidelines for implementing CA and CAWT
- D420: Practice by Farming System Research Paper
- D1958: Look who's talking: using mobile phone to collect household data from rural women
- D1957: Feasibility of using mobile phones and live operator calls to for monitoring
- D703: Paper on technical aspects of decision support for climate-smart agriculture (submitted)
- D415: CSA Compendium
- D709: Participatory modeling workshops with decision makers to create investment portfolios
- D668: Co-developed decision support/prioritization tools
- D667: Participatory processes used to target climate-smart agriculture: A review
- D2025: CSA Compendium InfoNote
- D2026: CSA Compendium Protocol Working Paper, CCAFS 138
- D2765: CSA X-ray: Conservation Agricu

A390 - (Bilateral) Climate Smart Agriculture (CSA) Strategic Support for Feed the Future Stakeholders and National Institutions

Description: USAID BFS wishes to provide technical capacity and support for FTF governments, regional entities, local institutions, and partners to strategically plan and prioritize CSA practices for integration into existing National Agricultural Investment Plans, especially in SSA. The Bureau seeks to build capacity for data-informed decision-making especially using geospatial data and analysis. This proposed project for USAID will build on and leverage these on-going CIAT and CCAFS efforts by providing targeted Feed the Future (FTF) countries with packaged information, tools, and engagement platforms that promote data-informed decision-making in support of CSA as a part of NAIPs and other national/sub-national level agricultural planning processes. Specifically the project aims to: a) Increase decision-maker understanding of the CSA practices and associated barriers to implementation of CSA. b) Support national level planning of CSA investments as part of NAIPs. c) Engage with CAADP to improve capacity to support Africa countries with CSA planning and implementation.

Start date: Jan 2015 **End date:** Mar 2017

Activity leader: CIAT - Centro Internacional de Agricultura Tropical Girvetz, Evan <e.girvetz@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: CSA Country Profiles are in the process of being developed for Ethiopia, Ghana, Mali, Niger, Senegal, and Uganda. The work is going slower than planned, which has provided good learning for improving the process of CSA Profile development. A CSA Prioritization Process was completed in Ghana (report forthcoming in 2017) and a CSA Prioritization framework tailored to Ethiopian agricultural programmes was developed. Reports on both of these will be delivered in 2017.

Deliverables in this activity:

- D417: Country Profiles
- D709: Participatory modeling workshops with decision makers to create investment portfolios

A657 - (Bilateral) The CSA Papers

Description: This activity, ?The Climate-Smart Agriculture (CSA) Papers?, supports the documentation and sharing of lessons from unpublished or on-going research and development interventions relating to climate-smart agriculture (CSA) in eastern and southern Africa (ESA). The project specifically provides a mechanism for small grants, networking and travel awards for the write-up of analysis documenting opportunities for improving climate resilience of agricultural systems, and the presentation of the most significant results/lessons. By supporting the dissemination of information, the project strengthens the community of researchers and implementing agencies testing and rolling out CSA strategies in ESA.

Start date: Jan 2017 **End date:** Jul 2018

Activity leader: ICRAF - World Agroforestry Centre Rosenstock, Todd <t.rosenstock@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: Starts in 2017

Deliverables in this activity:

- D2015: The CSA Papers

A659 - (Bilateral) Design of Climate Risk Profiles

Description: This consultancy will provide key information on climate change risk and vulnerability in the target counties for use to i) improve the ability of participating counties and communities in the arid and semi-arid lands to plan and implement climate change adaptation measures; ii) support capacity building for mainstreaming climate change considerations into development planning; iii) facilitate partnerships around climate change adaptation, iv) enhance dialogue on the intertwining land and climate change agendas, and, v) in developing knowledge information products for scaling up climate risk management at the community level. Delivery on this consultant will be achieved through extensive collaboration with a wide range of stakeholders and institutions working on climate change at national and county levels both government and non-governmental. In particular, CIAT will collaborate with the Kenya Agricultural and Livestock Research Organization (KARLO) and relevant academic institutions for implementation and capacity strengthening at National and County levels.

Start date: Mar 2016 **End date:** Jul 2017

Activity leader: CIAT - Centro Internacional de Agricultura Tropical Girvetz, Evan <e.girvetz@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: 15 County Climate Risk Profiles have been developed and are currently going through final validation. The success of these county-level profiles led to the World Bank requesting P4S to develop an additional 16 County Climate Risk Profiles for us in the World Bank US$ 250 million Kenya CSA Project.

Deliverables in this activity:

- D1930: Kenya County Climate Risk Profiles

A660 - (Bilateral) Surveillance of Climate-Smart Agriculture for Nutrition (SCAN)

Description: With the rapid increase in CSA programming, it is essential to monitor and learn what works to improve the evidence base, increase programming effectiveness and outcomes for farmers. SCAN will develop metrics, monitoring techniques and analytics capable of generating information describing the C-A-N pathways. The premise underlying this project is that innovative methods and metrics used in computer science, decision science and ecology can increase the information available to understand the linkages among C-A-N and facilitate use of that evidence in programming. SCAN?s research addresses three interrelated themes of data acquisition, integration and analysis. Examples of SCAN research questions: (1) Data acquisition: What are the theoretical limits for conducting surveys using mobile technologies? (2) Data integration: Can we develop probabilistic approaches to compile information from disparate sources for monitoring? and (3) Data analysis: Do alternative statistical techniques such as ?hypervolumes? provide new means to interpret and visualize multi-dimensional relationships?

Start date: Sep 2015 **End date:** Oct 2017

Activity leader: ICRAF - World Agroforestry Centre Rosenstock, Todd <t.rosenstock@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: Significant progress on the SCAN project. This project collected data via a modified version of the Rural Household Multi-indicator Survey (RHoMIS) at two sites in Kenya. The modification added weather and wash modules to specifically look at the impact pathways between climate, agriculture and nutrition. In addition, in collaboration with the World Food Program in Kenya we conducted a mixed method assessment of the feasibility of monitoring social change via mobile phones and call centres. Here we are trying to see if we get the same response when compared to traditional face-to-face interviews. Both data collection campaigns were successful and we ended the year with piles of data to write up in 2017 (the final year for this project).

Deliverables in this activity:

- D1957: Feasibility of using mobile phones and live operator calls to for monitoring
- D1958: Look who's talking: using mobile phone to collect household data from rural women
- D2767: Surveillance of Climate-smart Agriculture for Nutrition (SCAN): Innovations for monitoring at scale

A662 - (Bilateral) Evaluating the climate-smartness of practices and technologies in Tanzania

Description: This project collaborates with IITA and FAO to build capacity in Tanzania to implement their Agricultural Development Strategy. ICRAF and therefore P4S specific role is work with the national agricultural research institute to evaluate the 'climate-smartness' of farming technologies. This means ICRAF is developing a framework for participatory selection and implementation of field research on multi-objective research. This research specifically integrates gender and cost-benefit analysis into the framework in with additional information on productivity, observables that contribute to resilience, and mitigation.

Start date: Oct 2015 **End date:** Dec 2018

Activity leader: ICRAF - World Agroforestry Centre Rosenstock, Todd <t.rosenstock@cgiar.org>
Status: On-going

Overall activity or progress made during this cycle: This project will start in 2017. However, we have had a smaller ongoing activity of the same name and funder (USDA-FAS). In this activity, we created the general framework, called CSA-Diagnostic (CSA-Dx), which is a four step approach to evaluating the climate-smartness of practices. The write up of CSA-Dx will occur in 2017. At the same time, we began implementing research at the first sites near Tabora Tanzania on farmer selected practices including cassava-legume intercropping and postharvest processing of indigenous fruits.

Deliverables in this activity:

- D2016: Data evaluating the climate-smartness of farm practices

7. Leverages

No leverages added