

# CCAFS COFUNDED W1\_W2\_W3

**Title:** Climate Services for Agriculture: Empowering Farmers to Manage Risk and Adapt to a Changing Climate in Rwanda

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	F2 - Flagship 2	<b>Mgmt. liaison contact</b>	Hansen, James <jhansen@iri.columbia.edu>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Hansen, James <jhansen@iri.columbia.edu>
<b>Project type</b>	BILATERAL	<b>Bilateral Contract/ Proposal</b>	<a href="#">Climate Service PD-Final July 2015.docx</a>

## Project is working on

Flaship(s)	Region(s)
FP2: Climate Information Services and Climate-Informed Safety Nets	RP EA: East Africa

## Core project(s) contributing to this project

This project does not have Core projects

## Summary

This project seeks to build a national chain of climate services in Rwanda. It will deliver four outcomes:

1. Agricultural extension and other intermediary organizations and communicators provide farmers across Rwanda's 30 districts with decision-relevant climate information and advisories, and empower and guide them to use the information to manage risk.
2. Agricultural and food security decision-makers in the Ministry of Agriculture, and other relevant agencies and institutions, use climate information to respond to climate-related risks and to inform decisions that build the resilience of farmers.
3. Meteo-Rwanda designs, delivers, and incorporates user feedback into a growing suite of weather and climate information products and services tailored to the needs of agricultural and food security decision-makers.
4. A national climate services governance structure ensures sustained co-production, assessment and improvement of climate service for agriculture and food security; and facilitates a formal interface and effective dialog between the key agencies involved.

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## 2. Partners

### Partner #1 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Hansen, James <jhansen@iri.columbia.edu>	Overall project leader
Partner	Birachi, Eliud Abucheli <e.birachi@cgiar.org>	Host and supervise Project Manager (Desire Kagibu) in Kigali. Liaise with national partners.

### Partner #2

**Institution:** IRI - International Research Institute for Climate and Society

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Dinku, Tufa <tdinku@iri.columbia.edu>	Activity 2014-224 *Partner*.

### Partner #3

**Institution:** University of Reading

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Stern, Roger <r.d.stern@reading.ac.uk>	Activity 2014-224 *Partner*.

### Partner #4

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

Type	Contact	Responsibilities and contributions
Partner	Kinyangi, James <j.kinyangi@cgiar.org>	Activity 2014-224 *Leader*. Activity 2014-223 *Partner*. Host and supervise planned project leader hire.

**Partner #5****Institution:** ICRAF - World Agroforestry Centre**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Neufeldt, Henry <h.neufeldt@cgiar.org>	Activity 2014-223 *Leader*.

**Partnerships overall performance over the last reporting period:** Project activities in 2015 were limited to preparations and the start of the design phase. CIAT has done an excellent job of facilitating an efficient hiring process for Kigali-based project staff, and liaising with project partners through their Kigali office.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** Partners appear able and ready to deliver on activities that will be implemented starting in 2016.

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### 3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Rwanda

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

At the project completion, 3 million farmers across Rwanda's 30 districts will be equipped with decision-relevant operational climate services and empowered to better manage climate risks on their farms and farming enterprises. 50% of this target will be women farmers. Decisions of agricultural planners, policy makers, investors and food security decision makers will be improved based on the use of climate services and products. In addition, a national chain of climate services will be operational in Rwanda, with key national agencies capacitated to sustainably deliver climate services for farmers. Finally, credible evidence of project impact and the added value of climate services will have been generated.

**Annual progress towards outcome (end of 2015):** By end of 2015, intermediaries are trained to communicate climate information services at large scale, reaching thousands of farmers in Rwanda through seasonal planning workshops, rural radio and cell-phone based SMS platforms. A national framework for climate services starts to be organized in Rwanda, bridging the gap between climate (Meteo Rwanda), agricultural research (the Rwanda Agricultural Research Board), policy (Rwanda's Ministry of Agriculture) and farmer needs. Downscaled climate forecasts are produced by Meteo-Rwanda, and value-added with agronomic extension advisories, to provide tailored climate services that address farmer needs in the country. A robust M&E system is in place to collect baseline data against which to measure project impact for farmers in Rwanda. By end 2015, at least two thousand farmers expected to have access and begin using decision-relevant, tailored climate services to support their farm-level operations under a changing climate.

**Annual progress towards project outcome in the current reporting cycle (2015):** As a result of delayed funding (June 2015), and then delays in contracting and hiring processes, the start of project implementation was pushed to March 2016. 2015 outcome targets are also pushed back one year as a result.

**Communication and engagement activities have contributed to achieving your Project outcomes:** 2015 outcome targets are also pushed back one year as a result of delayed project start.

**Evidence documents of progress towards outcomes:** [Rwanda Project Year one work plan 16Dec15.docx](#)

**Annual progress towards outcome (end of 2016):** <Not defined>

**Annual progress towards outcome (end of 2017):** <Not defined>

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

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**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:** Assumptions still hold, but the timetable is pushed back one year due to delayed funding and delayed contracting and hiring processes.

## 4.2 Contribution to CCAFS Outcomes

**RP EA - Outcome 2019:** National Institutions, Donors and Relief Agencies are accessing and using research informed forecasting tools for timely and efficient food security decision-making and Academic, Government (e.g. Ministry of Ag.), and Development Organizations are developing and testing climate applications for agriculture to support scaling out and adoption of climate services to users (Farmer Organizations, CBOs, NGOs, agro-dealers, community radio).

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

2019	
Target value: 1	Cumulative target to date: 2
Target narrative: <Not defined>	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: <Not defined>	Cumulative target to date: 0	Target achieved: 0.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: Because of delayed funding, and delays due to contracting and hiring processes, the project implementation is starting in 2016.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: Not applicable.		

2016	
Target value: 1	Cumulative target to date: 1

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2016	
<b>Target narrative:</b> Rwanda national climate services initiative.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Not defined	

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

### 4.3 Other Contributions

**Contribution to other CCAFS Impact Pathways:** <Not defined>

**Collaborating with other CRPs:** <Not defined>

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#### **4.4 Outcome case studies**

There is not an Outcome Case Study added.

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<p><b>FP2 - MOG # 4:</b> Decision support systems improved or developed for incorporation into national food security safety net programs</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 1:</b> 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</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
Major Output groups - 2014
<p><b>FP2 - MOG # 4:</b> Decision support systems improved or developed for incorporation into national food security safety net programs</p> <p><b>Brief bullet points of your expected annual 2014 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief summary of your actual 2014 contribution towards the selected MOG:</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p> <p><b>Summary of the gender and social inclusion dimension of the 2014 outputs:</b> &lt;Not defined&gt;</p>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

#### Major Output groups - 2015

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Deferred to 2016 due to delayed start of project implementation.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Deferred to 2016 due to delayed start of project implementation.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Deferred to 2016 due to delayed start of project implementation.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Deferred to 2016 due to delayed start of project implementation.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Training for Meteo-Rwanda, associated with the IRI Data Library platform and ENACTS, started late 2015. Other activities are deferred to 2016 due to delayed start of project implementation.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Deferred to 2016 due to delayed start of project implementation.

### Major Output groups - 2016

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

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

Will develop capacity and tools to incorporate climate services into national planning by Ministry of Agriculture.

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

Improved national agricultural and food security planning will benefit from Rwanda's pro-women policy environment.

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

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

Tools and capacity development to provide climate services will be piloted in four districts.

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

Gender equity will be a criterion in planning activities, and incorporated into training for communication intermediaries.

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

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

Plan to develop basic set of online high-resolution historical and monitored climate information products for agriculture, and begin prototyping and testing downscaled seasonal forecasts.

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

Work under MOG1 will be tied to gender-sensitive communication strategies under MOG2.

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** Given the delayed start of project implementation, rapid progress in 2015 is essential.

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## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Robust Baseline data collected on farmers' climate service access and use in target project sites and controls, against which to monitor project impact	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Deferred to 2016 due to delayed start of project implementation.

Next-user
METEO-Rwanda (NHMS) / National Ministry of Agriculture / Rwanda Agriculture Board (NARES)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> NHMS climate forecasters, national agricultural planners and agricultural researchers expected to have a better understanding of farmers' climate service needs in Tanzania and Malawi; Improved tailoring of current and future climate information and forecasts to meet farmer needs in Rwanda.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> 1) CCAFS/ICRAF Report synthesizing findings from the field: "What climate services farmers need in Rwanda" (Q1 2015) 2) National Consultation Workshop on Climate Services for Agriculture and Food Security in Rwanda (Q2 2015)

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Neufeldt, Henry <h.neufeldt@cgiar.org>, ICRAF - World Agroforestry Centre
<b>Partner #2:</b> Birachi, Eliud Abucheli <e.birachi@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

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Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #2

Main Information	
<b>Title:</b> Gap bridged between Climate, agricultural Research and Farmer needs in Rwanda	
<b>MOG :</b> <Not defined>	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> <Not defined>	

Next-user
Policy-makers Africa wide; group of African climate negotiators
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Good practice case study from Rwanda informs efforts by other African nations to bridge the gap between policy/research and climate/agricultural research, to develop tailored climat services that meet the needs of farmers under a changing climate

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Peer reviewed journal Article: Bridging the Gap between Climate, agricultural Research and Farmer needs in Rwanda

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** <Not defined>

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### Deliverable #3

Submitted on 2016-04-10 at 21:21 UTC

Main Information	
<b>Title:</b> Participatory Rural radio programs and sustainable SMS-based ICT platforms enable climate service access to 3 million farmers in Rwanda	
<b>MOG :</b> <Not defined>	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Case Study
<b>Year of expected completion:</b> 2015	
<b>Status:</b> <Not defined>	

Next-user
Policy makers across Africa / African group of climate negotiators
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Good practice case study from Rwanda informs future efforts to leverage the power of ICTs and rural radio to scale up rural climate services for millions of farmers in other countries
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> 1) CCAFS Policy Brief: Participatory Rural radio programs and sustainable SMS-based ICT platforms enable climate service access to millions of farmers in Rwanda 2) Mid and End Project Knowledge Sharing Workshop- to the attention of EA and WA policy makers

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> <Not defined>

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
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Submitted on 2016-04-10 at 21:21 UTC

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

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### **5.3 Summary on next-users**

<Not defined>

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## 5.4 Project highlights

## 6. Activities

Activity #1	
<b>Title:</b> Farm-level design phase, needs assessment, and baseline	
<b>Description:</b> In the design phase, the desk review scoping study will provide the current status on climate services in Rwanda in order to get insight into current situation. The study will highlight the range of climate services projects and climate tools and products. The study will also highlight the key stakeholders providing a range of services and information that informs and supports the various technical offices, policy and decision-makers within the Government of Rwanda (GOR), farmers and others working in the agricultural sector in Rwanda to make informed decisions in the face of a changing climate and improve climate risk management.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2015	<b>End date (dd-MM-yyyy):</b> 29-02-2016
<b>Leader:</b> Kinyangi, James <j.kinyangi@cgiar.org>, ILRI - International Livestock Research Institute	
<b>Status:</b> On-going	<b>Justification:</b> Contracted the end of 2015 but work deferred to 2016 due to delayed funding and start of project implementation.

Activity #2	
<b>Title:</b> Climate services governance	
<b>Description:</b> Create climate service advisory committee, which will eventually serve as a long term sustainable governance body for climate services. Build awareness of the committee. The committee will initially serve as the advisory committee for the project, but will be tasked with the goal of creating a sustainable governance body by the time the project is completed. CCAFS communications will build awareness of the body creation through local media and webpages.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2016	<b>End date (dd-MM-yyyy):</b> 01-09-2019
<b>Leader:</b> Kinyangi, James <j.kinyangi@cgiar.org>, ILRI - International Livestock Research Institute	
<b>Status:</b> Extended	<b>Justification:</b> Deferred to 2016 due to delayed start of project implementation.

Activity #3	
<b>Title:</b> Climate information provision.	
<b>Description:</b> Build capacity of Meteo-Rwanda to design, deliver, and incorporate user feedback into a growing suite of weather and climate information products (historic, monitored, forecast) and services tailored to the needs of agricultural and food security decision-makers. Improve the knowledge and skills of Meteo Rwanda to assure the long-term sustainable provision of innovative climate services in Rwanda. Build specific capacity in agrometeorology and seasonal forecasting. Build capacity of the National University of Rwanda through engagement with leading global universities in the area of climate services. Build a strong research and knowledge exchange network between Meteo Rwanda and global climate service research institutions.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2015	<b>End date (dd-MM-yyyy):</b> 01-09-2019

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<b>Leader:</b> Dinku, Tufa <dinku@iri.columbia.edu>, IRI - International Research Institute for Climate and Society	
<b>Status:</b> On-going	<b>Justification:</b> Training started late 2015, but most work deferred to 2016 due to delayed start of project implementation.

#### Activity #4

<b>Title:</b> Climate services for governments and institutions	
<b>Description:</b> Build capacity of agricultural and food security decision-makers in the Ministry of Agriculture, and in other relevant government agencies and institutions, to use climate information to respond more effectively to climate-related risks and to inform decisions that build the resilience of farmers.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2015	<b>End date (dd-MM-yyyy):</b> 01-09-2019
<b>Leader:</b> Birachi, Eliud Abucheli <e.birachi@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Extended	<b>Justification:</b> Deferred to 2016 due to delayed start of project implementation.

#### Activity #5

<b>Title:</b> Climate services for farmers	
<b>Description:</b> Agricultural extension and other relevant intermediary organizations and communicators (e.g. farmer cooperatives, rural radio networks, ICT providers, NGOs) will provide farmers across Rwanda's 30 districts with decision-relevant operational climate information and advisory services, and empower and guide them to use the information to better manage risk. Initial development of communication tools will be supported by Reading University's PICSA team and scientists at the IRI. Work with national partners to strengthen capacity to build climate service products for agricultural extension.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2015	<b>End date (dd-MM-yyyy):</b> 01-09-2019
<b>Leader:</b> Birachi, Eliud Abucheli <e.birachi@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Extended	<b>Justification:</b> Deferred to 2016 due to delayed start of project implementation.

#### Activity #6

<b>Title:</b> Institutional level design phase, needs assessment, and baseline	
<b>Description:</b> Desk review will entail gathering of information contained in published and unpublished reports, documents, case studies and journals. To capture as many relevant literatures as possible, a wide range of published and unpublished project and government reports will be searched. Additionally, reports will be searched for web pages that might provide references on climate services in Rwanda. The findings will be summarized narratively. Interviews of members of METEO-Rwanda, RAB and MINAGRI and other relevant persons and stakeholders, who are familiar with climate services in Rwanda.	
<b>Start date (dd-MM-yyyy):</b> 01-11-2015	<b>End date (dd-MM-yyyy):</b> 30-04-2016

Submitted on 2016-04-10 at 21:21 UTC

<b>Leader:</b> Birachi, Eliud Abucheli <e.birachi@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Extended	<b>Justification:</b> Deferred to 2016 due to delayed start of project implementation.

Activity #7	
<b>Title:</b> Meteo Rwanda design phase, needs assessment, and baseline	
<b>Description:</b> This activity will be completed by the IRI-Meteo Rwanda team who recently completed the ENACTS project. The team is in a good position to review current capacity and synergies with ongoing or planned initiatives. As part of the launch of the ENACTS project, a session of the launch will be dedicated to the results of this review and allow for stakeholder feedback on the findings of the report.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2015	<b>End date (dd-MM-yyyy):</b> 29-02-2016
<b>Leader:</b> Kinyangi, James <j.kinyangi@cgiar.org>, ILRI - International Livestock Research Institute	
<b>Status:</b> Extended	<b>Justification:</b> Deferred to 2016 due to delayed start of project implementation.

**Lessons regarding your project activities and possible implications for the coming planning cycle:** Most activities are deferred to 2016 due to delayed start of project implementation.

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## 7. Leverages

<Not defined>

Submitted on 2016-04-10 at 18:52 UTC

**Title:** Global Framework for Climate Services: Tanzania and Malawi

<b>Start date (dd-MM-yyyy)</b>	01-01-2014	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	F2 - Flagship 2	<b>Mgmt. liaison contact</b>	Hansen, James <jhansen@iri.columbia.edu>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Hansen, James <jhansen@iri.columbia.edu>
<b>Project type</b>	BILATERAL	<b>Bilateral Contract/ Proposal</b>	<a href="#">GFCS Climate Services Adaptation Programme_Proposal_Final.doc</a>

**Project is working on**

Flaship(s)	Region(s)
FP2: Climate Information Services and Climate-Informed Safety Nets	RP EA: East Africa

**Core project(s) contributing to this project**

This project does not have Core projects

**Summary**

The program aims to increase the resilience of those most vulnerable to the impacts of weather and climate through the development, implementation and evaluation of a joint program of climate services in Tanzania and Malawi. It will build integrated frameworks within countries and will support existing initiatives in climate services, food security, nutrition and health, as well as disaster risk reduction. The project aims to strengthen capacity both to develop and use climate services and seeks to combine both the latest science and traditional knowledge in the climate service production process. In Tanzania, focus will be given, in part, to improving the accuracy and reach of the national Meteorological Agency's short-term weather and longer-term seasonal forecasts and making them available in a suitable format to users. In Malawi, one of the focal points will be strengthening the capacity of urban communities to prepare for and respond to severe weather events.

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## 2. Partners

### Partner #1

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Kinyangi, James <j.kinyangi@cgiar.org>	Activity 2014-334 *Leader*.

### Partner #2

**Institution:** ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Guntunku, Dileepkumar <g.dileepkumar@cgiar.org>	Activity 2014-333 *Leader*.

### Partner #3

**Institution:** ICRAF - World Agroforestry Centre

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Neufeldt, Henry <h.neufeldt@cgiar.org>	Activity 2014-226 *Leader*.

### Partner #4

**Institution:** University of Reading

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

#### Contacts

Type	Contact	Responsibilities and contributions
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Partner	Stern, Roger <r.d.stern@reading.ac.uk>	Activity 2014-332 *Partner*.
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## Partner #5

**Institution:** FRI - Farm Radio International

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Hampson, Karen <khampson@farmradio.org>	Radio scoping study, planning workshops and programming development.

## Partner #6 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Hansen, James <jhansen@iri.columbia.edu>	Arame Tall was leader of the CCAFS component, but resigned in August. As Arame's supervisor, James Hansen inherited responsibility to oversee the work and represent CCAFS in the Program Steering Committee. He contracted Steve Zebiak to help in this role for part of 2015.

## Partner #7

**Institution:** WFP - World Food Programme

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Choularton, Richard <richard.choularton@wfp.org>	Activity 2014-332 *Leader*.

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**Partnerships overall performance over the last reporting period:** Most activities have been co-organized and some co-funded with WFP, who has been an excellent partner. U. Reading contributions to PICSA training for intermediaries and follow-up with farmers have been valuable. At the request of WMO, who coordinates the project, CCAFS shifted from working with the two NMHS on development of downscaled information tailored to farmer needs, to providing specifications of information needs to WMO who were to lead capacity development of NMHS to produce products for targeted sectors and Program partners. Lack of progress on providing required information, particularly in Tanzania, significantly impacted CCAFS work.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** The partnership structure of this project is particularly complex and rather constraining. For CCAFS to contribute to development of climate services, it must have direct engagement of NMHS rather than depending on an intermediary. Since this is the last year of the project, little can be done unless a second phase is funded.

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### 3. Locations

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

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

This GFCS demonstration project will produce greater and more effective cross-sectoral planning, co-production and uptake of climate services at the national and local levels. End-users in the focus countries, Tanzania and Malawi, will have significantly strengthened capacities to demand, access, and benefit from co-produced climate services relevant for food security, nutrition, health and disaster risk reduction at the sub-national to local level. Also following the completion of the project, there will be an improved understanding, at the international level, of the effectiveness of the GFCS in climate risk management and adaptation.

**Annual progress towards outcome (end of 2015):** By end of 2015, intermediaries are trained to communicate climate information services at large scale, reaching thousands of farmers in Tanzania and Malawi through seasonal planning workshops, rural radio and cell-phone based SMS platforms. A national framework for climate services starts to be organized in both countries, bridging the gap between climate (NHMSs), agricultural research (NARES), policy (National Ministries of Agriculture), private sector and farmer needs. Downscaled climate forecasts are produced by NHMSs, and value-added with agronomic extension advisories, to provide tailored climate services that address farmer needs in the country. A robust M&E system is in place to collect baseline data against which to measure project impact for farmers in both countries. By end 2015, at least two thousand farmers expected to have access and begin using decision-relevant, tailored climate services to support their farm-level operations under a changing climate. Scaling up plans to 5 million farmers across both countries through ICT and rural radio begin start to be implemented.

**Annual progress towards project outcome in the current reporting cycle (2015):** 190 trained agricultural extension and development NGO personnel (71 in Malawi, 119 in Tanzania) trained 5746 farmers in target districts on the PICSA (Participatory Integrated Climate Services for Agriculture) approach to understand climate information; and to assess and adjust their farming and livelihood strategies in response. Trained farmers were expected to share information with other farmers. An estimated 5800 farmers (1800 in Malawi, 4000 in Tanzania) accessed climate information through radio programming and SMS messaging developed with CCAFS guidance.

**Communication and engagement activities have contributed to achieving your Project outcomes:** The outcome was facilitated by direct engagement by CCAFS and by WFP of ministries of agriculture, district agricultural extension services, and NGOs that work with farmers in target districts.

**Evidence documents of progress towards outcomes:** [Annual report March 2016\\_Final.pdf](#)

**Annual progress towards outcome (end of 2016):** <Not defined>

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**Annual progress towards outcome (end of 2017):** <Not defined>

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

**Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them:** Progress was impacted negatively by the shift from direct engagement with NHMS to depending on WMO to facilitate development of required information products through the NHMS, and by the loss of Arame Tall (project leader) and James Kinyangi (EA Regional Program Leader). The latter left the two CCAFS country project coordinators without adequate supervision, and negatively impacted capacity to provide the degree of communication and engagement required.

## 4.2 Contribution to CCAFS Outcomes

**RP EA - Outcome 2019:** National Institutions, Donors and Relief Agencies are accessing and using research informed forecasting tools for timely and efficient food security decision-making and Academic, Government (e.g. Ministry of Ag.), and Development Organizations are developing and testing climate applications for agriculture to support scaling out and adoption of climate services to users (Farmer Organizations, CBOs, NGOs, agro-dealers, community radio).

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

2019	
<b>Target value:</b> 2	<b>Cumulative target to date:</b> 4
<b>Target narrative:</b> <Not defined>	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>	

2015		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> 5.0
<b>Target narrative:</b> <Not defined>		
<b>Narrative for your achieved targets, including evidence:</b> District agricultural extension services in Tanzania and Malawi, Malawi Red Cross, and WFP country offices in Tanzania and Malawi are using the PICSA curriculum, developed with CCAFS support, to develop climate services and support scaling out.		

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2015	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>	
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Of the 1,708 farmers trained to use climate information in Malawi, 1,134 were women. In Tanzania, of the 2728 trained, 1,117 were women.	

2016	
<b>Target value:</b> 2	<b>Cumulative target to date:</b> 2
<b>Target narrative:</b> CCAFS methods adopted and capacity built for climate services in Tanzania and Malawi.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>	

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

### 4.3 Other Contributions

**Contribution to other CCAFS Impact Pathways:** <Not defined>

**Collaborating with other CRPs:** <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> Developing Capacity to Deliver Climate Services to Farmers in Tanzania and Malawi</p>
<p><b>Outcome statement:</b> 190 trained agricultural extension and development NGO personnel (71 in Malawi, 119 in Tanzania) trained 5746 farmers in target districts on the PICSA (Participatory Integrated Climate Services for Agriculture) approach to understand climate information; and to assess and adjust their farming and livelihood strategies in response. Trained farmers were expected to share information with other farmers. An estimated 5800 farmers (1800 in Malawi, 4000 in Tanzania) accessed climate information through radio programming and SMS messaging developed with CCAFS guidance.</p>
<p><b>Research Outputs:</b> Coulibaly et al., 2015. What climate services do farmers and pastoralists need in Tanzania? Baseline study for the GFCS Adaptation Program in Africa. CCAFS Working Paper 110.            Coulibaly et al., 2015. Which climate services do farmers and pastoralists need in Malawi? Baseline Study for the GFCS Adaptation Program in Africa. CCAFS Working Paper 112.            Hampson et al., 2015. Delivering climate services for farmers and pastoralists through interactive radio: CCAFS Working Paper 111.            Kaur et al., 2015. Scaling Up Climate Information Services for Farmers and Pastoralists in Tanzania through ICTs and Rural Radio, Dar es Salaam on 27-28, April 2015. CCAFS Workshop Report.            Dorward et al., 2015. Training Agricultural Research &amp; Extension Staff to Produce and Communicate Agro-Climatic Advisories, to Enhance the Resilience and Food Security of Farmers and Pastoralists in Tanzania. CCAFS Working Paper 132.            Dorward et al., 2015. Participatory Integrated Climate Services for Agriculture (PICSA): Field Manual. U. Reading</p>
<p><b>Research Partners:</b> World Meteorological Organization (WMO) – UN Global Framework for Climate Services            World Food Program            International Research Institute for Climate and Society            University of Reading            ICRISAT</p>
<p><b>Activities that contributed to the outcome:</b> Development of the Participatory Integrated Climate Services for Agriculture (PICSA) and training materials (with prior support from Flagship 4)            CCAFS-commissioned scoping studies, and jointly led (with WFP) multi-stakeholder workshops on radio- and ICT-based delivery of climate services            CCAFS co-led (with WFP) PICSA training workshops, follow-up with trained intermediaries, and Planning and Review events</p>
<p><b>Non-research Partners:</b> Farm Radio International (FRI, Tanzania) / Farm Radio Trust (FRT, Malawi)            International Research Institute for Climate and Society            University of Reading            Tanzania Meteorological Agency (TMA)            Malawi Department for Climate Change and Meteorological Services (DCCMS)</p>
<p><b>Output Users:</b> WFP            Agricultural extension services of Tanzania and Malawi            Malawi Red Cross            FRI            FRT</p>

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**How the output was used:** Needs assessment surveys informed what historical climate information was incorporated into PICSA training and radio programming.  
 PICSA materials were used to train agricultural extension and other intermediaries to work with farmers on use of climate information.  
 Scoping studies and workshops on informed the design of radio programming and SMS content.

**Evidence of the outcome:** Draft reports on Planning and Review workshops.  
 Reports on PICSA training workshops.  
 ICT workshop reports.  
 CCAFS annual progress report to GFCS/WMO.

**References:** Programme Brief ([http://www.gfcs-climate.org/Norway\\_2](http://www.gfcs-climate.org/Norway_2))  
 Reaching Farmers with climate services in Malawi and Tanzania (CAAFS) July 2015, [https://ccafs.cgiar.org/blog/reaching-farmers-climate-services-malawi-and-tanzania?utm\\_source=dlvr.it&utm\\_medium=twitter&utm\\_campaign=cgiarclimate#.Vtk3afI97IW](https://ccafs.cgiar.org/blog/reaching-farmers-climate-services-malawi-and-tanzania?utm_source=dlvr.it&utm_medium=twitter&utm_campaign=cgiarclimate#.Vtk3afI97IW)  
 How to best support farmers with useful climate information services (CAAFS) January 2015, [https://ccafs.cgiar.org/blog/how-best-support-farmers-useful-climate-information-services?utm\\_source=dlvr.it&utm\\_medium=twitter&utm\\_campaign=cgiarclimate#.Vtk5FvI97IX](https://ccafs.cgiar.org/blog/how-best-support-farmers-useful-climate-information-services?utm_source=dlvr.it&utm_medium=twitter&utm_campaign=cgiarclimate#.Vtk5FvI97IX)  
 How 'training-of-trainers' reach farmers with participatory climate information services (CAAFS) September 2015. <https://ccafs.cgiar.org/blog/how-training-trainers-helps-reach-farmers-participatory-climate-information-services#.Vu6NK8fSrKc>  
 Farmer-responsive climate services built in Tanzania and Malawi (CAAFS) January 2015. <https://ccafs.cgiar.org/blog/farmer-responsive-climate-services-built-tanzania-and-malawi#.Vu6NRsfSrKc>  
 Photo-story: Farmers in Tanzania use climate information to cope with variability (CAAFS) January 2015. <https://ccafs.cgiar.org/blog/photo-story-farmers-tanzania-use-climate-information-cope-variability#.Vu6NScfSrKc>  
 Using communicators to reach farmers with climate information services (CAAFS) October 2015. <https://www.weadapt.org/knowledge-base/using-climate-information/climate-information-services>  
 Online Launch of the Participatory Climate Information Services for Agriculture Manual (CAAFS) October 2015. <https://ccafs.cgiar.org/online-launch-participatory-climate-information-services-agriculture-manual#.VvUfsWPSrKd>

**The primary 2019 outcome indicator that this case study is contributing to:**

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

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

**Year:** 2015

**Annexes uploaded:** <Not defined>

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

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

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

<Not defined>

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

<Not defined>

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

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

<Not defined>

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

<Not defined>

#### Major Output groups - 2014

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

### Major Output groups - 2015

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Scoping studies and Planning workshops on ICT and radio to deliver climate services.

PICSA curriculum published and adapted to project context.

Preliminary lessons from PICSA published.

Baseline and needs assessment surveys published.

Planning and Review process to assess engagement with rural communities, develop forecast-based plans, ahead of each growing season.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Baseline and needs assessment disaggregated by gender. PICSA training and follow-up targeted gender balance.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

WMO request to lead capacity development of NMHS failed to make the needed information available in Tanzania, requiring CCAFS to adjust communication strategies to fit available information. The NMHS of Malawi made incremental progress in downscaling seasonal forecasts in a useful format.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Needs assessment was disaggregated by gender, but showed that men and women desire the same types of climate information. Initial efforts to develop information products for use by rural communities therefore did not require explicit gender differences.

### Major Output groups - 2016

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

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

<Not defined>

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

<Not defined>

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

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

<Not defined>

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

<Not defined>

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** Disappointing progress working through WMO to develop climate information products (MOG#1) weakened communication efforts under MOG#2. We are trying again to engage WMO and the two NMHS productively on this issue.

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## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Robust Baseline data collected on farmers' climate service access and use in target project sites and controls, against which to monitor project impact	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
World Food Programme / NHMSs of Tanzania and Malawi / NARESS of Tanzania and Malawi
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> WFP country officers and climate forecasters expected to have a better understanding of farmers' climate service needs in Tanzania and Malawi; Such understanding to yield better tailoring of current and future climate forecasts by NHMS and related extension services by NARES to the needs of farmers and agropastoralists in the region.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> CCAFS Report on Findings from Baseline survey: What climate services

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> <Not defined>

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

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

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<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #2

Main Information	
<b>Title:</b> 1000 National Ag. Extension staff trained as trainers to communicate climate services at large scale for farmers	
<b>MOG :</b> <Not defined>	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2014	
<b>Status:</b> <Not defined>	

Next-user
Farmers in Tanzania and Malawi
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Male and female farmers in target districts in Tanzania and Malawi access tailored climate services for the OND and MAM seasons, through trained agricultural extension officers. In 2014 OND: Kiteto District (Tanzania) In 2015 MAM: Longido District (Tanzania) In 2015 OND: New target districts in Malawi and Tanzania (TBD with national implementation partners) In 2016 OND & MAM: Most districts in Malawi and Tanzania (TBD with national implementation partners)

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Farmer seasonal forecast communication and planning workshops conducted in target project districts by trained National Agricultural extension staff

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** <Not defined>

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### Deliverable #3

Submitted on 2016-04-10 at 18:52 UTC

Main Information	
<b>Title:</b> Scoping Studies: Scaling up Climate Services for millions of farmers through rural radio and ICTs in Tanzania and Malawi	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
World Food Program
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Intelligence from CCAFS-commissioned scoping studies on the power of ICTs and rural radio to scale up climate services for farmers; is used by WFP to design its rural radio and ICT program implementation under the GFCS program
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> CCAFS Report synthesizing research findings from 2014 studies

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> <Not defined>

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #4

#### Main Information

<b>Title:</b> Functional and Coherent National Frameworks for Climate Services established in Tanzania, Malawi	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Project Delivery Teams meet regularly. Implemented Planning and Review meetings at start of each growing season.

#### Next-user

National-level adaptation / rural development planners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Improved understanding of farmer needs for climate services; Inclusion of farmer-focused climate services in national adaptation plans/agricultural development priorities;
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> 1) National Framework for Climate Services Follow-up workshop 2) Regional Training of pool of facilitators for development of national frameworks on climate services 3) CCAFS Policy Brief: Supporting National Frameworks for Climate Services in Africa: a priority for adaptation

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Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b>	<Not defined>

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

Deliverable dissemination	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	-1
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #5

Main Information	
<b>Title:</b>	<Not defined>
<b>MOG :</b>	<Not defined>
<b>Main Type:</b>	<Not defined>
<b>Sub Type:</b>	<Not defined>

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**Year of expected completion:** 2015**Status:** <Not defined>**Partners contributing to this deliverable****Partner #1 (Responsible):** <Not defined>**Deliverable Ranking****Address gender and social inclusion aspect** <Not defined>**Potential for/ actual contribution to outcomes** <Not defined>**Level of shared ownership (partnerships across org.)** <Not defined>**What is your personal perspective of the importance of this product** <Not defined>**Deliverable dissemination****Open access restriction:** <Not defined>**License adopted:** <Not defined>**Dissemination Channel:** <Not defined>**Dissemination URL:** [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**

&lt;Not defined&gt;

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### **5.3 Summary on next-users**

<Not defined>

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## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> <Not defined>	
<b>Author:</b> <Not defined>	<b>Subject:</b> <Not defined>
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b>	<b>Start date:</b> 2016-04-10
<b>End date:</b> 2016-04-10	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> <Not defined>
<b>Highlight description:</b> <Not defined>	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> <Not defined>	
<b>Partners:</b> <Not defined>	
<b>Links / Sources for further information:</b> <Not defined>	

## 6. Activities

Activity #1	
<b>Title:</b> Design & M&E	
<b>Description:</b> – Baseline data collection - Ongoing Monitoring and Evaluation: post-season re-assessments of needs and service delivery quality (after each season) - Final project impact assessment (measuring progress against baseline)	
<b>Start date (dd-MM-yyyy):</b> 01-09-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Neufeldt, Henry <h.neufeldt@cgiar.org>, ICRAF - World Agroforestry Centre	
<b>Status:</b> On-going	<b>Justification:</b> Initial baseline and needs assessment survey results published.

Activity #2	
<b>Title:</b> Climate services communication capacity building	
<b>Description:</b> Training agricultural extension officers and other intermediaries, in participatory communication processes for farming and pastoralist communities in Tanzania and Malawi.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2014	<b>End date (dd-MM-yyyy):</b> 30-11-2016
<b>Leader:</b> Choularton, Richard <richard.choularton@wfp.org>, WFP - World Food Programme	
<b>Status:</b> On-going	<b>Justification:</b> CCAFS (with U. Reading) and WFP conducted a series of PICSA training events targeting agricultural extension workers, meteorological service staff, Red Cross volunteers (in Malawi) and other intermediaries in target districts. The 5-day training workshops included three days of classroom training on the principles and methods, followed by a practicum where participants are guided to lead farmers through the participatory process. A total of 190 intermediaries were trained: 71 from the Balaka, Lilongwe and Nsanje Districts in Malawi; and 77 from Kiteto and Longido, and 42 from Kondoa, in Tanzania.

Activity #3	
<b>Title:</b> Scaling up Climate Services through rural radio and ICT-based platforms	
<b>Description:</b> - Scoping and feasibility studies to investigate needs and partners to establish sustainable rural radio and ICT capacity for scaling up climate services for millions of farmers in Tanzania and Malawi (2014) - Planning workshops to design strategies for ICT-based 2-way communication system linking farmers with national agromet knowledge hubs, through agridealers and local knowledge entrepreneurs; fostering of public-private partnerships to sustain ICT-based delivery of climate services for farmers (by 2015-16)	

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<b>Start date (dd-MM-yyyy):</b> 01-09-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Guntunku, Dileepkumar <g.dileepkumar@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> On-going	<b>Justification:</b> Preliminary estimates suggest that at least 1800 farmers in Malawi and about 4000 farmers in Tanzania have accessed climate information through radio as a result of Program activities developed by WFP and informed by a Farm Radio International scoping study commissioned by CCAFS, and radio and ICT planning workshops co-led by CCAFS and WFP. Note Dileepkumar Gunghunku is no longer activity leader, and no longer at ICRISAT.

#### Activity #4

<b>Title:</b> Support to establishment of a National Framework for Climate Services in Tanzania and Malawi	
<b>Description:</b> A process has been established since February 2014 (project launch) to assemble relevant national stakeholders and discuss needs for climate services in the nation. Relevant agencies were self-identified to spearhead this process between now and project end in 2016. CCAFS will support this activity by opening and nurturing spheres of dialogue between NHMS, agricultural extension research, and farmers, and supporting the establishment of functional national multi-disciplinary working groups, learning from the experience of Mali.	
<b>Start date (dd-MM-yyyy):</b> 03-02-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Kinyangi, James <j.kinyangi@cgiar.org>, ILRI - International Livestock Research Institute	
<b>Status:</b> On-going	<b>Justification:</b> CCAFS-supported project coordinators in each country are fully engaged in the national Project Delivery Teams. CCAFS and WFP initiated district-level Planning and Review meetings before the start of each growing season. Note James Kinyangi no longer leads the activity, and is no longer part of CCAFS.

**Lessons regarding your project activities and possible implications for the coming planning cycle:** <Not defined>

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## 7. Leverages

<Not defined>

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**Title:** Putting climate into extension services: Climate-Site-Specific Management Systems (CSMS) for grounding climate smart agriculture to farm rice systems

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	RP LAM - Latin America Region	<b>Mgmt. liaison contact</b>	Loboguerrero, Ana Maria <a.m.loboguerrero@cgiar.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Jimenez, Daniel <d.jimenez@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

**Project is working on**

Flaship(s)	Region(s)
FP1: Climate-smart practices	RP LAM: Latin America

Bilateral project(s) contributing to this project
148 - Convenio MADR - Project with the Colombian Ministry of Agriculture on Climate Change and Agriculture
192 - WD - Big Data for Climate Smart Agriculture Enhancing & Sustaining Rice Systems for Latin America and the World.
244 - Site-and climate- specific agriculture recommendations across time-scales USAID

**Summary**

Unpredictable climate is challenging farmers in Latin America (LAM) with changing, complex and extremely variable conditions for agriculture. New approaches to rural advisory services are required to support farmers' decision making processes and boost their resilience to the impacts of climate change. For this we propose to develop a two-way Climate-Site-Specific Management System (CSMS) that allows farmers in LAM to contribute with self-generated data on soil, crop management and production in return for tailored, site-specific information on Climate-Smart Practices (CSP). The approach will be implemented for rice systems in Colombia, Nicaragua and Perú and will be conducted jointly with the Latin American Fund for Irrigated Rice (FLAR)

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## 2. Partners

### Partner #1 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Jimenez, Daniel <d.jimenez@cgiar.org>	Activity 2014-14 *Leader*. Activity 2014-16 *Leader*. Activity 2014-79 *Partner*.
Project Coordinator	Munoz, Armando <l.a.munoz@cgiar.org>	Make knowledge management and capacity building in partner, facilitating the sustainability of CSMS.
Project Coordinator	Graterol, Eduardo <e.j.graterol@cgiar.org>	Coordinate research and management FLAR partners in each country

### Partner #2

**Institution:** FLAR - Fondo Latinoamericano para Arroz de Riego

#### CCAFS Partner(s) allocating budget

CIAT - Centro Internacional de Agricultura Tropical - Colombia

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Graterol, Eduardo <e.j.graterol@cgiar.org>	Activity 2014-14 *Partner*. Activity 2014-16 *Partner*. Activity 2014-79 *Leader*.

**Partnerships overall performance over the last reporting period:** Our partners in Peru (hacienda el potrero) , Colombia (FEDEARROZ) and Nicaragua (ANAR) through FLAR have facilitated: (a) the identification of key national institutions holding socio-economic, climate, and crop performance databases (NARs, meteorological institutions, rice mills, growers associations), (b) the visit to rice-production regions within each country, (c) identification of better strategies to approach the institutions holding databases, (d) encouraging such institutions to share their data, (e) identifying the person responsible of each country for the development of the CSMS, (f) workshops with farmers, (g) training of farmers on how to use

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the management system (AEPS platform. <http://www.open-aeps.org:808>)

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

- Peru was thought as the scenario with medium availability of data, however a scenario is institutionally weak, and therefore progress has been slow
- Nicaragua on the contrary was thought as the scenario with low availability of data, nevertheless there were farmers with data available
- Given that the this project has been severely affected with the recent budget cuts 75% , we will focus on some producers (pilot scheme for scaling up) keen to implement and validate the findings of the analysis from the CSMS

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### 3. Locations

Project level	Latitude	Longitude	Name
District	3.9251	3.9251	Colombia: Tolima
District	12.8967	12.8967	Perú: Jaen,
District	-5.6113	-5.6113	Nicaragua: Malacatoya, Sebaco, Matagalpa y San Luis

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

We will develop a CSMS based that will allow farmers and growers associations in LAM to obtain site-specific information on Climate-Smart Practices (CSP). At the end of the project farmers as well as FLAR and CIAT breeders & agronomists use the CSMS to better understand site-specific information on the response of crop varieties to climate in order to improve the management of current varieties and identify the best CSP. The CSMS will allow in the short-term, at least 1000 farmers to: (i) adapt their management practices to climate variability and (ii) maximize their productivity. As the system is developed together with FLAR the system has the potential to reach more than 300 000 rice growers in the long-term.

**Annual progress towards outcome (end of 2015):** Diagnosis of partners needs in the three countries will be used by CIAT's researchers and FLAR's director, partners, agronomists and technicians to define the strategy for each country. This diagnosis is the baseline of the development of both, protocol for standardized agricultural and gender information at site-specific level and the pilot of the CSMS. FEDEARROZ will use the report of target CSP as a baseline to improve its current strategies to store and manage data.

**Annual progress towards project outcome in the current reporting cycle (2015):** A group of farmers in Colombia started monitoring their crop measurements on a regular basis to try to make appropriate decisions facing future climatic events, and gathered at the premises of Fedearroz to learn on how to work together to improve their practices occurred through the use of several years of data collected. Twenty-six participants from CIAT, rice producers, millers and research centers from Uruguay, Argentina, Chile, Brazil and Colombia met for a week in the city of Treinta y Tres for a 'Workshop on the analysis of large volumes of rice trade data. Training of 88 Colombian technicians and 312 farmers on the use of a new version of SACFA, two workshops in Colombia on the use of machine learning analytical tools a total of 30 technicians were trained, Training of fourteen Nicaraguans' technicians on the use of the management system (AEPS platform. <http://www.open-aeps.org:808>)

**Communication and engagement activities have contributed to achieving your Project outcomes:** In Nicaragua fourteen farmers, from 8 rice farms were trained on the use of the management system (AEPS platform. <http://www.open-aeps.org:808>). Technicians from FEDEARROZ were trained in the use of the new data storage system, updated to an improved system through the collaboration with CIAT. An inception meeting was carried out in Colombia with farmers interested in applying big data results: <http://dapa.ciat.cgiar.org/agricultores-de-arroz-comprometidos-con-el-analisis-de-datos-para-enfrentar-la-variabilidad-climatica/> A different interface of the management system (AEPS platform. <http://www.open-aeps.org:808>) AEPS platform was developed for Nicaragua. <http://dapa.ciat.cgiar.org/agricultores-de-arroz-comprometidos-con-el-analisis-de-datos-para-enfrentar-la-variabilidad-climatica/> <http://dapa.ciat.cgiar.org/integrando-perspectiva-de-genero-en-agricultura-especifica-por-sitio-aeps-el-caso-de-nicaragua/>)

**Evidence documents of progress towards outcomes:** [Capacitacion.docx](#)

**Annual progress towards outcome (end of 2016):** Analytical tools validated and ready to process agricultural and environmental information from the rice growing areas of Colombia and Nicaragua. Beta version of CSMS used by technicians and farmers in Colombia and Nicaragua. Researchers from FEDEARROZ in Colombia interacting with lead CIAT/CCAFS researchers with regards to the multi-temporal scale prediction of best CSP, and then making decisions on which varieties, varietal traits and other Climate Smart Practices are more likely to work in the mid-term.

**Annual progress towards outcome (end of 2017):** Beta version of the CSMS used by agronomists, technicians and farmers in Colombia and Nicaragua. Android app used to collect information in Colombia, and Nicaragua. The capabilities of researchers, and agronomists, are strengthened in terms of the analytic capabilities as well as awareness along the technical assistance chain on the importance and usefulness of the data analysis workflow.

**Annual progress towards outcome (end of 2018):** Modelling approaches validated and adapted according to the richness of the data available within each country. This information will be used by FLAR and CIAT breeders & agronomists to better understand the response of crop varieties to climate, releasing more resilient germplasm, providing at least 1000 farmers with site-specific recommendations. CIAT's rice program including breeders and agronomists, as well as breeders and agronomists from FLAR will be the scientific users of the CSMS.

**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:** As it was identified with the diagnosis, each country requires a specific interface of the system. Despite being the same crop, Nicaragua and Colombia manage different units for (area, agrochemicals, yield, etc.)

As this project has been severely affected with the recent budget cuts. After discussing with our partner, some activities, regions and number of farmers have been considered not feasible with the current budget

## 4.2 Contribution to CCAFS Outcomes

**RP LAM - Outcome 2019:** LAM's producers associations are choosing and promoting CSA context-specific practices through strengthened extension services rescuing ancient and traditional knowledge. Local governments develop equitable local agricultural development plans using CSA context-specific portfolios assessed economically to plan and prioritize their investments focusing on climate variability challenges. NARS develop demand-driven outputs with sufficient technological capacity to address agricultural sector needs to face climate challenges. Private sector works with producer's associations, local and national

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governments to implement and scale out CSA involving agricultural market agents through innovative approaches (incentives along value chain to access to certification schemes). National governments scale up CSA approach based on successful experiences developed at local level.

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

2019	
<b>Target value:</b> 7	<b>Cumulative target to date:</b> Cannot be Calculated
<p><b>Target narrative:</b> Through Bilaterals in addition to institutions in Colombia, Nicaragua and Peru, Argentina and Uruguay , we will involve 2 more institution in Brasil and Mexico.</p> <p>FLAR as continent-wide rice growers association with all their partners will benefit of the CSMS .FLAR is a public-private alliance investing in a common platform for rice development.Our partners have different needs and capacities since each of them are deferentially advanced in data availability on rice production. Colombia can be considered with high data availability, Nicaragua medium and Peru low due to weakness of institutions</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Improved the capacity of women in the participation of decision-making through the access of site-specific information.</p>	

2015		
<b>Target value:</b> 1 FEDEARROZ (the national rice producers federation in Colombia)	<b>Cumulative target to date:</b> Cannot be Calculated	<b>Target achieved:</b> 1.0
<p><b>Target narrative:</b> Given that FEDEARROZ is the scenario with more data availability, in the first year Colombia through FEDEARROZ will be our target. FEDEARROZ will use the report of target CSP as a baseline to improve its strategies for storing and managing data. Improving their current strategies to collect and manage information</p>		
<p><b>Narrative for your achieved targets, including evidence:</b> FEDEARROZ and ANAR are the scenario with high and medium data availability respectively , therefore, they count on knowledge, attitudes and skills on how to: (a) collect information on soils, crop management, climate and yield, and (b) data management</p>		
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>		

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2015	
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Women from two communities in Nicaragua have strengthened the required skills to facilitate their sustainable use of the CSMS. Rice smallholder farmers (women and men) in Nicaragua improve their knowledge related to climate, soil and management practices and their effect on yield. In Nicaragua and Peru, gender gaps are identified, particularly in the identification of women as decision maker in production systems, no necessarily recognized as producer. In these countries it is necessary to generate sex-disaggregated data, in that sense the CSMS emerges a very important tool to achieve it .</p>	

2016	
<b>Target value:</b> 2	<b>Cumulative target to date:</b> Cannot be Calculated
<p><b>Target narrative:</b> FEDEARROZ and ANAR are the scenario with high and medium data availability respectively , therefore, they count on knowledge, attitudes and skills on how to: (a) collect information on soils, crop management, climate and yield, and (b) data management.</p> <p>FEDEARROZ in Colombia implement both mid and long-term strategies to make more informed decisions on, for example, the most appropriate varieties according to predicted and/or projected climate change scenarios and is capable of designing a long-term vision of an adapted rice sector for the country.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Women from two communities in Nicaragua have strengthened the required skills to facilitate their sustainable use of the CSMS. Rice smallholder farmers (women and men) in Nicaragua improve their knowledge related to climate, soil and management practices and their effect on yield.</p> <p>FEDEARROZ in Colombia recognize women's participation in decision-making and labor in the rice production systems in Tolima department (a community in Saldaña).</p>	

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

## 4.3 Other Contributions

### Contribution to other CCAFS Impact Pathways

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Activity 2014-16: FSMOG1 to Context specific targeted climate smart practices options that meet the needs of farmers and enhance productivity (FP12019), and FS1 to FP12019

**Collaborating with other CRPs:** <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<b>Title:</b> Fedearroz improves its information system through a collaboration with CIAT
<b>Outcome statement:</b> For some years FEDEARROZ, the Colombian rice growers federation, has been using its own information system called SACFA (Rice Farm Management System), updated to SACFA-Lite, but which presented separated separated archives for each user. In March 2015, Fedearroz and CIAT identified strategies to improve the way the association organizes and groups data in a single database, creating a new version of SACFA-Lite and training the federation technicians in its use.
<b>Research Outputs:</b> <a href="http://dapa.ciat.cgiar.org/agricultores-de-arroz-comprometidos-con-el-analisis-de-datos-para-enfrentar-la-variabilidad-climatica/">http://dapa.ciat.cgiar.org/agricultores-de-arroz-comprometidos-con-el-analisis-de-datos-para-enfrentar-la-variabilidad-climatica/</a> .
<b>Research Partners:</b> Ministry of Agriculture of Colombia (MADR)
<b>Activities that contributed to the outcome:</b> To carry out the creation of a single database, a research of different softwares on the market was carried out to convert the format in which the information in SACFA is stored, to an improved one (switching from DBF to SQL to make queries faster). While integrating data, it became clear that many data needed to be corrected for missing economic information, which were added through a series of consultations with technicians. As a result of changes made to the platform a training tour was carried out with agronomists working with Fedearroz. These workshops were led and organized by the federation. The success of this activity depended on responding to a specific need of the next user.
<b>Non-research Partners:</b> National rice producers federation in Colombia (FEDEARROZ), Latin American Fund for Irrigated Rice
<b>Output Users:</b> National rice producers federation in Colombia (FEDEARROZ)
<b>How the output was used:</b> The federation adopted the improved version of SACFA-Lite: changes were made to the code assigned to each farm by each coordinator; updated information is linked to economic research in a unique file that can be used by each user; review of names of inputs utilized by agronomists through consultations
<b>Evidence of the outcome:</b> <a href="http://www.fedearroz.com.co/revistanew/correo_270.pdf">http://www.fedearroz.com.co/revistanew/correo_270.pdf</a>
<b>References:</b> <a href="http://www.fedearroz.com.co/new/investEconFNA.php">http://www.fedearroz.com.co/new/investEconFNA.php</a>
<b>The primary 2019 outcome indicator that this case study is contributing to:</b> FP2 Indicator: Number of regional, national, and/or sub-national initiatives incorporating research outputs to develop or improve major demand-driven, equitable, climate informed services that support rural communities
<b>Explanation of the link between your outcome story and the CCAFS indicators:</b> ---
<b>Year:</b> 2015
<b>Annexes uploaded:</b> <a href="#">Cantidad de personas capacitadas en SACFA.msg</a>
Outcome case study #2
<b>Title:</b> Towards a Climate Smart Agriculture (CSA) in Colombia

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**Outcome statement:** The main author of this study is the leader of the CSMS. The study included varietal evaluation within context of both climate variability and change, seasonal agroclimatic forecasting, and climate site-specific management systems as a tool to determine the most limiting factors associated with variation in productivity, and therefore to increase productivity. The project reached 500 000 growers through a platform called Agronet <http://www.agronet.gov.co/>. The strategy to reach farmers across Colombia also included the release of agroclimatic newsletters by MADR.

**Research Outputs:** About 6000 farmers are implementing Climate Smart Practices (CSP), mostly based on best varieties and planting dates at site-specific level. About 500 000 growers are reached through a platform for information management and knowledge <http://www.agronet.gov.co/>.

**Research Partners:** CCAFS  
Colombian Corporation for Agricultural Research (CORPOICA).

**Activities that contributed to the outcome:** Federations are empowered with the tools used by scientists, and at the end of the project they are capable of : (a) selecting, multiplying and spreading the most adapted varieties according to the regions, (b) generating and interpreting seasonal forecasts not only to know the best management options (what, and where to grow) according to biophysical conditions but also the potential yield of the most adapted varieties under specific conditions, and (c) analyzing their own information to determine the most limiting factors in the production of their crops in specific regions

**Non-research Partners:** Ministry of Agriculture of Colombia (MADR) National Federation of Rice Growers (FEDEARROZ), the National Federation of Cereal and Grain Legume Growers (FENALCE) Colombian association for fruits and vegetables (ASOHOFrucol) Foundation for Territorial Sustainable Agriculture FUNDESOT , National Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM)

**Output Users:** Ministry of Agriculture of Colombia (MADR)  
Farmers from: the Colombian National Federation of Rice Growers (FEDEARROZ) (24 000 farmers), the National Federation of Cereal and Grain Legume Growers (FENALCE) =7 000 farmers, Colombian association for fruits and vegetables (ASOHOFrucol) =20 000, Foundation for Territorial Sustainable Agriculture FUNDESOT =200.

**How the output was used:** The strategy to reach farmers across Colombia included the release of agroclimatic newsletters by MADR. The newsletter has been created under the premise of providing greater information producers recommendations to mitigate effects of climate events and report data on the evolution of the same.

**Evidence of the outcome:** <https://cgspace.cgiar.org/bitstream/handle/10568/68403/Scaling-Up%20FINAL.pdf?sequence=1&isAllowed=y>

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**References:** Blog of Agreement between CIAT- CCAFS and MADR where processes and results are documented: <http://www.aclimatecolombia.org/Interactive> agroclimatic newsletter: <http://www.aclimatecolombia.org/boletin-agroclimatico/>

Online document with main results in terms of CSA actions: <http://www.aclimatecolombia.org/wp-content/uploads/2014/12/Revista-Convenio-Nov.15.pdf>

National information and communication web platform for the Agricultural Sector “Agronet” web page: <http://www.agronet.gov.co/agronetweb1/Agroclima/BoletinesAgroclimaticos.aspx>

Colombian association for fruits and vegetables’ , NGA web page showing their implementation of site-specific focus: <http://www.frutisitio.com/>

Blogpost on how farmer make the decision not to plant thanks to CSA recommendation and avoid major losses: <http://www.aclimatecolombia.org/la-onu-premia-proyecto-big-data-liderado-por-el-ciat-entre-las-mejores-ideas-del-mundo-para-fortalecer-la-accion-climatica/>

<http://dataimpacts.org/project/climate-modeling/>

<http://www.godan.info/wp-content/uploads/2015/04/ODI-GODAN-paper-27-05-20152.pdf>

[http://www.developmentprogress.org/sites/developmentprogress.org/files/case-study-report/data\\_revolution\\_-\\_finding\\_the\\_missing\\_millions-finalinfographic-corrections\\_290515.pdf](http://www.developmentprogress.org/sites/developmentprogress.org/files/case-study-report/data_revolution_-_finding_the_missing_millions-finalinfographic-corrections_290515.pdf)

Blogposts on information determining the most limiting factor in crop production in specific regions:

<http://www.aclimatecolombia.org/preguntas-respuestas-aeps-cierre-brechas-productivas/>

<http://www.aclimatecolombia.org/usando-big-data-en-la-compresion-de-factores-limitantes-en-el-rendimiento-de-arroz/>

Blogposts on how Federations are empowered with the tools <http://www.aclimatecolombia.org/formacion-facilitadores-enfoques-participativos/>

<http://www.aclimatecolombia.org/gestion-conocimiento-fortalece-agro-colombiano-cambio-climatico/>

<http://www.aclimatecolombia.org/disenio-de-intervenciones-de-gestion-de-conocimiento-en-la-investigacion-agricola-para-el-desarrollo/>

<http://www.aclimatecolombia.org/gira-fedearroz-intercambio-saberes/>

<http://www.aclimatecolombia.org/sinergias-apropiacion-metodos-y-resultados/>

**The primary 2019 outcome indicator that this case study is contributing to:**

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

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

**Explanation of the link between your outcome story and the CCAFS indicators:** Partnership between government, grower’s organizations, and research institutions has been a key factor to succeed with the project. Tics have a huge potential not only as tools to reach unprecedented number of farmers, but also as a mechanisms to collect information and monitor the impacts of the project.

**Year:** 2015

**Annexes uploaded:** [DJ\\_\\_Towards a CSA in Colombia\\_August2015\\_DJ.pdf](#)

*Submitted on 2016-02-24 at 15:13 UTC*

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

**FP1 - MOG # 4:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

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

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

<Not defined>

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

<Not defined>

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

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

<Not defined>

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

<Not defined>

#### Major Output groups - 2014

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**FP1 - MOG # 4:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

- Next users identify through exploratory analysis the best Climate-Smart Practices in 4 countries
- Next users identify through exploratory analysis the best Climate-Smart Practices in specific regions within 4 countries

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

The CSMS, is mainly used to capture traditional knowledge, however during the project has not been differentiated if the information collected comes from the work of men or women.

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

### Major Output groups - 2015

**FP1 - MOG # 4:** 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:**

- Next users are aware of how to make the process of managing and analyzing data more efficient through ICTs technologies
  - o Training of fourteen Nicaraguans' technicians on the use of the management system (AEPS platform. <http://www.open-aeps.org:808>)

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Survey and focus groups found that women and young people have a higher affinity and skills to use ICTs as a means of accessing information. The implementation of CSMS, or similar tools including data collection, interaction with information systems to facilitate decision-making, should strengthen the participation of women.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

- Next users identify through exploratory analysis the best Climate-Smart Practices in 4 countries
- Next users identify through exploratory analysis the best Climate-Smart Practices in specific regions within 4 countries

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

The CSMS, is mainly used to capture traditional knowledge, however during the project has not been differentiated if the information collected comes from the work of men or women.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Next users are aware of how the importance and usefulness of the data analysis workflow

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Survey and focus groups found that women and young people have a higher affinity and skills to use ICTs as a means of accessing information. The implementation of CSMS, or similar tools including data collection, interaction with information systems to facilitate decision-making, should strengthen the participation of women.

### Major Output groups - 2016

**FP1 - MOG # 4:** 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**

\* ICT platform

\* Strategic partnership with ANAR, FEDEARROZ, Hacienda el potrero, and other institutions in Uruguay and Argentina

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

Training on the use of ICT (web platform/ internet- based system) for data collection.

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

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

\* Scientific publication on; (a) the scalability of site-specific agriculture and the principles of CSMS to other countries

\* (b) assessment of the performance of varieties in the short medium and long-term (multi-decadal) (c) An integrated framework to accelerate trait discovery for specific environments

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

Feedback on the functionality of the web platform for the collection of data from family rice production systems.

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

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

\* Analysis of biophysical information to predict technologies to derive short- and medium-term outlooks of rice production and best performing Climate Smart practices

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

The participation of women and youth will enable sustainability and scaling

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** We will try to keep the workshops, trainings via videoconferences, Given that the this project has been severely affected with the recent budget cuts. Through FLAR and with the support of the World Bank we have engage in the CSMS 4 other countries: Uruguay, Argentina, Chile and Brazil. Given the recen budget cuts, we will explore how to keep moving forward the initiative, but we remark that with only 25% of the initial budget will be difficult to do it on behalf of CCAFS

Submitted on 2016-02-24 at 15:13 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Report with a diagnosis of existing information of target CSP, and partners needs	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
FEDEARROZ (the national rice producers federation in Colombia), "The Hacienda el Potrero" (Peru), and ANAR
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users are aware of existing information of CS practices and have better knowledge and skills for collecting information. They also see the benefits of collecting and analyzing data with our methodology, and know how to store data according to it and in a more efficient way
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Facilitation of FLAR to introduce CIAT with FLARS' partners will guarantee their engagement in the diagnosis. This will be the baseline information for partners to start to improve their data knowledge and management <a href="http://flar.org/wp-content/uploads/2014/07/Plan-Estrat%C3%A9gico-y-Operativo-FLAR-red.pdf">http://flar.org/wp-content/uploads/2014/07/Plan-Estrat%C3%A9gico-y-Operativo-FLAR-red.pdf</a>

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

Deliverable dissemination
<b>Open access restriction:</b> Yes

Submitted on 2016-02-24 at 15:13 UTC

<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

<b>Description:</b> List of documents that support this deliverable  Diagnosis in Partner's needs in Colombia, Peru and Nicaragua. Attendances list of workshops. Participants reports. Gender's Role Diagnosis. First version of the protocol for standardized agricultural information at site-specific level
<b>Creator / Authors:</b> Daniel Jiménez
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 15.02.2016
<b>Language:</b> Spanish
<b>Coverage:</b> Latin America

#### Deliverable Data sharing

[ftp://ftp.ciat.cgiar.org/DAPA/projects/BIGDATA\\_AEPS/REPORTES/FLAGSHIP/EvidenciaCCAFS.pdf](ftp://ftp.ciat.cgiar.org/DAPA/projects/BIGDATA_AEPS/REPORTES/FLAGSHIP/EvidenciaCCAFS.pdf)

## Deliverable #2

#### Main Information

<b>Title:</b> Databases with readily-available information on soils, crop management, climate and yield	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> We will keep deliverables for 2016 focused on some producers (pilot scheme for scaling up).

#### Next-user

Submitted on 2016-02-24 at 15:13 UTC

Researchers, and the persons defined to be responsible of the development of the CSMS in Colombia and Nicaragua

**Knowledge, attitude, skills and practice changes expected in next-user:** Researchers and the persons defined to be responsible of the development of the CSMS in FEDEARROZ -Colombia and ANAR have access to a new database, they are aware on the usefulness of this database to have a better data management strategy.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Researchers together with the persons defined to be responsible of the development of the CSMS in Colombia and Nicaragua, will unify the information from different sources to develop the CSMS pilot

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Limited Exclusivity Agreements

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** Excel databases shared by farms, this contain: climate, soil and management information

**Creator / Authors:** Farms: Agricola Miramontes, Palo Ralo, Hacienda el Potrero...

**Author Identifier:** <Not defined>

**Publication / Creation date:** No published

**Language:** Spanish

**Coverage:** Colombia, Nicaragua and Peru

Submitted on 2016-02-24 at 15:13 UTC

Deliverable Data sharing	
<b>Deliverable files</b> <Not defined>	

### Deliverable #3

Main Information	
<b>Title:</b> Android App capable of capturing information on soils, crop management and yield	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2017	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Deliverable linked to activity that has been cancelled. Dissemination of the CSMS to researchers, agronomist and farmers through FLAR's network. Given that the this project has been severely affected with the recent cuts 75% , the activity has been discussed with FLAR and we considered is no feasible with the current budget

Next-user
Researchers, agronomists, technicians from FEDEARROZ (Colombia) and ANAR "(Nicaragua)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users change the traditional way of collecting information and uses ICTs technologies to make this process more efficient.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Close communication with the users, to prove that using these new tools leads to a more efficient task of capturing data. The Android app will have the tools to guide the user in addition to having space for questions, which will be resolved by the administrator. An user-guide

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

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

Submitted on 2016-02-24 at 15:13 UTC

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> CSMS for rice capable of delivering information on tailored site-specific information on CSP practices	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2018	

Submitted on 2016-02-24 at 15:13 UTC

<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Given that the this project has been severely affected with the recent cuts 75% , the activity has been discussed with FLAR and we considered is no feasible with the current budget
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Next-user
Researchers, agronomists, technicians from FEDEARROZ (Colombia), "The Hacienda el Potrero" (Peru), and ANAR "(Nicaragua)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users change the way how they make decisions on the response of crop varieties to climate in order to either improve the management of current varieties or identify the best Climate-Smart Practices.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Close communication with the users and ensure that the CSMS is Included the guidelines of FLAR strategy.To encourage partners to use decision support systems for smart production of rice is part of FLAR's strategy 2014-2018 see document "Plan estratégico y operativo FLAR 2014-2018" p. 69.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

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

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

Deliverable Metadata
<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>

Submitted on 2016-02-24 at 15:13 UTC

<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #5

### Main Information

<b>Title:</b> Ready-to-use analytical tools (R scripts, guidelines) developed that can be implemented	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Tools
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Functions for analysis in the software R-322 and a brief document about how to use the tools were created.

### Next-user

Researchers, agronomists, technicians from FEDEARROZ (Colombia) and "ANAR
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The analytic capabilities of our next users are strengthened through ready to use analytic tools. Next users along the technical assistance chain are aware of these tools, and understand the importance and usefulness of the data analysis workflow to make more informed decisions
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> To have an open source system is a commitment of the CIAT researchers, in order to offer a system that can be used by Researchers, agronomists, technicians and farmers from FEDEARROZ , "and ANAR

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

### Deliverable Ranking

Submitted on 2016-02-24 at 15:13 UTC

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

#### Deliverable dissemination

<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other
<b>Dissemination URL:</b> <a href="https://github.com/hdorado/Regression-Methods-AEPS">https://github.com/hdorado/Regression-Methods-AEPS</a>

#### Deliverable Metadata

<b>Description:</b> A script in R for analyze crops information with machine learning techniques. A guide and a toy set was included.
<b>Creator / Authors:</b> AEPS - BIG DATA team
<b>Author Identifier:</b> AEPS - BIG DATA team
<b>Publication / Creation date:</b> 07.09.2015
<b>Language:</b> Spanish
<b>Coverage:</b> For all interested in any region

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #6

#### Main Information

<b>Title:</b> Training of researchers, agronomists, and farmers on CSMS through existing FLAR's network	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2017	

Submitted on 2016-02-24 at 15:13 UTC

<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> We will keep this activity focused on some producers (pilot scheme for scaling up). Depending on the budget allocated
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#### Next-user

Researchers, agronomists, and farmers from FEDEARROZ (Colombia), and ANAR "(Nicaragua)

**Knowledge, attitude, skills and practice changes expected in next-user:** Next users change the way to collect information using ICTs technologies and make this process more efficient. In Colombia and Nicaragua the users make decisions on the response of crop varieties to climate in order to either improve the management of current varieties or identify the best Climate-Smart Practices.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Workshops, joint positions, dissemination through the FLAR's network, user guides, tutorial, share of experiences of the three persons responsible of each country for the development of the CSMS.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** <Not defined>

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

Submitted on 2016-02-24 at 15:13 UTC

**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**

&lt;Not defined&gt;

**Deliverable #7****Main Information****Title:** Engagement with policy makers with CSMS through existing FLAR network**MOG # 1:** Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)**Main Type:** Data and information outputs, including datasets, databases and models**Sub Type:** Data**Year of expected completion:** 2018**Status:** Cancelled**Justification for cancelling the deliverable:** Deliverable linked to activity that has been cancelled. Dissemination of the CSMS to researchers, agronomist and farmers through FLAR's network. The deliverable was cancelled since we were notified of the first budget cut**Next-user**

Farmers, Extension services, policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** Next users are aware that traditional blanket climate-smart technological solutions are less useful nowadays due to climate change variability, and that recommendations to farmers should move towards a system of dynamic site-specific practices sensitive and responsive to climate.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** FLAR's partners in some countries represents the stakes of more than 100 000 has, often in LAM due to the importance of rice and the large areas that rice systems represents have influence on policies We will take advantage of this feature of FLAR's network to accomplish this**Partners contributing to this deliverable****Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

Submitted on 2016-02-24 at 15:13 UTC

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

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #8

Main Information	
<b>Title:</b> A Beta version of the CSMS to collect agricultural and environmental data in rice areas	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2017	

Submitted on 2016-02-24 at 15:13 UTC

**Status:** On-going**Justification for cancelling the deliverable:** We will keep this activity focused on some producers in Colombia and Nicaragua (pilot scheme for scaling up).**Next-user**

Agronomists, technicians and farmers from FEDEARROZ (Colombia), and Agronomists from "ANAR"

**Knowledge, attitude, skills and practice changes expected in next-user:** Agronomists, technicians and farmers in Colombia and Nicaragua change the way they collect agricultural information and use the Beta version of the CSMS to optimize the data capture, storage and access to their own data and use it to make more informed decisions on the best Climate-Smart Practices**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** As partners are involved from the beginning in the development of the CSMS, they will use it as their own tool. So that they are interested and encouraged to use the system to their benefit. The reliability of results and their usefulness will motivate partners to use the CSMS too.**Partners contributing to this deliverable****Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego**Partner #2:** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego**Deliverable Ranking****Address gender and social inclusion aspect** <Not defined>**Potential for/ actual contribution to outcomes** <Not defined>**Level of shared ownership (partnerships across org.)** <Not defined>**What is your personal perspective of the importance of this product** <Not defined>**Deliverable dissemination****Open access restriction:** <Not defined>**License adopted:** <Not defined>**Dissemination Channel:** -1**Dissemination URL:** <Not defined>**Description:** <Not defined>**Creator / Authors:** <Not defined>

Submitted on 2016-02-24 at 15:13 UTC

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

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #9

### Main Information

<b>Title:</b> Multi-temporal scale prediction of best CSP	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Exploratory analysis have been carried out

### Next-user

Agronomists, technicians from FEDEARROZ (Colombia)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Fedearroz Researchers will use this information to make more informed decisions on the most appropriate traits and/or varietal types towards the future, and more broadly are capable of designing a long-term vision of an adapted rice sector for the country.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Work sessions with researchers from FEDEARROZ, integrating their feedback into the analysis, encourage them to use and interpret the analytical tools

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego

### Deliverable Ranking

Submitted on 2016-02-24 at 15:13 UTC

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

Deliverable dissemination	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	-1
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #10

Main Information	
<b>Title:</b> Data capture protocol for standardized climate, soil and management information at site-specific level	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Other non-peer reviewed articles
<b>Year of expected completion:</b> 2016	

Submitted on 2016-02-24 at 15:13 UTC

**Status:** On-going**Justification for cancelling the deliverable:** We are still working in the protocol, and it is expected to be released in 2016. For the first version, see deliverable file: Report with a diagnosis of existing information of target CSP, and partner's needs**Next-user**

Agronomists from FEDEARROZ, The Hacienda el Potrero, ANAR and Farmers interested in the data capture

**Knowledge, attitude, skills and practice changes expected in next-user:** The users are aware of the advantages of the system to collect and to storage: climate, soil and crop management information, ensuring that data will be in a standard format that can be then much easier analyzed. As result we hope to count on cleaner and more useful databases.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The protocol will be open access, for any user who want to start the data capture process. Once the user identify the advantage of saving information, he/she will probably decide to adopt this tool as a routine.**Partners contributing to this deliverable****Partner #1 (Responsible):** Jimenez, Daniel <d.jimenez@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical**Partner #2:** Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego**Deliverable Ranking**

<b>Address gender and social inclusion aspect</b>	2
<b>Potential for/ actual contribution to outcomes</b>	3
<b>Level of shared ownership (partnerships across org.)</b>	5
<b>What is your personal perspective of the importance of this product</b>	5

**Deliverable dissemination****Open access restriction:** Yes**License adopted:** <Not defined>**Dissemination Channel:** -1**Dissemination URL:** [<Not defined>](#)**Description:** A document which serves as the protocol for capture and storing information in agriculture.

Submitted on 2016-02-24 at 15:13 UTC

**Creator / Authors:** AEPS - BIG DATA team

**Author Identifier:** AEPS - BIG DATA team

**Publication / Creation date:** Cooming soon

**Language:** Spanish

**Coverage:** Colombia, Nicaragua and Peru

#### Deliverable Data sharing

<http://www.open-aeps.org>

### 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> FEDEARROZ (the national rice producers federation in Colombia), Professionals recognized the potential of the data analysis for the identification of smart practices, and now have skills to scaling “The Hacienda el Potrero” (Peru), and ANAR “Asociación Nicaragüense de Arroceros” (Nicaragua), The professionals of these institutions have a better understanding of the factors that determine the yield of rice.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> The facilitation of FLAR has guaranteed the engagement of the next user in this diagnosis. Furthermore facilitated: the identification of key national institutions holding socio-economic, climate, and crop performance databases (NARs, meteorological institutions, rice mills, growers associations, the visit to rice-production regions within each country, (c) identification of better strategies to approach the institutions holding databases, identifying the person responsible of each country for the development of the CSMS, (f) workshops with farmers, training of farmers on how to use the management system (AEPS platform. <a href="http://www.open-aeps.org:808">http://www.open-aeps.org:808</a>)</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b>  <a href="ftp://ftp.ciat.cgiar.org/DAPA/projects/BIGDATA_AEPS/REPORTES/FLAGSHIP/EvidenciaCCAFS.pdf">ftp://ftp.ciat.cgiar.org/DAPA/projects/BIGDATA_AEPS/REPORTES/FLAGSHIP/EvidenciaCCAFS.pdf</a></p>
<p><b>Lessons and implications for the next planning cycle:</b> We will keep deliverables for 2016 focused on some producers (pilot scheme for scaling up). Deliverables for 2017 depending on the budget allocated.</p>

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> Global Open Data for Agriculture and Nutrition (GODAN)	
<b>Author:</b> Open Data Institute	<b>Subject:</b> Big Data- How open data is solving problems in agriculture and nutrition? 14 use cases
<b>Publisher:</b> Open Data Institute	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2016-02-16
<b>End date:</b> 2016-02-16	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> <Not defined>
<b>Highlight description:</b> Saving \$3.6m in drought damage with a climate-smart tool: CIAT Colombia	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> The impact on the agricultural sector as well as the Colombian economy was significant. Actions informed by this data helped farmers avoid extreme damage from the drought saving an estimated \$3.6m of potential economic losses	
<b>Partners:</b> FEDEARROZ (the national rice producers federation in Colombia), Ministry of Agriculture of Colombia (MADR), Fondo Latinoamericano de Arroz Riego (FLAR)	
<b>Links / Sources for further information:</b> <a href="http://www.godan.info/wp-content/uploads/2015/04/ODI-GODAN-paper-27-05-20152.pdf">http://www.godan.info/wp-content/uploads/2015/04/ODI-GODAN-paper-27-05-20152.pdf</a>	

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Project highlight Information #1	
<b>Title:</b> Climate Modeling Empowers Farmers	
<b>Author:</b> Open Data Watch	<b>Subject:</b> Climate Modeling Helps Colombian Farmers Improve Decision Making
<b>Publisher:</b> Open Data Watch	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2016-02-16
<b>End date:</b> 2016-02-16	<b>Is global:</b> Yes
<b>Country:</b>	<b>Keywords:</b> Big Data , Climate -, Colombia , modeling
<b>Highlight description:</b> A partnership of public, non-profit, and private organizations combined climate and agricultural data to provide location-specific recommendations to rice growers	
<b>Introduction / Objectives:</b> By predicting high risk planting periods, the project saved farmers millions of dollars in agricultural inputs that would have been wasted on drought-stricken crops	
<b>Results:</b> Erratic Climate Decreases Rice Production  Despite generally favorable growing conditions in Colombia, day-to-day climatic fluctuations can reduce potential crop yields 30-50 percent, and major events like floods and droughts can destroy entire crops. 2 As climate change leads to increasingly erratic weather, farmers need more information in order to adapt their cultivation practices.	
<b>Partners:</b> FEDEARROZ , Ministry of Agriculture of Colombia (MADR)	
<b>Links / Sources for further information:</b> <a href="http://dataimpacts.org/project/climate-modeling/">http://dataimpacts.org/project/climate-modeling/</a>	

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Project highlight Information #1	
<b>Title:</b> Los arroceros aprenden a vivir en un mundo con menos agua	
<b>Author:</b> La Silla Vacía	<b>Subject:</b> Big Data para ayudar arroceros en Colombia
<b>Publisher:</b> La Silla Vacía	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2016-02-16
<b>End date:</b> 2016-02-16	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> <Not defined>
<b>Highlight description:</b> <Not defined>	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> <Not defined>	
<b>Partners:</b> Fedearroz, Ministry of Agriculture of Colombia (MADR)	
<b>Links / Sources for further information:</b> <a href="http://lasillavacia.com/historia/los-arroceros-aprenden-vivir-en-un-mundo-con-menos-agua-52478">http://lasillavacia.com/historia/los-arroceros-aprenden-vivir-en-un-mundo-con-menos-agua-52478</a>	

Submitted on 2016-02-24 at 15:13 UTC

Project highlight Information #1	
<b>Title:</b> A Date with Big Data in Uruguay	
<b>Author:</b> CIAT	<b>Subject:</b> Empowering with Big Data tools 5 countries in LAM
<b>Publisher:</b> CIAT	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications Capacity enhancement	<b>Start date:</b> 2016-02-16
<b>End date:</b> 2016-02-16	<b>Is global:</b> No
<b>Country:</b> Colombia Argentina Chile Brazil	<b>Keywords:</b> <Not defined>
<b>Highlight description:</b> <Not defined>	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> <Not defined>	
<b>Partners:</b> Fondo Latinoamericano de Arroz Riego (FLAR)	
<b>Links / Sources for further information:</b> <a href="http://www.ciatnews.cgiar.org/2015/08/18/a-date-with-big-data-in-uruguay/">http://www.ciatnews.cgiar.org/2015/08/18/a-date-with-big-data-in-uruguay/</a>	

Submitted on 2016-02-24 at 15:13 UTC

Project highlight Information #1	
<b>Title:</b> The data revolution: finding the missing millions	
<b>Author:</b> Overseas Development Institute	<b>Subject:</b> Colombian rice growers and a democratic revolution
<b>Publisher:</b> Overseas Development Institute	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2016-02-16
<b>End date:</b> 2016-02-16	<b>Is global:</b> No
<b>Country:</b> Colombia	<b>Keywords:</b> <Not defined>
<p><b>Highlight description:</b> Colombian rice growers and a democratic revolution From 2007, yields in Colombia's rice-producing districts started falling dramatically: from 6 to 5 tons per hectare in five years. Rice is the staple food of almost a third of the population, particularly poorer communities, and the primary source of income of numerous small-scale subsistence farmers. A federation of rice growers (Fedearroz); the Centro Internacional de Agricultura Tropical (CIAT) and Colombia's ministry of agriculture together analysed crop-related data on an unprecedented scale. The CIAT team used data-mining techniques to analyse information from annual rice surveys, harvest monitoring records, and agronomic experiments with changing the dates of rice sowing, as well as weather data from the National Institute of Hydrology. Results suggested that for several regions climate change was the problem, and that traditional farming practices needed to change too. The results are highly site-specific. In the town of Saldaña, for example, rice yields were limited mainly by solar radiation during the grain-ripening stage. I</p>	
<b>Introduction / Objectives:</b> <Not defined>	
<p><b>Results:</b> In Espinal, the biggest problem was warm nights. This suggested that farmers in Saldaña could boost yields by aligning their sowing dates with sunnier seasons, whereas those in Espinal may have needed a variety more suited the local climate. 'When we use machine-learning techniques, we can explore non-linear functional relationships between various factors – temperature, radiation, rainfall and productivity', says CIAT agronomist Daniel Jiménez. The analysis forecasted that the first growing season of the year would coincide with a severe dry period and that the window for planting crops would need to be delayed. A simple, site-specific message was articulated and communicated by Fedearroz to 170 farmers in Cordoba, a region in the north: 'don't plant in this sowing season'. To make sure the rice growers took the recommendation seriously, they gave pinpoint-accurate information to the farmers on either the ideal windows for planting or the best variety to grow. 'One farmer said to me that they acted on the research because it was based on their own data,' says Jiménez. This information helped these farmers avoid the drought and estimated economic losses of \$3.6 million for that harvest. Now the CIAT team intends to scale up the initiative, using a similar approach with rice growers in Peru and Nicaragua through a partnership with the Latin American Fund for Irrigated Rice (FLAR).</p>	
<b>Partners:</b> FEDEARROZ, Ministry of Agriculture of Colombia (MADR)	
<p><b>Links / Sources for further information:</b>  <a href="http://www.developmentprogress.org/sites/developmentprogress.org/files/case-study-report/data_revolution_-_finding_the_missing_millions-finalinfographic-corrections_290515.pdf">http://www.developmentprogress.org/sites/developmentprogress.org/files/case-study-report/data_revolution_-_finding_the_missing_millions-finalinfographic-corrections_290515.pdf</a></p>	

## 6. Activities

Activity #1	
<b>Title:</b> 2. Pilot of a CSMS for rice in LAM (Colombia and Nicaragua)	
<b>Description:</b> Design and release of a first version of the internet- based system meeting the needs of the partners. In addition, the refining, testing and validating of the best modelling approaches based on traditional methods such as: Ordinary Least Squares regression (OLS), Principal component analysis (PCA), Robust linear regressions, Mixed Models, Facto Class, Categorical Principal Components Analysis and /or : empirical based on machine learning such as artificial neural networks, random forest, Classification And Regression Tree (CART). The developed and refined empirical approaches will be used together with process-based models the General Large-Area Model (GLAM) as predictive technologies to derive short- and medium-term outlooks of rice production and best performing Climate Smart practices	
<b>Start date (dd-MM-yyyy):</b> 01-07-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Jimenez, Daniel <d.jimenez@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> We will keep this activity focused on some producers (pilot scheme for scaling up) . Climate Smart Agriculture, Climate Smart Practices and all these concepts rely on agronomy. Climate Smart Practices are good agronomic practices. Having said so, for any person involved in agricultural development through agronomy; it is crystal clear that: farmers need to see that a given technology/recommendation is working in order to implement it in his/her own field. That is the way how massive adoption technologies take place. A good example of this is the ay how CCAFS through smart villages concept proposes massive adoption in the future. In LAM, one of the best examples is FLAR, which over the last 20 years has demonstrated that varieties, agronomy and water harvesting has been adapted after been demonstrated that was a Climate Smart Practice/ Agronomic practice that works. Thus, despite budget cuts, our new proposal approach of focusing on some producers (pilot scheme for scaling up) has total legitimate, and we can guarantee that in the future it has the potential of being adapted for more than 300 000 rice growers and many more of other crops.
Activity #2	
<b>Title:</b> Identification of partners needs in terms of data and knowledge management Colombia, Peru y Nicaragua	

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<b>Description:</b> Documentation of partners needs and capacities on CSMS: Visits to each country/partner. FEDEARROZ (the national rice producers federation in Colombia), “The Hacienda el Potrero” (Peru), and ANAR “Asociación Nicaragüense de Arroceros” (Nicaragua) in order to know if and how they manage, share and store their information, how do they communicate with their farmers.	
<b>Start date (dd-MM-yyyy):</b> 12-01-2015	<b>End date (dd-MM-yyyy):</b> 30-06-2016
<b>Leader:</b> Jimenez, Daniel <d.jimenez@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Complete	

### Activity #3

<b>Title:</b> Dissemination of the CSMS to researchers, agronomist and farmers through FLAR’s network	
<b>Description:</b> The release of a functional version of a CSMS that captures, analyzes and shares agricultural information. Training of the teams of the partners in each country in order to be able to use the CSMS as part of their daily work. Contribute to create the enabling environment of new policies to emerge that would promote the use of CSMS.	
<b>Start date (dd-MM-yyyy):</b> 01-07-2016	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Graterol, Eduardo <e.j.graterol@cgiar.org>, FLAR - Fondo Latinoamericano para Arroz de Riego	
<b>Status:</b> Cancelled	<b>Justification:</b> Given that the this project has been severely affected with the recent cuts 75% , the activity has been discussed with FLAR and we considered is no feasible with the current budget

**Lessons regarding your project activities and possible implications for the coming planning cycle:** We will keep this activity focused on some producers (pilot scheme for scaling up).

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## 7. Leverages

<Not defined>

Submitted on 2016-03-03 at 18:51 UTC

**Title:** Mainstreaming CSA practices in mixed tree/food crop systems among smallholder farmers in W Africa & Latin America

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	RP LAM - Latin America Region	<b>Mgmt. liaison contact</b>	Loboguerrero, Ana Maria <a.m.loboguerrero@cgiar.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Lundy, Mark <m.lundy@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

### Project is working on

Flaship(s)	Region(s)
FP1: Climate-smart practices	RP LAM: Latin America
	RP WA: West Africa

### Bilateral project(s) contributing to this project

166 - USAID- Unlocking Private Sector Engagement and Creating a Learning Community in Climate Smart Agriculture
142 - Trade-offs and synergies in climate change adaptation and mitigation in coffee and cocoa systems
245 - (USDA-BAA) Identifying Opportunities for Action on Private Sector Engagement in Climate-Smart Agriculture
246 - Science support to the Sustainable Cocoa Production Platform (SCPP)

### Summary

The project seeks to test methods for scaling Climate Smart Agricultural (CSA) practices through (a) voluntary certification schemes; and, (b) impact investments in producer organizations, using smallholder coffee and cocoa systems in Latin America as model cases. Project partners include two of the preeminent actors in voluntary certification (Rainforest Alliance) and impact investing (Root Capital). We will assess the climate change exposure of coffee and cocoa systems at a sub-national scale, develop appropriate CSA practices with farmers incorporating cash crops and food crops to increase the resilience of these systems and codify these practices in adaptation guidelines. These guidelines will be mainstreamed through existing certification training curricula and used to develop innovative investment products. Results will be promoted with multiple voluntary certification agencies and impact

*Submitted on 2016-03-03 at 18:51 UTC*

investors to achieve scale. Outcomes will influence government, private sector and civil society actors towards a common adaptation agenda applicable to other smallholder crops.

Submitted on 2016-03-03 at 18:51 UTC

## 2. Partners

### Partner #1

**Institution:** IITA - International Institute of Tropical Agriculture

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Jassonge, Laurence <L.Jassogne@cgiar.org>	Contribute to vulnerability assessments / zoning using crop and climate models for cocoa in Ghana; development of site specific CSA practices for cocoa training modules for West Africa; participation in multi-stakeholder platforms on cocoa in Ghana. Activity 2014-3 *Partner*. Activity 2014-15 *Partner*.

### Partner #2 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Lundy, Mark <m.lundy@cgiar.org>	Project lead
Partner	Lundy, Mark <mlundy@cgiar.org>	Overall project leader Activity 2014-71 *Partner*. Activity 2014-75 *Partner*.
Partner	Laderach, Peter <p.laderach@cgiar.org>	Activity 2014-15 *Leader*. Activity 2014-3 *Partner*.

### Partner #3

**Institution:** Root Capital

#### CCAFS Partner(s) allocating budget

CIAT - Centro Internacional de Agricultura Tropical - Colombia
IITA - International Institute of Tropical Agriculture - Nigeria

#### Contacts

Submitted on 2016-03-03 at 18:51 UTC

Type	Contact	Responsibilities and contributions
Partner	Schmerler, Benjamin <bschmerler@rootcapital.org>	Activity 2014-71 *Leader*.

## Partner #4

**Institution:** SFL - Sustainable Food Lab

### CCAFS Partner(s) allocating budget

CIAT - Centro Internacional de Agricultura Tropical - Colombia
IITA - International Institute of Tropical Agriculture - Nigeria

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Daniels, Stephanie <stephanie@sustainablefood.org>	Activity 2014-75 *Leader*.

## Partner #5

**Institution:** Rainforest Alliance

### CCAFS Partner(s) allocating budget

CIAT - Centro Internacional de Agricultura Tropical - Colombia
IITA - International Institute of Tropical Agriculture - Nigeria

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Noponen, Martin <mnoponen@ra.org>	Activity 2014-3 *Leader*. Activity 2014-5 *Leader*.

**Partnerships overall performance over the last reporting period:** Partners have performed relatively well but funding uncertainty and overall declines have limited their flexibility and willingness to invest additional time in this project.

*Submitted on 2016-03-03 at 18:51 UTC*

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** It is difficult to maintain a partnership with donors do not provide approved funding.

Submitted on 2016-03-03 at 18:51 UTC

### 3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Ghana
Country	Not applicable	Not applicable	Nicaragua
Country	Not applicable	Not applicable	Peru

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

Despite the vulnerability to climate change of millions of small coffee and cocoa producers, adaptation is not a prominent component of supply chains, certification schemes, extension programs and impact investing. This project will contribute to mainstreaming CSA practice in coffee and cocoa value chains by: (a) developing locally adapted guides for tree and food crops and incorporating these into training and technical assistance delivered to tens of thousands of farmers through certification networks; and, (b) contributing to the design of new impact investment mechanisms to support CSA uptake. Farmers will increase resilience through crop diversification and management adjustments depending on their specific exposure to climate change. These practices will be promoted by voluntary certification agencies and incorporated into financial investment vehicles by impact investors. These processes will be supported by MSPs with key private, public and civil society actors and lessons learned documented and promoted for other crops and regions.

**Annual progress towards outcome (end of 2015):** Climate impact gradients for coffee, cocoa and associated food crops are developed for Ghana, Peru and Nicaragua. Specific CSA practices are identified, their cost-benefit assessed and participatory workshops held with producer associations to identify best fits for different conditions along the impact gradient initially in Ghana. Strategies are developed to incorporate best fits into Rainforest Alliance certification training materials. In a parallel fashion, Root Capital develops underwriting guidelines for CSA financial instruments. Multi-stakeholder platforms are convened in Ghana allowing dialogue around the role of public and private actors in cocoa adaptation and transition activities. Key global partners and events identified and an engagement strategy constructed.

FOR REPORTING IN AUG 2015: In 2015, use of CCAFS climate science and site specific CSA practices (developed in LAM and Ghana) in the Rainforest Alliance voluntary certification scheme and in impact investment approaches implemented by Root Capital in 2015, with the aim of engaging 100,000 cacao farmers in Ghana in 2016).

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**Annual progress towards project outcome in the current reporting cycle (2015):** Inception workshops in Ghana and Peru convened relevant stakeholders from the cocoa (Ghana, Peru) and coffee (Peru) value chains, with high participation. Results: clear interest in CC impacts on crops and on most appropriate CSA practices; demand for actionable tools and recommendations to respond to CC in specific regions; recognition that several projects work on the topic of CC to adapt the sectors and increased coordination would be helpful (Peru); good possibility that research findings will support the emerging COCOBOD strategy and Forestry Commission programs (Ghana).

ECOM confirmed as partner in Ghana willing to work on uptake of project outcomes with network of 100,000 farmers.

Incorporation of project exposure mapping results by the Kuapa Kokoo cooperative (100,000 members).

- Climate impact gradients for coffee and cocoa have been developed for Ghana
- Specific CSA practices are identified in Ghana
- Key global partners and events identified and an engagement strategy constructed.

**Communication and engagement activities have contributed to achieving your Project outcomes:** Engagement by local actors knowledgeable of sector dynamics, history and personalities has been key in gaining traction in Ghana and Peru. This was not adequately foreseen.

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

**Annual progress towards outcome (end of 2016):** Exposure gradient maps used by RA and RC in Ghana, Peru and Nicaragua. Specific CSA practices validated in Ghana, Peru and possibly Nicaragua. Training materials used by RA with 10 POs. Peer learning started with other certification agencies. Financial products used by Root Capital's with 10 POs. Peer learning started with other impact investment organizations through the CSAF. MSP meet once per year in Ghana, Peru and possibly Nicaragua. Key engagement with global partners under way through.

**Annual progress towards outcome (end of 2017):** Results and methodologies of exposure gradient mapping for coffee, cocoa and food crops to identify specific CSA are actively being used by Rainforest Alliance and one additional voluntary certification agency and Root Capital and one additional impact investment agency in Peru, Nicaragua and Ghana. Site specific CSA practices further improved through at farmer field schools along exposure gradients in Peru, Nicaragua and Ghana. Training materials on climate-smart practices developed in local languages and being used in certification training and extension activities by at least two voluntary certification agencies and one commodity trader active in Peru, Nicaragua and Ghana reaching 20 producer associations. Emerging lessons learned shared with other voluntary certification agencies through the ISEAL Alliance. Climate smart adaptation and mitigation financial products scaled in Root Capital's and one additional impact investor's lending portfolio in Peru, Nicaragua and Ghana reaching 20 producer associations. Emerging lessons learned shared with other impact investment organizations through the Council on Smallholder Agricultural Finance and with national banking sectors in Peru, Nicaragua and Ghana. Multisector engagement facilitates discussions among key actors in three national level fora to promote climate adaptation in the target regions, review use of project findings

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and identify mechanisms to scale best bet CSA practices for the particular regions of focus at least once per year in Peru, Nicaragua and Ghana. Key engagement with global partners continues through meetings and presentations convened in or around relevant industry events in the coffee and cocoa sectors. At least one global brand company identified to promote use of project findings.

**Annual progress towards outcome (end of 2018):** Results and methodologies of exposure gradient mapping for coffee, cocoa and food crops to identify specific CSA are actively being used by Rainforest Alliance and two additional voluntary certification agency and Root Capital and two additional impact investment agency in Peru, Nicaragua and Ghana. Site specific CSA practices further improved through at farmer field schools along exposure gradients in Peru, Nicaragua and Ghana. Training materials on climate-smart practices developed in local languages and being used in certification training and extension activities by at least three voluntary certification agencies, one commodity trader and one government extension service in Peru, Nicaragua and Ghana reaching 35 producer associations. Emerging lessons learned taken up and incorporated by other voluntary certification agencies through the ISEAL Alliance. Climate smart adaptation and mitigation financial products scaled in Root Capital's and one additional impact investor's lending portfolio in Peru, Nicaragua and Ghana reaching 35 producer associations. Emerging lessons learned shared with other impact investment organizations through the Council on Smallholder Agricultural Finance and with national banking sectors in Peru, Nicaragua and Ghana. Multisector engagement facilitates discussions among key actors in three national level fora to promote climate adaptation in the target regions, review use of project findings and identify mechanisms to scale best bet CSA practices for the particular regions of focus at least once per year in Peru, Nicaragua and Ghana. Key engagement with global partners continues through meetings and presentations convened in or around relevant industry events in the coffee and cocoa sectors. At least one global brand company publicly commits to using project findings in a verifiable fashion and a second global brand company expresses interest in following suit.

**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:** We will revisit the overall theory of change in March to reformulate it based on actual funding available rather than initial projections. Anticipate reduced targets.

## 4.2 Contribution to CCAFS Outcomes

**RP LAM - Outcome 2019:** LAM's producers associations are choosing and promoting CSA context-specific practices through strengthened extension services rescuing ancient and traditional knowledge. Local governments develop equitable local agricultural development plans using CSA context-specific portfolios assessed economically to plan and prioritize their investments focusing on climate variability challenges. NARS develop demand-driven outputs with sufficient technological capacity to address agricultural sector needs to face climate

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challenges. Private sector works with producer's associations, local and national governments to implement and scale out CSA involving agricultural market agents through innovative approaches (incentives along value chain to access to certification schemes). National governments scale up CSA approach based on successful experiences developed at local level.

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

2019	
<b>Target value:</b> 6	<b>Cumulative target to date:</b> 8
<p><b>Target narrative:</b> 3 voluntary standards organizations using methods and tools derived from this project to inform and tailor their climate criteria and extension programs in coffee and cocoa. In addition to Rainforest Alliance, likely users include Utz Certified, Fairtrade International, 4C and Fairtrade USA. These organizations currently certify 30% of global cocoa production and 17% of global coffee production; as leading members of the International Social and Environmental Accreditation and Labelling Alliance (ISEAL), they provide the central mechanism for farmers to gain recognition and value from improved farming practices. They are widely recognized as the mainstream programs in use by the coffee and cocoa trade.</p> <p>3 impact investment agencies using methods and tools derived from this project to inform their investment decisions in coffee and cocoa in Nicaragua and Peru. Potential users might include: Alterfin, Oikocredit, Rabobank's Rabo Rural Fund, responsAbility Investments AG, Root Capital, Shared Interest Society and Triodos Investment Management. These organizations currently lend approximately US\$ 400m annually to producer organizations but without explicit inclusion of climate science in their lending process.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

2015		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> 2.0
<p><b>Target narrative:</b> The project will be working towards this goal by engaging 1 voluntary certification organization and 1 impact investor around tools from this project for use in Ghana. The initial focus on Ghana is due to the need to report outcomes to DFID in Ghana by August 2015. For that reason LAM outcomes will become apparent in 2016.</p> <p><b>Narrative for your achieved targets, including evidence:</b> Rainforest Alliance and Root Capital engaged in Peru work in 2015.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p> <p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Gender analysis to be incorporated in 2017</p>		

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2016	
<b>Target value:</b> 2	<b>Cumulative target to date:</b> 2
<p><b>Target narrative:</b> 1 voluntary standards organizations using methods and tools derived from this project to inform and tailor their climate criteria and extension programs in coffee and cocoa (Rainforest Alliance).</p> <p>1 impact investment agency using methods and tools derived from this project to inform their investment decisions in coffee and cocoa in Nicaragua and Peru (Root Capital).</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Gender disaggregated data on producers / PO gathered</p>	

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

**Indicator #2:** FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

2019	
<b>Target value:</b> 45	<b>Cumulative target to date:</b> 72
<p><b>Target narrative:</b> 41 farmer associations using methods and tools derived from this project to inform and tailor their activities in coffee and cocoa in Nicaragua and Peru.</p> <p>2 commodity traders using methods and tools derived from this project to inform their activities in Nicaragua and Peru for coffee and/or cocoa.</p> <p>2 brand companies engaged in ongoing dialogue on providing incentives for farmers to adopt CSA.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

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2015		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 3	<b>Target achieved:</b> 0.0
<b>Target narrative:</b> The project will be working towards this goal through initial activities in Ghana. The initial focus on Ghana is due to the need to report outcomes to DFID in Ghana by August 2015. For that reason LAM outcomes will become apparent in 2016.		
<b>Narrative for your achieved targets, including evidence:</b> Not implemented in 2015		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Gender analysis to be incorporated in 2017		

2016	
<b>Target value:</b> 8	<b>Cumulative target to date:</b> 15
<b>Target narrative:</b> 8 farmer associations using methods and tools derived from this project to inform and tailor their activities in coffee and cocoa in Nicaragua and Peru.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Gender disaggregated data on producers / PO gathered	

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

**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.

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

**Indicator #2:** FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

2019	
<b>Target value:</b> 12	<b>Cumulative target to date:</b> 72
<p><b>Target narrative:</b> 2 voluntary standards organizations using methods and tools derived from this project to inform and tailor their extension programs in cocoa. In addition to Rainforest Alliance, likely users include Utz Certified and Fairtrade International. RA, Utz and FT currently certify 30% of global cocoa production; as leading members of the International Social and Environmental Accreditation and Labelling Alliance (ISEAL), they provide the central mechanism for farmers to gain recognition and value from improved farming practices. They are widely recognized as the mainstream programs in use by the cocoa trade in West Africa.</p> <p>3 impact investment agencies using methods and tools derived from this project to inform their investment decisions in coffee and cocoa in Ghana. Potential users might include: Alterfin, Oikocredit, Rabobank's Rabo Rural Fund, responsAbility Investments AG, Root Capital, Shared Interest Society and Triodos Investment Management. These organizations currently lend approximately US\$ 400m annually to producer organizations but without explicit inclusion of climate science in their lending process.</p> <p>1 National government extension service (Ghana / COCOBOD) using methods and tools derived from this project to inform and tailor their extension programs in cocoa.</p> <p>2 cocoa commodity traders using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p> <p>4 producer associations using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

2015		
<b>Target value:</b> 3	<b>Cumulative target to date:</b> 3	<b>Target achieved:</b> 3.0
<p><b>Target narrative:</b> 1 voluntary standard organization (Rainforest Alliance) using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p> <p>1 impact investment agency (Root Capital) using methods and tools derived from this project to inform their investment decisions in cocoa in Ghana.</p> <p>1 producer association using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p>		

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2015	
<p><b>Narrative for your achieved targets, including evidence:</b> ECOM confirmed as partner in Ghana willing to work on uptake of project outcomes with network of 100,000 farmers. Incorporation of project exposure mapping results by the Kuapa Kokoo cooperative (100,000 members) Rainforest Alliance reviewing adjustments to training materials based on exposure gradient maps</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Gender analysis initiated in 2015 with a focus on youth and land inheritance led by IITA.</p>	

2016	
<b>Target value:</b> 4	<b>Cumulative target to date:</b> 15
<p><b>Target narrative:</b> 1 voluntary standard organization -- Rainforest Alliance -- using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p> <p>1 impact investment agency -- Root Capital -- using methods and tools derived from this project to inform their investment decisions in cocoa in Ghana.</p> <p>1 National government extension service (Ghana / COCOBOD) using methods and tools derived from this project to inform and tailor their extension programs in cocoa.</p> <p>1 producer associations using methods and tools derived from this project to inform and tailor their extension programs in cocoa in Ghana.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Gender disaggregated data on producers / PO gathered.</p>	

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

### 4.3 Other Contributions

**Contribution to other CCAFS Impact Pathways:** <Not defined>

## Collaborating with other CRPs

Policies, Institutions and Markets
<b>Description of collaboration:</b> Exploratory to date. Hope to finalized an agreement to examine how market mechanisms and value chain and business model upgrading can incorporate CSA practice promotion in ways that are profitable to farmers and buyers.
<b>The achieved outcome contributions:</b> <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> Private/public sector actors use results on CC impacts on cocoa and coffee to support strategies.</p>
<p><b>Outcome statement:</b> CIAT results on climate suitability of cocoa and coffee were used in 2015 to prioritize strategies of private and public sector. WCF references Läderach et al. 2013 in their proposal to USAID to develop a CSA strategy for the cocoa sector. The WB's Ghana agricultural sector risk assessment uses results on projected cocoa production decrease to prioritize risk management; two WB senior scientist presentations include CIAT's findings; WCR uses findings to guide its global coffee breeding program.</p>
<p><b>Research Outputs:</b> Using CC predictions from Global Circulation Models, Läderach et al. 2013 predict changes in relative climatic suitability for cocoa for 2050 and suggest site-specific strategies to reduce the vulnerability of the cocoa sector:  <a href="http://link.springer.com/article/10.1007%2Fs10584-013-0774-8">http://link.springer.com/article/10.1007%2Fs10584-013-0774-8</a>  Läderach et al. 2011 show that the optimum cocoa-growing area will increase by 2050 to an altitude between 450-500 masl:  <a href="http://www.eenews.net/assets/2011/10/03/document_cw_01.pdf">http://www.eenews.net/assets/2011/10/03/document_cw_01.pdf</a>  Data for current and future climatic suitability for cocoa farming in Ghana and Ivory Coast, West Africa:  <a href="https://dataverse.harvard.edu/dataverse/Cocoa_Ghana_IvoryCoast">https://dataverse.harvard.edu/dataverse/Cocoa_Ghana_IvoryCoast</a>  Bunn et al 2015a find that in zones currently classified as hot and dry, CC will impact arabica more than those that are better suited to it. Zones that currently have climates better suited for arabica will migrate upwards by about 500m in elevation:  <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490</a>  <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155</a>  Bunn et al 2015b, Impact of CC on robusta and arabica coffee globally:  <a href="http://link.springer.com/article/10.1007%2Fs10584-014-1306-x">http://link.springer.com/article/10.1007%2Fs10584-014-1306-x</a></p>
<p><b>Research Partners:</b> CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)  World Coffee Research  CCAFS</p>
<p><b>Activities that contributed to the outcome:</b> Upon request, CIAT scientists have directly provided data and support about the models used in Läderach et al 2011, 2013, to staff of WCF and the WB. Two workshops were held in Ghana and Peru with more than 150 participants with key government and private sector actors.</p> <p>WCR commissioned the study on worldwide Arabica impacts of CC to be able to create new, climate-resilient varieties tailored to individual climatic zones. The report, is co-authored by WCR's executive director Tim Schilling and WCR's Assistant Director for CORE programs, Christophe Montagnon.</p>
<p><b>Non-research Partners:</b> Conservation International  GMCR  BMGF  WCR</p>
<p><b>Output Users:</b> World Cocoa Foundation  The World Bank  World Coffee Research</p>
<p><b>How the output was used:</b> Justify WCF's proposal to USAID for a CSA cocoa strategy.  Study commissioned by WCF to guide the CC strategy of members.  WB prioritizes risk management in Ghana based on projected production decrease.  WCR uses findings to locate sites for International Multi-location Variety Trial.  Inclusion of maps/results in high level presentations.</p>

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**Evidence of the outcome:** "CIAT Research Work with CCAFS influences decision-making of next users; a validation report". Right Track Africa

**References:** [https://elliott.gwu.edu/sites/elliott.gwu.edu/files/World Cocoa Foundation.pdf](https://elliott.gwu.edu/sites/elliott.gwu.edu/files/World%20Cocoa%20Foundation.pdf) [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/09/11/090224b0830cfc6b/3\\_0/Rendered/PDF/Ghana000Agricu00risk0prioritization.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/09/11/090224b0830cfc6b/3_0/Rendered/PDF/Ghana000Agricu00risk0prioritization.pdf)  
[https://www.agriskmanagementforum.org/sites/agriskmanagementforum.org/files/farmd\\_html/farmd/images/PP\\_T\\_RSCD\\_WorldBank\\_London101015\\_Final.pdf](https://www.agriskmanagementforum.org/sites/agriskmanagementforum.org/files/farmd_html/farmd/images/PP_T_RSCD_WorldBank_London101015_Final.pdf)  
[http://www.gffa-berlin.de/images/stories/GFFA\\_2015/Arbeitssitzungen/Arbeitssitzung\\_Weltbank\\_EN.pdf](http://www.gffa-berlin.de/images/stories/GFFA_2015/Arbeitssitzungen/Arbeitssitzung_Weltbank_EN.pdf)  
<http://worldcoffeeresearch.org/read-more/news/169-unlocking-coffee-s-climate-new-wcr-research-on-coffee-and-climate-change-will-allow-dramatic-improvements-in-climate-adaptation-efforts-for-coffee-growers-and-industry>  
[https://www.youtube.com/watch?v=eK0mfSloA\\_4](https://www.youtube.com/watch?v=eK0mfSloA_4)  
<http://link.springer.com/article/10.1007%2Fs10584-013-0774-8>  
[http://www.eenews.net/assets/2011/10/03/document\\_cw\\_01.pdf](http://www.eenews.net/assets/2011/10/03/document_cw_01.pdf)  
[https://dataverse.harvard.edu/dataverse/Cocoa\\_Ghana\\_IvoryCoast](https://dataverse.harvard.edu/dataverse/Cocoa_Ghana_IvoryCoast)  
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490>  
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155>  
<http://link.springer.com/article/10.1007%2Fs10584-014-1306-x>

**The primary 2019 outcome indicator that this case study is contributing to:**

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

FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

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

**Year:** 2015

**Annexes uploaded:** [CIAT outcomes validation study Feb2016.pdf](#)

### Outcome case study #2

**Title:** Mobilizing private sector partners for climate action in the cocoa value chain

**Outcome statement:** see attached PDF file

**Research Outputs:** see attached PDF file

**Research Partners:** see attached PDF file

**Activities that contributed to the outcome:** see attached PDF file

**Non-research Partners:** see attached PDF file

**Output Users:** see attached PDF file

**How the output was used:** see attached PDF file

**Evidence of the outcome:** see attached PDF file

**References:** <https://cgspace.cgiar.org/bitstream/handle/10568/67911/outcomecase.pdf?sequence=3>

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**The primary 2019 outcome indicator that this case study is contributing to:**

FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

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

Year: 2015

Annexes uploaded: [CSVC DFID outcome case 2015.pdf](#)

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<p><b>FP1 - MOG # 5:</b> 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)</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP1 - MOG # 3:</b> 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)</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP1 - MOG # 4:</b> 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)</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP1 - MOG # 2:</b> 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)</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>

### Major Output groups - 2014

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**FP1 - MOG # 5:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

**FP1 - MOG # 3:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

**FP1 - MOG # 4:** 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 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>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

### Major Output groups - 2015

**FP1 - MOG # 5:** 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:**

Information provided to NGOs, public and private sector actors raised concerns about climate change and is helping to frame the conversation about what needs to be done.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Forthcoming 2016

**FP1 - MOG # 3:** 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:**

Scaling pathways identified in Ghana via public policy (e.g. Forestry Commission, REDD+) and private companies. Networks under development in Peru with producer and exporter organizations, NGOs and public sector for scaling.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Forthcoming 2016 and 2017

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**FP1 - MOG # 4:** 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:**

Multi-stakeholder platforms established and initial conversations convened in Ghana (70+ people) and Peru (60+ people). Sub-national workshops on CSA practices held in Ghana to identify & prioritize CSA practices.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Forthcoming 2016 and 2017

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Methods under development for cost benefit analysis along the value chain

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Forthcoming 2016 and 2017

### Major Output groups - 2016

**FP1 - MOG # 5:** 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**

CSA practices incorporated into voluntary certification training materials by Rainforest Alliance  
CSA practices incorporated into impact investing vehicles by Root Capital

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

Gender disaggregated data on producers / PO gathered. All work focuses on smallholder farmers and thus drives social inclusion.

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**FP1 - MOG # 3:** 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**

CSA practices incorporated into voluntary certification training materials by Rainforest Alliance  
CSA practices incorporated into impact investing vehicles by Root Capital

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

Gender disaggregated data on producers / PO gathered. All work focuses on smallholder farmers and thus drives social inclusion.

**FP1 - MOG # 4:** 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**

MSP established in Ghana, Peru and Nicaragua including public sector, producer organizations, civil society and private sector.  
Peer learning initiated with voluntary certification agencies (ISEAL) and impact investors (CSAF)

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

Gender disaggregated data on producers / PO gathered. All work focuses on smallholder farmers and thus drives social inclusion. Not sure how gender is relevant at the level of multi-stakeholder platforms.

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

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

Exposure maps developed and used to identify appropriate CSA practices by risk gradient.  
CSA practices identified & prioritized by exposure gradient

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

Gender disaggregated data on producers / PO gathered. All work focuses on smallholder farmers and thus drives social inclusion.

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** None

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## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Exposure analysis for coffee, cocoa and relevant food crops for Ghana, Peru and Nicaragua	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Ghana mostly completed. Peru started and on-going but with difficulties accessing data. Nicaragua not yet started due to funding uncertainty.

Next-user
Project team, multi-stakeholder platforms
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The relative exposure of coffee and cocoa systems at a national scale facilitates the identification of gradient specific drivers which can then inform site specific CSA practices.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Workshops, reports and on-going discussion through multi-stakeholder fora at the national and international level. Most important however is the continuous collaboration with Rainforest Alliance and Root Capital to assure ownership of methodologies, tools and results as these partners are also the next users.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
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Submitted on 2016-03-03 at 18:51 UTC

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>
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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #2

#### Main Information

<b>Title:</b> CSA practices along exposure gradient identified and ex- ante analysis and trade-off analysis conducted	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2018	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Ghana and Peru underway. Nicaragua not started.

#### Next-user

Project team, multi-stakeholder platforms
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Submitted on 2016-03-03 at 18:51 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** CSA practices are prioritized and selected using a participatory CSA prioritization framework developed by CIAT/CCAFS including a CSA compendium, participatory prioritization processes, ex ante cost and benefit analysis and final selection of practices by stakeholders.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Workshops, reports and on-going discussion through multi-stakeholder fora at the national and international level. Most important however is the continuous collaboration with Rainforest Alliance and Root Capital to assure ownership of methodologies, tools and results as these partners are also the next users.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

**Partner #3:** Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

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**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

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

**Language:** <Not defined>

**Coverage:** <Not defined>

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### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #3

#### Main Information

<b>Title:</b> Strategically identify learning sites along gradients of climate vulnerabilities (Ghana & Peru)	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Started in Ghana, not yet initiated in Peru. Nicaragua pending due to funding cuts.

#### Next-user

Project itself
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Set of strategically selected learning sites will be used to identify types of climate change responses through participatory workshops. This will allow the development of site specific adaptation practices (differentiating about 3-4 situations per country) that will feed into certification training.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> This information will primarily be used by the Project participants themselves (RA, CIAT, local partners).

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

#### Deliverable Ranking

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

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Deliverable dissemination
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Deliverable Metadata
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<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> Participatory workshops at strategic learning sites to identify vulnerabilities and adaptation best practices	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Started in Ghana, not yet initiated in Peru. Nicaragua pending due to funding cuts.

Next-user
Project partners and key external stakeholders

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**Knowledge, attitude, skills and practice changes expected in next-user:** The workshops will involve local and national stakeholders and serve to identify climate change vulnerabilities and adaptation best practices. These will then be developed into user-friendly training and extension materials.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The next users are the Project partners themselves (development of training materials) although the workshops will also already have an important sensitization effect on local stakeholders including from government and private sector.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

#### Deliverable Ranking

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

#### Deliverable dissemination

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**Dissemination Channel:** -1

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**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

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**Deliverable #5**

Main Information	
<b>Title:</b> Produce user-friendly, site specific training and extension materials and tools for scaling up	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Started in Ghana, not yet initiated in Peru. Nicaragua pending due to funding cuts.

Next-user
Extensionists, certifiers, government agencies, private sector
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Users recognize the differentiated vulnerabilities to climate change and prepare or adapt through changes in practices and, in certain cases, in crops. This sensitization will be generated or reinforced through the participatory workshops and integration of local and traditional knowledge and practice into the adaptation training tools and materials
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Next users will be involved in workshops where vulnerabilities are analyzed and the adaptation tools and materials are developed. This will facilitate ownership of those strategies and recommendations. This will be followed by an intensive roll-out strategy targeting government and private sector players as well as producer organizations.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

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

Deliverable dissemination
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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #6

Main Information	
<b>Title:</b> Workshops with certification trainers from private sector and NGOs to adopt adaptation materials	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user #1
Organizations providing certification training to farmers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Sensitivity to climate change as a risk factor, willingness to invest in additional training about climate change adaptation
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Facilitation, participatory training methods, farmer field schools, posters, field visits to climate affected sites

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### Next-user #2

Support farmer field schools on climate change adaptation provided by private sector and NGO trainers

**Knowledge, attitude, skills and practice changes expected in next-user:** Farmers are sensitized to their vulnerability to climate change. As result of the training, they would implement recommended practices on their farms

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Farmer field schools, posters, demonstration farms, Exchange visits among regions differently affected by climate change

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

### Deliverable Ranking

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

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**Coverage:** <Not defined>

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**Deliverable #7**

Main Information	
<b>Title:</b> Support farmer field schools on climate change adaptation provided by private sector and NGO trainers	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Communities including farmers and women from selected regions differently affected by climate change
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Farmers and their families are sensitized to their vulnerability to climate change. As result of the training, they would implement recommended practices on their farms
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Farmer field schools, posters, demonstration farms, Exchange visits among regions differently affected by climate change, community workshops

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

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

Deliverable dissemination
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Dissemination URL: [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**

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**Deliverable #8****Main Information****Title:** Sensitize and build capacity of government extension services to use adaptation training materials**MOG # 2:** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)**Main Type:** Capacity**Sub Type:** Capacity**Year of expected completion:** 2017**Status:** <Not defined>**Next-user**

Government extension services

**Knowledge, attitude, skills and practice changes expected in next-user:** Sensitivity to climate change vulnerability of their respective regions, willingness to adopt new adaptation technical content in their extension services**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Government representatives have participated from the beginning in development of training materials and stakeholder engagement, therefore having ownership of training tools and materials. Site and exchange visits among regions differentially affected by climate change, demonstration farms, workshops, demonstration and use of risk assessment tools

Submitted on 2016-03-03 at 18:51 UTC

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b>	Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

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

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<b>Coverage:</b>	<Not defined>

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #9

Main Information	
<b>Title:</b>	Operationalize CSA practices and standardize underwriting guidelines for financial products including renovation and resilience investments

Submitted on 2016-03-03 at 18:51 UTC

<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Information for underwriting still being developed. Will be implemented in 2016 in Ghana and, hopefully, Peru.

#### Next-user

Root Capital loan officials and credit underwriting standards

**Knowledge, attitude, skills and practice changes expected in next-user:** We will build a body of knowledge, track record and research to create standards from CSA financial products into our core operating platform. In doing so, our Loan Officers and underwriting guidelines will embed climate science into the development of CSA investment instruments.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Root Capital loan officers will take key learning from their portfolio and will include these in design workshops and credit committee trainings, which will a) inform and update our lending and finance guidelines and b) provide loan officers with critical new tools to assess and customize CSA financial products.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #10

Main Information	
<b>Title:</b> Root Capital loan officers trained in CSA best practices	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Information for underwriting still being developed. Will be implemented in 2016 in Ghana and, hopefully, Peru.

Next-user
Root Capital loan officers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Increase the capacity of loan officers to assess, analyze, recommend, disburse and manage CSA financial products, we will strengthen and expand our ability to prove that resilience and durability of the base of the supply chain is not only good for people and the planet, but also profits.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Root Capital loan officers will attend regional workshops with trusted climate change scientists from IITA and CIAT and CSA practitioners such as Rainforest Alliance to increase their ability to analyze, assess and customize financial products for adaptation and mitigation. We hold regional workshops in each target country.

Submitted on 2016-03-03 at 18:51 UTC

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital	
<b>Partner #2:</b> Lundy, Mark <mlundy@cgjar.org>, CIAT - Centro Internacional de Agricultura Tropical	

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

Deliverable dissemination	
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Deliverable Data sharing	
<b>Deliverable files</b>	
<Not defined>	

## Deliverable #11

Main Information	
<b>Title:</b> Catalyze thriving CSA market with Council on Smallholder Agriculture Finance	

Submitted on 2016-03-03 at 18:51 UTC

<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Initial contacts established with CSAF but in depth conversations pending. Need more advances on underwriting and other processes showing how CSA science can inform funding to have substantive engagements.

#### Next-user

Peer Institutions and Competitors organized in the CSAF and other bodies

**Knowledge, attitude, skills and practice changes expected in next-user:** Root Capital will catalyze a market for CSA financial products for rural small and growing businesses by designing, testing, iterating, and scaling different CSA loan products and sharing with peer organizations to incorporate CSA practices into loan products and engage with industry partners from coffee and cocoa.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Root Capital will lead a new cadre of financial service providers to enhanced capacity to ensure that loan products are tailored to the needs of individual clients that are responsible, sustainable, and replicable through engagement with their peers gathered in the Council on Smallholder Agricultural Finance (CSAF).

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

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Dissemination URL: [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**  
<Not defined>**Deliverable #12****Main Information****Title:** Engagement strategy for national level platforms**MOG # 2:** Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Research report**Year of expected completion:** 2015**Status:** On-going**Justification for cancelling the deliverable:** Complete in Ghana. On-going in Peru. Not started in Nicaragua due to funding uncertainty.**Next-user**

Project partners

**Knowledge, attitude, skills and practice changes expected in next-user:** Provide project partners with a broad understanding of the actors with capacity to influence the various levels of CSA adoption: farm level CSA adoption; economic diversification; and landscape level mechanisms.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The next users will be engaged in the mapping process from the start of the project to ensure synergy between local workshops on certification pathway and consultation of the design of investment criteria for the impact investing pathway.

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## Partners contributing to this deliverable

**Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

## Deliverable Ranking

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

## Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

## Deliverable Metadata

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

## Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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**Deliverable #13**

## Main Information

<b>Title:</b> National level forum - in one of project countries, likely Ghana
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Submitted on 2016-03-03 at 18:51 UTC

<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

#### Next-user

National level policy makers, producer organizations, commodity traders, NGOs and voluntary standards organizations

**Knowledge, attitude, skills and practice changes expected in next-user:** Broad understanding of the tools and knowledge being generated in the project, and active engagement in testing the tools for possible integration into their ongoing operations.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Well designed and facilitated workshops generate dialogue among a diverse, multi-cultural group of stakeholders. Clearly designed summary materials communicate knowledge generated by the project. Government representatives help develop training materials and therefore have ownership of training tools and materials. These actors are the core of the forum stakeholders.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab

**Partner #2:** Jassonge, Laurence <L.Jassogne@cgiar.org>, IITA - International Institute of Tropical Agriculture

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** other

**Dissemination URL:** <http://dapa.ciat.cgiar.org/ghana-workshop-on-climate-smart-cocoa-a-success/>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #14

Main Information	
<b>Title:</b> Global multi-stakeholder engagement	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Discussions with global coffee and cocoa players a success. Project will share emerging results at major international coffee (SCAA) and cocoa (ICCO) events in 2016 with keynote presentations and several panel discussions. Joint bilateral projects in coffee with Hans Neuman Foundation and cocoa with World Cocoa Foundation under revision.

Next-user
Global brand manufacturers, commodity traders, standards organizations, INGOs and multilaterals
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Broad understanding of the tools and knowledge being generated in the project, and active engagement in testing the tools for possible integration into their ongoing operations.

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Identify private sector actors with vulnerability to climate risk and commitments to certification for one-on-one consultations through trusted relationships. Industry champions will be sought to co-convene focused dialogues at global events.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

Submitted on 2016-03-03 at 18:51 UTC

**Deliverable #15**

Main Information	
<b>Title:</b> Expansion of CSA financial products in the marketplace	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Peer institutions and other impact investing funds
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> We will accelerate the adoption CSA financial products by piloting and scaling CSA loan products and sharing our findings with peer organizations in the Council on Smallholder Agricultural Finance (CSAF) and impact investing funds such as AgDevCo, Acumen and Grassroots Business Fund to increase awareness among impact equity investment vehicles.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Root Capital will provide access to information, training and support to investment agencies to incorporate CSA practices into loan products and engage with industry partners from coffee and cocoa to examine the role that other financial and non-financial institutions can play to incentivize uptake of CSA practices at scale.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital
<b>Partner #2:</b> Lundy, Mark <mlundy@cgjar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

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

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<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #16

Main Information	
<b>Title:</b> Building the body of knowledge and research to scale CSA financial products	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Commercial Banks, Development Banks , Peer Institutions and other social impact investment funds
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Project information convinces non-project participants to increase the number of CSA-focused financial products in the market

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Highlight market opportunities to "crowd in" competition from other financial service providers  
 Publish Quarterly Performance Report including CSA products, opportunities and barriers  
 Quarterly call to discuss results and key learnings  
 Annual presentation at relevant national and international fora

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

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**Deliverable #17**

Main Information	
<b>Title:</b> Scaling CSA Financial Products	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user #1
Commercial Banks, Development Banks, Peer Institutions, Development Practitioners and Value Chain actors
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Use project results to scale activities to new geographies, products and diverse CSA and mitigation investment strategies. Goal to facilitate the entrance of commercial banks, development banks, peer institutions, development practitioners, and value chain actors either offering CSA products directly or through targeted vehicles.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Highlight market opportunities to "crowd in" competition from other financial service providers Publish Quarterly Performance Report including CSA products, opportunities and barriers Quarterly call to discuss results and key learnings Annual presentation at relevant national and international fora

Next-user #2
CSAF loan officers trained in CSA best practices
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Increased capacity of CSAF members to assess, analyze, recommend, and disburse and manage financial products tailored to climate-smart agronomic practices and to the specific needs of their clients in the context of climate change and the surrounding environment and landscape.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Peer training workshops including 10 other financial institutions held quarterly Share lessons learned publicly (presentations, forums, publications & blogs) Dynamic micro site focused on CSA and CSA financial products

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital
<b>Partner #2:</b> Lundy, Mark <mlundy@cgjar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #18

Main Information	
<b>Title:</b> National level forum - held in different project country	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2016	

Submitted on 2016-03-03 at 18:51 UTC

**Status:** <Not defined>**Next-user**

National level policy makers, producer organizations, commodity traders, NGOs and voluntary standards organizations

**Knowledge, attitude, skills and practice changes expected in next-user:** Broad understanding of the tools and knowledge being generated in the project, and active engagement in testing the tools for possible integration into their ongoing operations.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Well designed workshops & facilitated workshops  
Clearly designed summary materials to communicate project knowledge  
On-going participation of government actors in the development of training materials to ensure ownership**Partners contributing to this deliverable****Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical**Deliverable Ranking**

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

**Deliverable dissemination****Open access restriction:** <Not defined>**License adopted:** <Not defined>**Dissemination Channel:** <Not defined>**Dissemination URL:** [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>

Submitted on 2016-03-03 at 18:51 UTC

Coverage: &lt;Not defined&gt;

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #19

### Main Information

**Title:** Global multi-stakeholder engagement

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

**Main Type:** Workshops

**Sub Type:** Workshop

**Year of expected completion:** 2016

**Status:** <Not defined>

### Next-user

Global brand manufacturers, commodity traders, standards organizations, INGOs, and multilaterals

**Knowledge, attitude, skills and practice changes expected in next-user:** Specific knowledge of project outputs and willingness to either use the outputs directly or share them with their peers, either internal or external to each organization.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Focus on engagement of private sector actors with vulnerability to climate risk and commitments to acting on climate change and certification. This targeted group will be consulted to define specific private sector policies and incentives possible for providing positive pull for CSA practices in their supply chains.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab

**Partner #2:** Lundy, Mark <mlundy@cgjar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

<b>Address gender and social inclusion aspect</b>	<Not defined>
<b>Potential for/ actual contribution to outcomes</b>	<Not defined>
<b>Level of shared ownership (partnerships across org.)</b>	<Not defined>

Submitted on 2016-03-03 at 18:51 UTC

<b>What is your personal perspective of the importance of this product</b>	<Not defined>
<b>Deliverable dissemination</b>	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	<Not defined>
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>
<b>Deliverable Metadata</b>	
<b>Description:</b>	<Not defined>
<b>Creator / Authors:</b>	<Not defined>
<b>Author Identifier:</b>	<Not defined>
<b>Publication / Creation date:</b>	<Not defined>
<b>Language:</b>	<Not defined>
<b>Coverage:</b>	<Not defined>
<b>Deliverable Data sharing</b>	
<b>Deliverable files</b>	<Not defined>

**Deliverable #20**

<b>Main Information</b>	
<b>Title:</b> National level forum - held in 3rd project country	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	
<b>Next-user</b>	
National level policy makers, producer organizations, commodity traders, NGOs and voluntary standards organizations	

Submitted on 2016-03-03 at 18:51 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Broad understanding of the tools and knowledge being generated in the project, and active engagement in testing the tools for possible integration into their ongoing operations.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Well designed workshops & facilitated workshops  
Clearly designed summary materials to communicate project knowledge  
On-going participation of government actors in the development of training materials to ensure ownership

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab

**Partner #2:** Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

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

**Author Identifier:** <Not defined>

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**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

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**Deliverable #21**

Main Information	
<b>Title:</b> Global multi-stakeholder engagement	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
Global fora such as Global CSA Alliance, Grow Africa, Business Action for Africa, WEF
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Understanding of linkages between broad global goals and site specific tools and approaches generated in the project.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Through relationship building and sharing of project outputs over 2016-17, these fora will recognize the CCAFS leadership on CSA agriculture and look to the consortium to provide expert materials of success stories for coffee and cocoa in the 3 target countries.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab
<b>Partner #2:</b> Lundy, Mark <mlundy@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
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<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #22

Main Information	
<b>Title:</b> Identify supply chain stakeholders, training or extension services as potential users of project outputs	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Moved to 2016. Dependent on other outputs which are also ongoing.

Next-user
Project itself
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Relevant end users and stakeholders of the project identified and mapped that will help to develop methods for information sharing and identify added value needed to existing CSA efforts.

Submitted on 2016-03-03 at 18:51 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** This information will primarily be used by the Project participants themselves (RA, IITA, local partners).

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

## Deliverable #23

Submitted on 2016-03-03 at 18:51 UTC

Main Information	
<b>Title:</b> Map current adaptation/resilience training initiatives and projects relevant to the cocoa and/or coffee sector	
<b>MOG # 2:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Advanced for Ghana, started for Peru and not yet started in Nicaragua due to funding reductions.

Next-user
Project itself
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Value add and relevant and appropriate CSA practices are identified that will help to formulate the tools and training methods necessary.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> This information will primarily be used by the Project participants themselves (RA, IITA, CIAT local partners).

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Submitted on 2016-03-03 at 18:51 UTC

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Public sector actors: Government bodies in Ghana &amp; the World Bank</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Knowledge sharing of updated climate exposure maps for cocoa and coffee</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> Using CC predictions from Global Circulation Models, Läderach et al. 2013 predict changes in relative climatic suitability for cocoa for 2050 and suggest site-specific strategies to reduce the vulnerability of the cocoa sector:  <a href="http://link.springer.com/article/10.1007%2Fs10584-013-0774-8">http://link.springer.com/article/10.1007%2Fs10584-013-0774-8</a>            Läderach et al. 2011 show that the optimum cocoa-growing area will increase by 2050 to an altitude between 450-500 masl:  <a href="http://www.eenews.net/assets/2011/10/03/document_cw_01.pdf">http://www.eenews.net/assets/2011/10/03/document_cw_01.pdf</a>            Data for current and future climatic suitability for cocoa farming in Ghana and Ivory Coast, West Africa:  <a href="https://dataverse.harvard.edu/dataverse/Cocoa_Ghana_IvoryCoast">https://dataverse.harvard.edu/dataverse/Cocoa_Ghana_IvoryCoast</a></p>
<p><b>Lessons and implications for the next planning cycle:</b> Project seems well positioned to add value to initiatives already underway on topics such as REDD+, forest conservation and resilience to climate change.</p>
Next user #2
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Non-CGIAR research: World Coffee Research</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Research outputs</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> Bunn et al 2015a find that in zones currently classified as hot and dry, CC will impact arabica more than those that are better suited to it. Zones that currently have climates better suited for arabica will migrate upwards by about 500m in elevation:  <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490</a>  <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155</a>            Bunn et al 2015b, Impact of CC on robusta and arabica coffee globally:  <a href="http://link.springer.com/article/10.1007%2Fs10584-014-1306-x">http://link.springer.com/article/10.1007%2Fs10584-014-1306-x</a></p>
<p><b>Lessons and implications for the next planning cycle:</b> Key to engage with WCR to ensure that multi-location coffee varietal trials include aspects of climate suitability now and into the future</p>
Next user #3
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Private sector: World Cocoa Foundation, value chain actors in Ghana</p>

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**Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:** Upon request, CIAT scientists have directly provided data and support about the models used in Läderach et al 2011, 2013, to staff of WCF and the WB. Two workshops were held in Ghana and Peru with more than 150 participants with key government and private sector actors. Justify WCF's proposal to USAID for a CSA cocoa strategy. Study commissioned by WCF to guide the CC strategy of members.

**Reported deliverables serve as evidence towards this achieved change:**

[https://elliott.gwu.edu/sites/elliott.gwu.edu/files/World Cocoa Foundation.pdf](https://elliott.gwu.edu/sites/elliott.gwu.edu/files/World%20Cocoa%20Foundation.pdf)  
<http://dapa.ciat.cgiar.org/ghana-workshop-on-climate-smart-cocoa-a-success/>

**Lessons and implications for the next planning cycle:** Private sector is interested in results from this work but need concrete, actionable insights. Exposure maps grab their attention but they need more concrete inputs to move to action.

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## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> Successful launch of climate smart value chain project in Ghana and Peru sparks interest from local and international stakeholders	
<b>Author:</b> CIAT	<b>Subject:</b> Inception workshops in Peru and Ghana map out current initiatives and stakeholder needs
<b>Publisher:</b> CIAT	<b>Year:</b> 2015
<p><b>Project highlights types</b>            Participatory action research            Innovative non-research partnerships            Policy engagement</p>	
<b>Start date:</b> 2016-02-25	<b>End date:</b> 2016-02-25
<b>Is global:</b> No	
<b>Country:</b> Ghana Peru	<b>Keywords:</b> Climate smart value chains, Peru, Ghana
<p><b>Highlight description:</b> CIAT, Root Capital, Rainforest Alliance and the Sustainable Food Lab convened the first workshops of the CCAFS Climate Smart Value Chains project in Accra, Ghana, and in Lima, Peru, with about 70 participants in each workshop, from ministries, private sector, research institutions, NGOs, financial institutions, and international donors.</p>	
<p><b>Introduction / Objectives:</b> How can we go beyond raising awareness to the negative implications of climate change for tropical cash crops and guide policies for adaptation? The project “Mainstreaming CSA practices in cocoa and coffee value chains” proposes to use a transect approach to identify sites with high, medium and low climate change impacts and to develop appropriate strategies for each problem setting. Throughout the process local stakeholders are engaged to develop practices that are well suited to the local decision environment. Ultimately, the project seeks to develop incentives and support mechanisms that will drive farmer uptake of CSA at scale</p>	

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**Results:** The Ghana workshop resulted in:

- A clear interest from a broad-section of the Ghanaian cocoa sector to better understand what climate change means for cocoa in Ghana, how it will impact different areas of the country and what the most appropriate CSA practices are to promote to manage these impacts;
- Demand for actionable tools that can be tested and rapidly scaled up that help actors in the sector respond to climate change in ways that contribute to productivity and profits for farmers and other actors in the value chain;
- Potential to use tangible research findings to support on-going activities such as the emerging COCOBOD strategy as well as the Forestry Commission ERP and PIP programs funded by the World Bank and others;
- Positive energy to continue engagement and conversations that bring together disparate pieces of previous and on-going work, identify synergies and add value to the entire cocoa sector.

The Peru workshop resulted in:

- The interest of stakeholders along the coffee and cocoa supply chains in Peru in the topic of climate change is very high. No assessment of the impacts of climate change on these two important crops has been conducted for the country. Therefore actors are highly uncertain about where, when and what to expect from climate change.
- Several projects work on the topic of climate change to adapt the sectors and increased coordination would be helpful.
- Very high demand for actionable recommendations to confront specific climatic changes in specific regions of the country.

**Partners:** CIAT

International Institute of Tropical Agriculture, IITA),  
Rainforest Alliance  
Root Capital  
Sustainable Food Lab

**Links / Sources for further information:** <http://dapa.ciat.cgiar.org/successful-launch-of-climate-smart-value-chain-project-for-coffee-and-cocoa-in-peru/>  
<http://dapa.ciat.cgiar.org/ghana-workshop-on-climate-smart-cocoa-a-success/>  
<https://ccafs.cgiar.org/research/results/mobilizing-private-sector-partners-climate-action-cocoa-value-chain>

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Project highlight Information #1	
<b>Title:</b> Mobilizing private sector partners for climate action in the cocoa value chain	
<b>Author:</b> CCAFS	<b>Subject:</b> CSA, private sector, cocoa, Ghana
<b>Publisher:</b> CCAFS	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research	
<b>Start date:</b> 2016-02-26	<b>End date:</b> 2016-02-26
<b>Is global:</b> No	
<b>Country:</b> Ghana	<b>Keywords:</b> CSA, private sector, cocoa, Ghana
<p><b>Highlight description:</b> Efforts to ensure the use of CCAFS climate science and site specific climate-smart agriculture (CSA) practices in the Rainforest Alliance voluntary certification scheme and in impact investment approaches implemented by Root Capital began in 2015. The project leverages existing smallholder value chain interventions to translate climate science into actionable strategies for farmers and supporting actors, including agricultural businesses, voluntary certification schemes, and investors, across a number of geographies using smallholder coffee and cocoa systems in Africa and Latin America as model cases.</p>	
<p><b>Introduction / Objectives:</b> Assess the climate change exposure of cocoa systems at a sub-national scale, develop appropriate CSA practices with farmers incorporating cash crops and food crops to increase the resilience of these systems, and codify these practices in adaptation guidelines. These guidelines will be main-streamed through existing certification training curricula and used to develop innovative impact investment products that will help finance the adoption of identified adaptation strategies.</p>	
<p><b>Results:</b> Initial outcomes include a clear demand from private sector partners for improved information on climate change and cocoa in Ghana expressed by the widespread use of exposure maps at the recent global World Cocoa Foundation partnership meeting. Companies such as Hershey's, Mars, Lindt, Tom's, Guittard and Tcho as well as key trading houses like ECOM, Olam and ADM have shown interest, and some have offered to provide additional data to further improve the models. The World Cocoa Foundation has also requested further engagement to mainstream results at the sector level.</p> <p>The long-term objective is defined as adoption of recommended CSA practices by 15% of global cocoa producers and 7% of global coffee producers, as well as the provision of USD 350 million of tailored financial products to producer organizations, traders, exporters, and other key value chain actors by 2019.</p>	
<b>Partners:</b> CIAT, IITA, Rainforest Alliance, Root Capital and the Sustainable Food Lab	

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**Links / Sources for further information:** • Successful workshop on climate-smart cocoa in Ghana  
<http://bit.ly/1i9xz0f>

- Building climate resilient cocoa value chains in Ghana <http://bit.ly/1LgXp9l>
- Ghana workshop on climate smart cocoa a success <http://bit.ly/1JOZWHL>
- Cocoa production in Ghana needs to confront heat and drought <http://bit.ly/1i9xCJu>
- CCAFS impact story August 2015  
<https://cgspace.cgiar.org/bitstream/handle/10568/67911/outcomecase.pdf?sequence=3>

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## 6. Activities

Activity #1	
<b>Title:</b> Site & crop specific CSA identified by exposure gradient	
<b>Description:</b> Based on exposure gradient, relevant climate drivers are identified. These feed into participatory processes with producer associations to identify site and crop specific CSA practices that are most promising for inclusion into certification training and investment vehicles.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance	
<b>Status:</b> On-going	<b>Justification:</b> Advanced in Ghana, started in Peru and not yet started in Nicaragua due to funding decrease

Activity #2	
<b>Title:</b> Incorporation of CSA practices by crop and gradient into voluntary certification training	
<b>Description:</b> Define methods and approaches to incorporate identified CSA practices by crop and gradient into Rainforest Alliance training materials for coffee and cocoa farmers in Nicaragua, Peru and Ghana. Engage with peer agencies organized in the ISEAL alliance to replicate this process with other voluntary certification bodies. Influence uptake of methods and approaches from the project by additional farmer associations and public extension services.	
<b>Start date (dd-MM-yyyy):</b> 01-06-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Noponen, Martin <mnoponen@ra.org>, Rainforest Alliance	
<b>Status:</b> Extended	<b>Justification:</b> Slated for 2016

Activity #3	
<b>Title:</b> Exposure gradient mapping of coffee, cocoa and food crops; site and crop specific CSA identified	
<b>Description:</b> Coffee and cocoa are very susceptible to increased temperature and changing precipitation patterns and therefore significant impact on these crops are foreseen. In this activity we will model the impact on coffee, cocoa and the food crops that these farmers grow to establish a exposure gradient, from low over medium to high changes in suitability. Site specific CSA practices and packages will be identified and through ex-ante and trade-off analysis their potential to CSA assessed.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> Advanced in Ghana, started in Peru and not yet started in Nicaragua due to funding decrease

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Activity #4	
<b>Title:</b> Design, Incorporate and Scale innovative Climate-Smart financial products into investment vehicles.	
<b>Description:</b> Create methodology and approach to operationalize identified CSA best practices into Root Capital's tailored financial products and investment vehicles for different gradients with coffee and cocoa farmers in Nicaragua, Peru and Ghana. Design and standardize underwriting guidelines for long-term renovation and related adaptation investments. Train Root Capital loan officers to identify CSA best practices and incorporate learning into credit decisions and consultations with clients. Engage with peer institutions in the Council for Smallholder Agriculture Finance to replicate and scale financial products for climate adaptation and mitigation based on project results. Disseminate information and share knowledge among larger community of financial institutions, certification bodies, development practitioners, foundations, convening organizations and value chain actors to influence larger action and catalyze a growing market for CSA based financial products that are customized to needs of each unique situation.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Schmerler, Benjamin <bschmerler@rootcapital.org>, Root Capital	
<b>Status:</b> Extended	<b>Justification:</b> Slated for 2016

Activity #5	
<b>Title:</b> Multi-stakeholder engagement for scaling adoption of practices, learning and scope of impact	
<b>Description:</b> Map the ecosystem of engagement at national and global levels to support implementation of CSA practices in coffee and cocoa farming systems, at farm and landscape level. Utilize various engagement processes (fora, bilateral consultation, value chain roundtables) to share project learnings to maximize uptake or results, reach and impact.	
1)National MSP: Identify and convene key actors from the coffee and/or cocoa value chains (public,private,NGOs,etc.) critical for providing market incentives for practice adoption. Review and evaluate results from exposure gradient work, assist in identifying key partners for building CSA practices and identifying new climate smart investment opportunities. Provide a forum for on-going review of project activities and project scaling at national level.	
2)Global: Identify global partners, spaces and events relevant to project outputs, particularly industry actors and venues necessary to the market incentive for practice adoption	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Daniels, Stephanie <stephanie@sustainablefood.org>, SFL - Sustainable Food Lab	
<b>Status:</b> On-going	<b>Justification:</b> Advanced in Ghana, started in Peru and not yet started in Nicaragua due to funding decrease

**Lessons regarding your project activities and possible implications for the coming planning cycle:** We need to revisit our theory of change and project deliverables in light of budget reductions. This will happen the week of 7 March in Ghana.

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## 7. Leverages

<Not defined>

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**Title:** Integrated agricultural technologies for enhanced adaptive capacity and resilient livelihoods in climate-smart villages (CSVs) of Southeast Asia

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	RP SEA - South East Asia Region	<b>Mgmt. liaison contact</b>	Tan Yen, Bui <y.bui@irri.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Vietnam	<b>Project leader</b>	Campilan, Dindo <d.campilan@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

### Project is working on

Flaship(s)	Region(s)
FP1: Climate-smart practices	RP SEA: South East Asia

### Bilateral project(s) contributing to this project

227 - Pragmatic economic valuation of adaptation risk and responses across scales

### Summary

In Southeast Asia CSVs' wide-ranging agro-ecosystems, CCAFS seeks to help build livelihood resilience of farming systems to extreme weather events, seasonal shifts and related climate change risks.

This project will provide integrated climate-smart agriculture (CSA) options to enhance adaptive capacity in CSVs. Key activities:

- 1) Assessment and priority setting – identify biophysical and socio-economic constraints, review/consolidate results from prior CSV assessments, conduct systematic field survey and spatially explicit assessment of crop suitability, and CSA multi-stakeholder planning.
- 2) Participatory action research – Conduct participatory farmer-group testing of technologies and practices within CCAFS' broader CSV social learning process, farmers' training/capacity building, and learning-oriented monitoring and evaluation.
- 3) Knowledge sharing and networking – incorporate location-specific technologies and practices in innovation strategies of parallel FP1.2-13 projects in CCAFS Southeast Asia

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through: joint impact pathways planning, developing knowledge products as input to the latter's upscaling activities, and co-organizing events for policy engagement and public awareness.

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## 2. Partners

### Partner #1

**Institution:** IWMI - International Water Management Institute

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Pavelic, Paul <p.pavelic@cgiar.org>	To serve as lead Center for implementing activities in assigned CSV

### Partner #2 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Campilan, Dindo <d.campilan@cgiar.org>	Activity 2014-171 *Leader*.
Partner	Smith, Georgina <g.smith@cgiar.org>	Activity 2014-182 *Leader*.
Project Coordinator	Bui, Vinh Le <V.Bui@CGIAR.ORG>	Project Coordination

### Partner #3

**Institution:** BI - Bioversity International

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Vernooy, Ronnie <r.vernooy@cgiar.org>	Activity 2014-171 *Partner*. Activity 2014-173 *Partner*. To co-design and facilitate training-workshops for CSA assessment-priority setting and M&E To assist in action research for testing CSA technologies and practices in target CSV/s

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**Partner #4****Institution:** ILRI - International Livestock Research Institute**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Staal, Steve <s.staal@cgiar.org>	Activity 2014-171 *Partner*. Activity 2014-173 *Partner*. Activity 2014-182 *Partner*. To co-design and facilitate training-workshops for CSA assessment-priority setting and M&E To assist in action research for testing CSA technologies and practices in target CSV/s.

**Partner #5****Institution:** CIP - Centro Internacional de la Papa**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Wheatley, Christopher <c.wheatley@cgiar.org>	Activity 2014-171 *Partner*. Activity 2014-173 *Partner*. To assist in action research for testing CSA technologies and practices in target CSV/s

**Partner #6****Institution:** ICRAF - World Agroforestry Centre**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Simelton, Elisabeth <e.simelton@cgiar.org>	Activity 2014-171 *Partner*. To serve as lead Center for implementing activities in assigned CSV
Partner	Catacutan, Delia <d.catacutan@cgiar.org>	Activity 2014-173 *Partner*.

**Partner #7**

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**Institution:** IRRI - International Rice Research Institute**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Wassmann, Reiner <r.wassmann@irri.org>	Activity 2014-171 *Partner*. Activity 2014-181 *Partner*. To serve as lead Center for implementing activities in assigned CSV
Partner	Hayashi, Keiichi <k.hayashi@irri.org>	Activity 2014-173 *Partner*.

**Partner #8****Institution:** IWMI - International Water Management Institute**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Pavelic, Paul <p.pavelic@cgiar.org>	Activity 2014-171 *Partner*. Activity 2014-181 *Partner*.

**Partner #9****Institution:** WorldFish - WorldFish**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Beare, Douglas <d.beare@cgiar.org>	Activity 2014-171 *Partner*. Activity 2014-181 *Partner*. To serve as lead Center for implementing activities in assigned CSV

**Partnerships overall performance over the last reporting period:** The partnership in FP1.1 has been successfully strengthened between CGIAR centers (CIAT and ICRAF) and multi-level local governments, national research partners, and farmer associations in 5 CSVs in Vietnam (2), Laos (1), and Cambodia (1). The ownership of these partners/stakeholders in the project has been built and strengthened throughout the year 2015 via various meetings, workshops at provincial and local levels. Local government officials and farmers have actively participated in and contributed to the implementation of the project via great ideas and

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participatory activities at the locations and via exchange visits nationally and internationally.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** Strengthened ownership of project partners/stakeholders emphasized specific roles of all stakeholders in the project and how important the roles they play to take the project to success not only by the end of 2018 but far beyond this time after the project comes to the end. These stakeholders will continue the good works of FP1.1 further in more villages and districts/provinces to benefit more poor and marginalized farmers and women and, more importantly, contribute to improving the resilience of local people to climate change impacts. This has been recognized as one of the most important outcomes of this project.

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### 3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	South East Asia
CSV	Not applicable	Not applicable	Ma
CSV	Not applicable	Not applicable	My Loi
CSV	Not applicable	Not applicable	Tra Hat
CSV	Not applicable	Not applicable	Ekxang
CSV	Not applicable	Not applicable	Rohal Suong

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

Local stakeholders identify and meet priorities of farmers, including women/marginalized groups, and accessing knowledge/technologies/tools towards increased awareness and enhanced capacity for CSA adoption. CSA technologies and practices become integrated in farmers' overall management strategy for their agricultural systems, and consequently improving resilience of their livelihoods as indicated continued productivity growths in the face of risks associated with natural disasters, weather variabilities, and longer-term soil degradation and water-related stresses.

Besides farmer-endusers in CSVs who directly take up locally adapted technologies/practices, target next-users include: 1) community-based institutions, such as local government units and development NGOs in setting up CSA incentive mechanisms; 2) external stakeholders, including regional research institutes in prioritizing CSA-relevant agendas and value-chain actors in stimulating market demand for CSA-generated farm products, 3) national/subnational policy-making and regulatory agencies in formulating climate change adaptation plans, and 4) other provinces and countries in Southeast Asia in distilling project lessons to establish similar CSA initiatives

Consequently, the next users

**Annual progress towards outcome (end of 2015):** A key outcome story at the end of Year 1 will be on how local stakeholders jointly identify and prioritize CSA technologies and practices to guide CSV-level action research. Local stakeholders comprise farming households, community groups, local government in the target communities, together with external development/research/policy-making organizations involved in local-level CSA interventions.

It will highlight how the use of CCAFS and related methods and tools can effectively support climate-smart local decision-making and action planning. These methodological innovations include spatially explicit participatory field assessments, ex-ante and scenario analysis for crops and systems, and whole-farm planning.

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**Annual progress towards project outcome in the current reporting cycle (2015):** -Institutional links with project stakeholders (MARD, local research partners, provincial and local governments, CSV-based farmer associations) were strengthened via multi-level meetings and workshops (eg. CGIAR-MARD, CCAFS SEA, province and CSV meetings).

- Baseline studies for situation analysis and needs assessment (SANA) were conducted for all of the site to identify climate risks-triggered impacts on agricultural production and local livelihoods. Organizational landscapes were drawn to find linkages among local partners and define new linkages with the CGIAR centers working in the project and at the sites.
- Five baseline reports were made for the 5 CSVs based on which research activities in 2015 were planned.
- Various social mobilization activities were conducted to prepare for the implementation of the project from 2015 on, such as: cooking contest using indigenous recipes, village fashion show on environmental protection, participatory land-use planning, farmer visits to places with successful and long practiced management models, installation of a loud speaker system in the village to update farmers on daily information, weather information/data arrangement with a local weather station for daily broadcast via the loud speaker.
- Formation of farmer groups to prepare for testing different CSA T&Ps.
- Development of a partnership diagram which explains every stakeholder's roles and links among them and support that project stakeholders can get from each other. This diagram well defines and emphasizes the ownership of all stakeholders in the project.
- Five CSA priority setting workshops to prioritize CSA T&Ps with local farmers and governments.
- Five multi-stakeholder meetings at 5 CSVs were conducted to discuss the research results and work plans for 2016.
- Drafts of project 2015 reports to be submitted as reports and/or working papers.
- The results at the end of 2015 show that the project has been on track despite of over 7 months of delay.

**Communication and engagement activities have contributed to achieving your Project outcomes:** Project activities have been documented and published as blogs or written in a blog format (unpublished, for CIAT's working). For example one of the published blogs of CIAT about Ma CSV has recently led to an arranged visit from a MIT Technology Review reporter to come to write about Ma. The project team members participated in 3 high level meetings with MARD and Vietnam's national partners on climate-smart agriculture research in 2015. Meeting and workshop minutes were widely shared among CGIAR partners and with Global CCAFS. The attendance in the CSA workshop in India helped the planning of FP1.1.

**Evidence documents of progress towards outcomes:** [Summary of CCAFS FP1 1 activities in 2015.docx](#)

**Annual progress towards outcome (end of 2016):** Based on the budget cuts, the project is redesigned to target only 2 CSVs -- North Vietnam and Central Vietnam. In both CSVs, an initial portfolio of integrated technologies for CSA would have been tested in a first-season trial with community-based learning groups. These CSA technologies are identified from the 2015 activity of climate-risk targeting and CSA priority setting with CSV stakeholders.

**Annual progress towards outcome (end of 2017):** In each CSV, the portfolio of CSA technologies would have been field-tested and adapted in at least 2 cropping seasons. The results are synthesized and served as input to CSV-level adaptive planning and in the production of knowledge products for wider sharing.

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

**Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for**

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**them:** Our theory of change is that the project's success will draw attention of local, national and regional governments in adapting CSA T&Ps that mitigate climate impacts on production and livelihoods and achieve food security for disadvantaged rural dwellers and female farmers via new policies and strategic developments for CSA.

Through many meetings, we've learnt that governments have now realized how badly climate impacts can do to their countries, farmers' livelihoods and sustainability of production systems. This will encourage the project team in making a good work as an excellent example for a good change in a near future.

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

2019	
<b>Target value:</b> 40	<b>Cumulative target to date:</b> 60
<p><b>Target narrative:</b> Project outcomes target local stakeholders -- as intermediate and end users -- for 2 CSVs in Vietnam. In each CSV, 1 farmer group and 3 local institutions jointly agree on priority CSA technologies and practices for adaptive testing and co-invest in action-research activities. CSA innovations are integrated in planning documents of 6 new projects/programs in CSVs. Key verifiable indicator is the set of multi-year activities with formally assigned budget/resources and implementing team/partnership.</p> <p>Beyond the CSVs, similar outcomes are expected in 4 other countries (Philippines, Indonesia, China, India) covering sub-national/local CSA plans, public-sector projects and large-scale investment programs (e.g. IFAD).</p> <p>.</p> <p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Each of these initiatives/institutions would cover at least 30% women beneficiaries.</p>	

2015		
<b>Target value:</b> 10	<b>Cumulative target to date:</b> 10	<b>Target achieved:</b> 5.0
<b>Target narrative:</b> <Not defined>		

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2015	
<p><b>Narrative for your achieved targets, including evidence:</b> Farmer associations and local agricultural/extension departments in 5 CSVs applied the scoring card developed by BI to prioritize CSA T&amp;Ps for testing. This activity was facilitated by a CGIAR center at each CSV. Participatory meetings, workshops organized at the CSVs in 2015 with the participation of provincial and district DARD can potential result in a good outcome in 2016 via agricultural policies supported by and mainstreamed into project activities. Due to the delayed start of the project (July 2015), this could not be achieved in 2015.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Women unions play an important role in all CSVs in acquiring and applying CCAFS tools. For example, Ma's women union has actively participated in meetings, workshops and trainings on CSA prioritization and helped explain the scoring card tool to invited farmers at the CSA priority setting workshop in July 2015. Poor and marginalized farmers were given the opportunity to participate in the project and they engaged very actively in all activities of 2015.</p>	

2016	
<b>Target value:</b> 10	<b>Cumulative target to date:</b> 20
<p><b>Target narrative:</b> Development initiatives and public institutions in Vietnam, along with 4 other countries (Philippines, Indonesia, China, India) for linked bilateral projects covering sub-national/local CSA plans, public-sector projects and large-scale investment programs (e.g. IFAD).</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Each of these initiatives/institutions would cover at least 30% women beneficiaries.</p>	

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

**Indicator #2:** FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

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**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:** FP1 Indicator: # of public-private actors at national and sub-national levels are using new incentive mechanisms or business models/ markets that explicitly promote climate smart approaches along the value chain, using CCAFS science

2019	
<b>Target value:</b> 80	<b>Cumulative target to date:</b> 110
<b>Target narrative:</b> The project's emerging set of research outputs, i.e. CSA technologies and action learning methods/tools are used by at least 80 institutional actors at national and sub-national levels in Vietnam and 4 other countries for targeted outscaling.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Each of these initiatives/institutions would cover at least 30% women beneficiaries.	

2015		
<b>Target value:</b> 10	<b>Cumulative target to date:</b> 10	<b>Target achieved:</b> 6.0
<b>Target narrative:</b> <Not defined>		
<b>Narrative for your achieved targets, including evidence:</b> Ma's processing plant owners confirmed higher prices being paid to cassava with higher starch content and strongly support the cassava-grass strips model. Subnational and local governments at 5 CSV areas have committed to align their development plans with and financial support for CSA T&Ps that are suitable and/or potential with their strategic development plans. For example, at various meetings, Yen Binh and Yen Bai DARDs confirmed their financial support for good CSA T&Ps and cooperation with CIAT in formulating policies that are appropriate for CSA implementation in the district and province. This will take effects in the implementation phase 2016.		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Project targeting women and the poor in all of the interventions prioritized via supporting them with seeds and breeds besides technical guidance. Site visits were conducted to help these groups learn diversified production systems in order to improve their household value chain with new production strategies.		

2016	
<b>Target value:</b> 20	<b>Cumulative target to date:</b> 30

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2016		
<b>Target narrative:</b> The project's emerging set of research outputs, i.e. CSA technologies and action learning methods/tools are used by at least 20 institutional actors at national and sub-national levels in Vietnam and 4 other countries for targeted outscaling.		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Each of these initiatives/institutions would cover at least 30% women beneficiaries.		

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

### 4.3 Other Contributions

#### Contribution to other CCAFS Impact Pathways

The project in general -- and activities 2014-173, 181 and 182 specifically -- will contribute to the impact pathways of other CCAFS FP1 projects in Southeast Asia (led by IRRI and ICRAF), by providing a menu of field-tested CSA technologies and practices -- packaged into multi-media knowledge products and shared through various learning modes -- thereby forming the basis for upscaling efforts and agro-climatic advisory services.

#### Collaborating with other CRPs

Roots, Tubers and Bananas
<b>Description of collaboration:</b> co-located research sites
<b>The achieved outcome contributions:</b> <Not defined>

Policies, Institutions and Markets
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**Description of collaboration:** co-located research sites

**The achieved outcome contributions:** <Not defined>

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#### **4.4 Outcome case studies**

There is not an Outcome Case Study added.

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

**FP1 - MOG # 4:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

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

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

<Not defined>

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

<Not defined>

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

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

<Not defined>

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

<Not defined>

#### Major Output groups - 2014

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**FP1 - MOG # 4:** 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 plan of the gender and social inclusion dimension of the expected annual output**

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

### Major Output groups - 2015

**FP1 - MOG # 4:** 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**

Multi-level meetings and workshops were carried out

Various social mobilization activities were conducted to prepare for the implementation of the project  
Formation of farmer groups to prepare for testing different CSA T&Ps.

Five multi-stakeholder meetings at 5 CSVs were conducted to discuss the research results and work plans for 2016.

#### **Brief summary of your actual 2015 contribution towards the selected MOG:**

We created a multi-stakeholder learning platform between CIAT/ICRAF and multi-level governments, CSV farmers, national research partners, and private sector. Regular meetings were organized for knowledge, research results to be exchanged, discussed and shared. Visits were made for Ma and My Loi farmers to learn new knowledge/experience from other farmers.

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

Women unions play an important role in all CSVs in acquiring and applying CCAFS tools. Poor and marginalized farmers were given the opportunity to participate in the project and they engaged very actively in all activities of 2015.

#### **Summary of the gender and social inclusion dimension of the 2015 outputs:**

Champion female farmers to be identified for leading some of the testing groups. Successful female farmers from other areas to be identified for disseminating knowledge and experience to Ma villagers in testing similar option/s. Inclusion of poor/disadvantaged farmers in CSA T&Ps testing groups to improve their resilience and livelihoods.

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

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

Formation of farmer groups to test CSA T&Ps.

Five CSA priority setting workshops to prioritize CSA T&Ps with local farmers and governments.

Baseline studies for situation analysis and needs assessment (SANA) in all sites. Organizational landscapes were drawn to find linkages among local partners and new linkages with CGIAR centers.

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Five CSA T&Ps were finalized for testing in 2016 after the participatory priority setting and cost benefit analysis. Three more possible CSA T&Ps were picked up later from IRRI and IWMI. Detailed testing plans of 3 have been drafted. Results were shown to project's stakeholders in January 2016.

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

Project targeting women and the poor in all of the interventions prioritized via supporting them with seeds and breeds besides technical guidance. Site visits were conducted to help these groups learn diversified production systems.

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

5-7 active female farmers have been identified to lead some of the groups, and a few of them are poor but willing to take lead in testing activities. 5-7 poor households have been selected to test 3-5 CSA T&Ps and receive additional support from the project in implementing the tests.

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

A group conducted a cost-benefit analysis (CBA) and came up with 5 prioritized CSA T&Ps which are evidence-based. Detailed analysis will only be released in May 2016. However, this initial result was sufficient to plan the testing activities in 2016.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

This CBA work was randomized but still slightly modified to include sufficient number of poor/disadvantaged households to collect and interpret information and perception from them. Some of these households will be testing the selected CSA T&Ps in 2016.

**Major Output groups - 2016**

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**FP1 - MOG # 4:** 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 each CSV, at least 2 community-based learning groups are organized to support the testing of potential CSA options based on the climate risks identified

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

The action learning groups include at least 1 all-women participants to ensure that CSA risks affecting women are directly addressed

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

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

Portfolio of integrated CSA technologies are field-tested with community-based action learning groups in 2 CSVs

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

CSA technologies are prioritized and evaluated based on criteria that include potential benefit/impact to women and men

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

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

Results of assessment phased (climate-risk targeting and CSA priority setting) include field-validated methodological guidelines for wider application within and beyond CCAFS.

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

The methodological guidelines include gender-differentiated tools for data collection and analysis

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** •Link well project activities to highlight synergies among the practices

- Emphasize the importance of stakeholders' roles in the project and frequently strengthen these partnerships via meetings, workshops, and joint activities.
- This is a research project and it requires a participatory learning process, and it does not do development investment.
- Find links with provincial agricultural development plans in order to mainstream project activities into subnational policy formulation process on CSA action research and up-scaling.

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## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Priority CSA technologies and practices for CSV-level action research	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Datasets
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
Farmers groups and local institutions in 5 CSVs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Climate-informed decision-making and planning to identify potential technologies and practices for improving farm-within-landscape management.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Community-level multi-stakeholder assessment, joint analysis and planning exercises

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Wassmann, Reiner <r.wassmann@irri.org>, IRRI - International Rice Research Institute
<b>Partner #2:</b> Simelton, Elisabeth <e.simelton@cgiar.org>, ICRAF - World Agroforestry Centre
<b>Partner #3:</b> Beare, Douglas <d.beare@cgiar.org>, WorldFish - WorldFish
<b>Partner #4:</b> Pavelic, Paul <p.pavelic@cgiar.org>, IWMI - International Water Management Institute
<b>Partner #5:</b> Vernooy, Ronnie <r.vernooy@cgiar.org>, BI - Bioversity International
<b>Partner #6:</b> Wheatley, Christopher <c.wheatley@cgiar.org>, CIP - Centro Internacional de la Papa

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	4
<b>Potential for/ actual contribution to outcomes</b>	5
<b>Level of shared ownership (partnerships across org.)</b>	5

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What is your personal perspective of the importance of this product	5
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#### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

**Creator / Authors:** Bui Le Vinh et al.

**Author Identifier:** CGIAR partners

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

**Language:** English

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #2

#### Main Information

**Title:** Location-specific integrated technologies and practices with potential for adaptation and upscaling beyond CSVs

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

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

**Sub Type:** Information outputs

**Year of expected completion:** 2018

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**Status:** On-going

**Justification for cancelling the deliverable:** We have prioritized CSA T&Ps for testing and been working on possibilities for strategic adaptation and upscaling beyond CSVs as the planning and implementation go on. This is a time-consuming process and we expect to make achievements along the way up until 2018.

#### Next-user

CSA stakeholders in other districts, provinces and countries outside the target CSVs

**Knowledge, attitude, skills and practice changes expected in next-user:** Adapt the project methods and tools in planning for their respective CSA initiatives. These would lead to CSA becoming a major component of the program/project portfolio of these next users, together with increased financial/resource investment in CSA initiatives.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Project team and partners will conduct cross-visits to potential "upscaling sites" and help local stakeholders in setting up and launching their CSA initiatives.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Simelton, Elisabeth <e.simelton@cgiar.org>, ICRAF - World Agroforestry Centre

**Partner #2:** Catacutan, Delia <d.catacutan@cgiar.org>, ICRAF - World Agroforestry Centre

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** <Not defined>

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<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> Bui Le Vinh et al.
<b>Author Identifier:</b> Bui Le Vinh
<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> English
<b>Coverage:</b> <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #3

#### Main Information

<b>Title:</b> CSA knowledge products and knowledge-sharing platforms	
<b>MOG # 4:</b> 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)	
<b>Main Type:</b> Communication Products and Multimedia	<b>Sub Type:</b> Articles for media or news
<b>Year of expected completion:</b> 2018	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Initiatives have been made. CIAT and ICRAF have organized and documented events/activities in the forms of videos, blog, working paper. protocol, television news (video), articles published on local/national news papers/channels, and scientific paper. The dissemination of these products can actually be done as soon as they are made from specific activities and will occur along with the implementation of the project up until 2018.

#### Next-user

Action research groups (farmers and local stakeholders) in the 3 target CSVs

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**Knowledge, attitude, skills and practice changes expected in next-user:** Locally validated CSA technologies and practices are integrated in farm- and landscape-level agricultural systems management. Action research groups are key next users since these provide a learning and decision-support to group to individual farmers participating in the testing of CSA technologies and practices.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Site -specific training and capacity building activities under the joint coordination of local project team and community stakeholders

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Simelton, Elisabeth <e.simelton@cgiar.org>, ICRAF - World Agroforestry Centre

**Partner #2:** Wheatley, Christopher <c.wheatley@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Restricted Use Agreement - Restricted access

**Restricted access until:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

**Creator / Authors:** CIAT and ICRAF project teams

**Author Identifier:** Project members

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

**Language:** English

**Coverage:** <Not defined>

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### Deliverable Data sharing

#### Deliverable files

&lt;Not defined&gt;

## Deliverable #4

### Main Information

**Title:** Strategic plans, investment documents and project proposals

**MOG # 4:** 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)

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

**Sub Type:** Discussion paper

**Year of expected completion:** 2018

**Status:** On-going

**Justification for cancelling the deliverable:** We will coordinate with national/subnational governments in mainstreaming project activities into their policy formulation and implementation strategies in order to bring about new initiatives that help promote CSA participatory action research for development. This can be done via sharing project documents in local languages. Whereas, more project proposals (research and/or development) will be welcomed to align with project activities and sites in order to improve synergies of the work in the CSVs that will expectedly help lift up opportunities for out- and up-scaling of the project. This process will evolve with the project activities up until 2018.

### Next-user

Local, sub-national and national decision-makers for CSA agenda setting and investment planning

**Knowledge, attitude, skills and practice changes expected in next-user:** Key decision-makers prioritize and invest in CSA initiatives at various levels in-country

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Knowledge-sharing events and technical advisory missions to support decision-makers

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Simelton, Elisabeth <e.simelton@cgiar.org>, ICRAF - World Agroforestry Centre

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**Partner #2:** Wheatley, Christopher <c.wheatley@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> CIAT and ICRAF teams
<b>Author Identifier:</b> Project members
<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> English
<b>Coverage:</b> <Not defined>

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #5

#### Main Information

<b>Title:</b> CSA Priority Setting Process
<b>MOG # 1:</b> 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)

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<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> This (in progress) working paper defines a methodological framework for participatory CSA priority setting process and different steps to achieve the final goal, which is a final CSA action learning agenda for testing selected CSA T&Ps. The document then goes on presenting different participatory tools that helped achieve the final goal and organizes them in separate sections with individuals or groups of researchers completed the works. It is a well-organized document which links sufficiently different parts/sections in it to make readers understand well and be able to replicate the process in another site.

#### Next-user

Research for development researchers and/or rural developers, national/subnational professional staff, university lecturers, national/local researchers

**Knowledge, attitude, skills and practice changes expected in next-user:** The next-users should be able to replicate the process/methodology in a complete new site for CSA participatory action research. They can work further to improve the methodology with more quantitative analyses. But this document helps provide next users a quick approach to CSA participatory action research in a rural area.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Upon completion, the document can be shared on Open Access for everyone with interest to use. Contacts will be provided for questions and answers.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Bui, Vinh Le <V.Bui@CGIAR.ORG>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Campilan, Dindo <d.campilan@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #3:** Smith, Georgina <g.smith@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #4:** Vernooy, Ronnie <r.vernooy@cgiar.org>, BI - Bioversity International

#### Deliverable Ranking

<b>Address gender and social inclusion aspect</b>	5
<b>Potential for/ actual contribution to outcomes</b>	5
<b>Level of shared ownership (partnerships across org.)</b>	5

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What is your personal perspective of the importance of this product	5
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Deliverable dissemination
<b>Open access restriction:</b> Effective Date Restriction - Embargoed period
<b>Restricted embargoed date:</b>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> Bui Le Vinh et al.
<b>Author Identifier:</b> Bui Le Vinh
<b>Publication / Creation date:</b> not yet
<b>Language:</b> English
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #6

Main Information	
<b>Title:</b> Training workshop on climate smart agriculture: Targeting and Priority Setting Methodological Framework	
<b>MOG # 1:</b> 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)	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Conference proceedings/papere
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

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### Next-user

Research for development researchers and/or rural developers, national/subnational professional staff, university lecturers, national/local researchers

**Knowledge, attitude, skills and practice changes expected in next-user:** The next-users should be able to replicate the process/methodology in a complete new site for CSA targeting and priority setting .in a rural area.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The document will be shared on Open Access for everyone with interest to use. Contacts will be provided for questions and answers.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Vernooy, Ronnie <r.vernooy@cgiar.org>, BI - Bioversity International

**Partner #2:** Bui, Vinh Le <V.Bui@CGIAR.ORG>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #3:** Smith, Georgina <g.smith@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

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

### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

### Deliverable Metadata

**Description:** <Not defined>

**Creator / Authors:** Ronnie Vernooy et al.

**Author Identifier:** Ronnie Vernooy and Arma Bertuso

**Publication / Creation date:** September 2015

**Language:** English

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Coverage: &lt;Not defined&gt;

### Deliverable Data sharing

#### Deliverable files

&lt;Not defined&gt;

## Deliverable #7

### Main Information

**Title:** A set of published and unpublished blogs on different CSA Priority Setting activities

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

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

**Sub Type:** Reference material

**Year of expected completion:** 2015

**Status:** Complete

### Next-user

Research for development researchers and/or rural developers, national/subnational professional staff, university lecturers, national/local researchers

**Knowledge, attitude, skills and practice changes expected in next-user:** The next-users will be informed about completed activities and should be able to replicate various participatory research works in a completely new site for CSA participatory action research. .

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** These blogs are consolidated in the working paper on CSA Priority Setting Process and will be shared on Open Access for everyone with interest to use. Contacts will be provided for questions and answers.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Bui, Vinh Le <V.Bui@CGIAR.ORG>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Smith, Georgina <g.smith@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #3:** Campilan, Dindo <d.campilan@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #4:** Vernooy, Ronnie <r.vernooy@cgiar.org>, BI - Bioversity International

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

Deliverable dissemination
<b>Open access restriction:</b> Effective Date Restriction - Embargoed period
<b>Restricted embargoed date:</b>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> Bui Le Vinh et al.
<b>Author Identifier:</b> Bui Le Vinh
<b>Publication / Creation date:</b> December 2015
<b>Language:</b> English
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## 5.3 Summary on next-users

### Next user #1

**Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:** Research for development researchers and/or rural developers, national/subnational professional staff, university lecturers, national/local researchers, farmers at the CSVs. These are project's stakeholders who greatly contributed to the reporting of the project's results. They are also the ones who will use these results for their own purposes. For example, multi-level governments will use the results in aligning their strategic development plans with project activities, local researchers will use the priorities to test their research hypotheses and research proposals, the private sector will see plans for local agricultural development for planning their production capacity, farmers will use the results to prioritize their production systems to be suitable to climate change impacts and improve their livelihood resilience. They, project stakeholders, will together play their important roles in this CSA game and push it up to a new level of success and more sustainability. And CIAT will, therefore, increase its reputation and portfolios in the region.

**Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:** Their ownership in the project again needs to be defined and their roles must be given in the project. They will then will know what they have to do and who and what they can benefit from, so together they can help achieve goal in sustainable and resilient developments. A strong platform for these users must be formulated and strengthened over time to nurture this ownership and partnerships among them and with CIAT. CIAT needs to play a role of an effective and efficient facilitator in the project.

**Reported deliverables serve as evidence towards this achieved change:** Multi-stakeholder and separate meetings: (1) Recently on 23 March 2016, the FP1.1 team and CIAT Asia management team visited Yen Bai People's Committee to set up an official partnership with the province in this project; (2) On 22 January 2016, the project team organized a stakeholder meeting to discussed 2015 results; (3) In July, August and September 2015, the team organized various participatory workshops with farmers and extension workers to collect information on CSA T&P preferences, land use, soils, land-use plans...

**Lessons and implications for the next planning cycle:** These partnerships must always be strengthened via joint project activities, meetings and workshops. Meetings with provincial leaders have to occur periodically to discuss about and prepare for potential subnational and local initiatives right in 2016 onwards.

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> CSA targeting and priority setting workshop	
<b>Author:</b> Ronnie Vernooy and Bui Le Vinh	<b>Subject:</b> Scoring of CSA technologies and practices
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Inter-center collaboration	
<b>Start date:</b> 2015-07-27	<b>End date:</b> 2015-07-31
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> <Not defined>
<p><b>Highlight description:</b> The village baseline survey (VBS) report of Ma CSV and miscellaneous notes from the first visit to Ma CSV by Bui Le Vinh, FP1.1's research coordinator from CIAT Asia, gathered information of farmers' preferred interventions as well as potentials for implementing these interventions, such as farmers' willingness, land capacity, market access, labour availability. The research team then conceptualized these interventions in such a way that they would not only meet farmers' will, but would also provide evidence-based future resilient benefits to the village's climate risks. For example, planting grass strips in cassava fields is one way to help meet farmers' wish in mitigating soil erosion, producing feed for intensifying fish farming and livestock (cows and goats). The research team also came up with a list of potential CSA interventions that have been tested in areas having similar conditions and farmers are not aware of. These two CSA intervention lists added up to a CSA pool consisting of 10 CSA interventions (5 collective and 5 individual): (1) Cassava-based integrated systems, (2) Cassava-tree, (3) Fish farming, (4) Integrated landscape, (5) Climate-smart systems in paddy fields, (6) Cassava-grass strips, (7) Cut-and-carry, (8) Rice to vegetables, (9) Macadamia-fruit tree-forages, and (10) Tea-coffee-fruit tree-forages. These interventions were visualized to A0-sized posters for a CSA fair before the CSA Prioritization workshop. Ronnie Vernooy (Bioversity) and Arma Bertuso (CIP) were the key developers of this CSA priority setting protocol and workshop in Ma CSV.</p>	
<p><b>Introduction / Objectives:</b> The research team collected farmers' preferred farming systems and those that were successfully tested then conceptualized them on A0 posters. The results were discussed with farmers and ranked by them in terms of preference. 7 highest scored practices were taken for a CBA to evidence-based select 3-4 practices for field tests</p>	

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**Results:** Results synthesized from scoring cards for each of the 10 CSA interventions revealed that farmers are more in favour of the first 7 interventions and not of the last 3. According to them, practices that incorporate too many crops/trees are often complicated and require much more labour, time, and investment. Furthermore, markets for these new products are often unknown. Farmers prefer better products that can likely bring them incomes. The focuses are fish farming, livestock, improving cassava yield, crop rotation in paddy fields in unpredictable weather patterns, and exceptionally a landscape approach that requires farmers working together in more sustainable integrated systems at catchment scale in order to achieve soil and water restoration from a more system approach point of view. Farmers have now ranked their 7 preferred interventions based on their importance as follow: 1 (intervention 3), 2 (6), 3 (1), 4 (2), 5 (7), 6 (4), and 7 (5). (1) Cassava-based integrated systems, (2) Cassava-tree, (3) Fish farming, (4) Integrated landscape, (5) Climate-smart systems in paddy fields, (6) Cassava-grass strips, (7) Cut-and-carry, (8) Rice to vegetables, (9) Macadamia-fruit tree-forages, and (10) Tea-coffee-fruit tree-forages. These interventions were visualized to A0-sized posters for a CSA fair before the CSA Prioritization workshop. Ronnie Vernooy (Bioversity) and Arma Bertuso (CIP) were the key developers of this CSA priority setting protocol and workshop in Ma CSV.

**Partners:** CIP, BI, ICRAF, WorldFish, IWMI, IRRI, Yen Bai People's Committee, Ma farmers, NOMAFSI (Northern Mountainous Agriculture & Forestry Science Institute).

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRV3I4MIIXdDJFekE](https://drive.google.com/open?id=0B_-vCyjPLcyRV3I4MIIXdDJFekE)

Project highlight Information #1	
<b>Title:</b> CSA Targeting and Priority Setting Methodological Framework	
<b>Author:</b> Dindo Campilan and Bui Le Vinh	<b>Subject:</b> Project methodology
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<p><b>Project highlights types</b> Participatory action research</p>	<p style="font-size: small; text-align: center;">Figure 1. CSA Targeting and Priority Setting Methodological Framework Diagram</p>
<b>Start date:</b> 2015-07-01	<b>End date:</b> 2015-07-06
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> The methodology to implement project activities in 2015
<p><b>Highlight description:</b></p> <ol style="list-style-type: none"> <li><b>Step 1: CSA situation analysis and needs assessment</b> <ul style="list-style-type: none"> <li>Conduct of CSA profiling and needs assessment:</li> <li>Identification of provisional list of CSV-specific climate risks and potential CSA T&amp;Ps</li> </ul> </li> <li><b>Step 2: Participatory assessment</b> <ul style="list-style-type: none"> <li>Develop a list of CSA T&amp;P</li> <li>Prioritize CSA T&amp;P based on farmers' votes through a CSA scoring activity</li> <li>Refine a shorter list of CSA T&amp;P based on farmers' votes for a CBA work</li> </ul> </li> <li><b>Step 3: Participatory land mapping and soil survey.</b> The purpose of this step is to collect local knowledge on the following issues:                     <ul style="list-style-type: none"> <li>Current land-use types</li> <li>History of land uses</li> <li>Local soil knowledge</li> <li>Preferences on future land-use planning and produce the following map product                             <ul style="list-style-type: none"> <li>A digital elevation model</li> <li>Participatory GIS</li> </ul> </li> </ul> </li> <li><b>Step 4: Ex-ante economic and social analysis.</b> The purpose of this step is to calculate costs and benefits of each of farmers' prioritized CSA T&amp;P.                     <ul style="list-style-type: none"> <li>Socio-economic surveys for 100 households</li> <li>An economic model to calculate costs and benefits of farmers' prioritized CSA T&amp;P</li> <li>Refinement of 3-5 CSA T&amp;P for field trials based on cost-benefit analysis results</li> </ul> </li> <li><b>Step 5: Scenario analysis.</b> The purpose of this step is to derive different scenarios for testing selected CSA T&amp;P.                     <ul style="list-style-type: none"> <li>Intersecting different map data, including local soil knowledge, slope inclination and land use.</li> <li>Identification of major map units with distinctive attribute data</li> <li>Drafting scenarios for testing CSA T&amp;P based on results of the final map</li> </ul> </li> <li><b>Step 6: Stakeholders' validation planning and M&amp;E training.</b> The purpose of this step are:                     <ul style="list-style-type: none"> <li>to discuss the results of CSA prioritization and scenarios for testing CSA T&amp;P with farmers and stakeholders, and</li> <li>to have a training on monitoring and evaluation (M&amp;E) when implementing the testing of CSA T&amp;P</li> </ul> </li> </ol>	

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**Introduction / Objectives:** The CIAT team developed a CSA Targeting and Priority Setting Methodological Framework to implement activities of the CCAFS FP1.1 in 2015 through a stepwise procedure, which consists of 6 major steps as can be seen in the protocol for CSA Targeting and Priority Setting Methodological Framework.

**Results:** The methodological framework diagram as can be seen in the photo

**Partners:** None

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRM2w5aGRseEpTNWs](https://drive.google.com/open?id=0B_-vCyjPLcyRM2w5aGRseEpTNWs)

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Project highlight Information #1	
<b>Title:</b> A learning visit for Yen Binh farmers to Van Yen district's success cassava-grass strip story	
<b>Author:</b> Bui Le Vinh	<b>Subject:</b> Farmer visit
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion	
<b>Start date:</b> 2015-08-05	<b>End date:</b> 2015-08-05
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> Learning a cassava-grass strip model that has been successfully practiced since 2002 in Van Yen district, Yen Bai province
<p><b>Highlight description:</b> The model of high yield cassava varieties intercropped with different grasses and tephrosia trees along 5-10m contour lines was introduced to the village from Van Yen DARD in 2002. After 13 years of practicing this model, the village has achieved remarkable results. There are only 75ha out of total 115ha of the village used for cassava. The other 40ha of land are used to plant cinnamon, styrax, acacia, and small area of tea. There are 80 buffalos and 25 cows for a total of 94 households. Yet there is not land for grazing, 100% of cattle are kept in stables and only taken outside to relax at certain times during the day. Cut-and-carry system, therefore, is very popular here. Since 2002, agricultural production of the village and farmers' livelihoods has changed dramatically. Cassava yield has increased from 12 tons/ha to an average of 20 tons/ha. Many farmers can achieve 30-40tons/ha. Soil quality has especially improved remarkable. Eroded soil materials are kept by and accumulated overtime at the strip lines. The increase in height of the grass strips (up to 1-1.2m) caused by accumulating soil materials has formed natural terraces. The topsoil at each terrace has become better aerated, richer in soil carbon content. The addition of soil carbon stock has come largely from decayed cassava stems and leaves that were left scattered on the surface as mulch and contour barriers made from cassava stems. Cassava stems after a harvest was piled up along contour lines following the dimensions: 50-60cm (height) – 50-60cm (length) – 30-40cm (width). These cassava barriers helped now only keep eroded soil materials from flushed downslope by run-on water, but decayed after some time providing good input of organic carbon back to the soil.</p>	
<p><b>Introduction / Objectives:</b> To show Ma villagers a successfully implemented practice that will be tested in their field back in Ma. By seeing great effects of the model, farmers would have a good incentive in implementing this model before it was even launched in Ma.</p>	
<p><b>Results:</b> Sharing with the delegation from Yen Binh district, Mrs. Tran Thi Bich Hue – head of Van Yen district's extension department – stated that having seen the unsustainable cassava mono-cropping system in the past, the government of Van Yen started the initiative of adopting the cassava-grass strip from a finished project in the region. With grass varieties provided by CIAT in 2002, it promoted the cassava-grass campaign in some of the 17 communes of the district. Starting in 2002 with 1000 ha of cassava-grass strip and 2200 ha in 2003, there are now 6700 ha of this model successfully implemented in the district of Van Yen. The methods used to achieve this sustainable practice were mainly community propaganda via village loud speaker systems and via field demonstrations. Farmers also have played a remarkable role in disseminating the techniques and knowledge to peer farmers to follow.</p>	
<b>Partners:</b> NOMAFSI	

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**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRMUZTVINpM3ltSGs](https://drive.google.com/open?id=0B_-vCyjPLcyRMUZTVINpM3ltSGs)

Project highlight Information #1	
<b>Title:</b> The social processes of adaptation to change: looking at agricultural interventions through a gender lens	
<b>Author:</b> Nozomi Kawarazuka	<b>Subject:</b> Gender balance and social inclusion
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion	
<b>Start date:</b> 2015-08-27	<b>End date:</b> 2015-08-27
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> Scientific and economic research must be a foundation for justifying new technologies. But it is also crucial to consider the social aspects of new research interventions.
<p><b>Highlight description:</b> 1.1. Understanding the social processes of adaptation to change            Understanding social and gender relations within society enables us to examine the social processes of climate adaptation, which are different from the ecological processes of change. Gender is not about women. Gender is not about women's empowerment.</p> <p>1.2. Exercise 1: Learning from the history of change            In conservative villages, men tend to be afraid of change since there is a danger of losing their authority and masculine power. How do farmers think about changing norms, landscape and agricultural practices?</p> <p>1.3. Exercise 2: Considering power emerging through conjugal negotiations            All family members have to change every day gendered routine activities for creating additional time and labour spent on new interventions. Whose time and labour are increased? Even if new technologies require men's labour, their wife may have more burdens as a result of re-negotiations over gender division of labour. Some new technologies may be aimed at supporting women but their husband and mother-in-law may feel jealous and therefore they may not approve of young wives' participation in the project.</p> <p>1.4. Exercise 3: Looking at social dynamics among the village members            The village is not always a harmonious society. Let's carefully observe differences between the poor and the better off within the village and find out who are more likely to take advantage of new technologies.</p>	
<p><b>Introduction / Objectives:</b> Understanding social and gender relations within society enables us to examine the social processes of climate adaptation, which are different from the ecological processes of change. Gender is not about women. Gender is not about women's empowerment.</p>	

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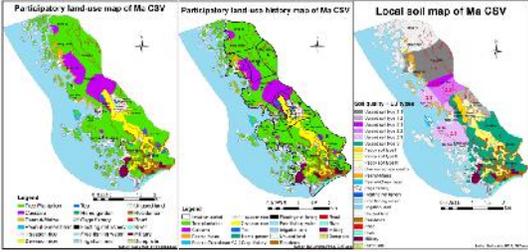
**Results:** In Ma village, women have a lot of work and they said that additional labour input was not acceptable. In some other project sites, interventions target women. Do men accept their wives being empowered while they are marginalized? Some participants discussed that new interventions may cause tension and result in creating many divorce cases! Although it is impossible to predict the consequent changes in conjugal relations, this exercise reminds us that people's everyday lives are embedded in family relations and there are always social constraints and unintended consequences.

In Ma village, women have a lot of work and they said that additional labour input was not acceptable. In some other project sites, interventions target women. Do men accept their wives being empowered while they are marginalized? Some participants discussed that new interventions may cause tension and result in creating many divorce cases! Although it is impossible to predict the consequent changes in conjugal relations, this exercise reminds us that people's everyday lives are embedded in family relations and there are always social constraints and unintended consequences.

The poor may be more affected by climate change than better-off families but more difficult to adopt new technologies, not only because they lack economic capital but also because they are socially marginalized from other villagers. In some conservative villages, it may be unacceptable that poor men become the first person in the village to adopt new technologies. A small number of powerful people might be dominating resources and in such a case, the project team needs to deal with them to leverage their power for the community, and think how the poor can benefit from the interventions.

**Partners:** CIP

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyReG5OaGgxeWJfSDQ](https://drive.google.com/open?id=0B_-vCyjPLcyReG5OaGgxeWJfSDQ)

Project highlight Information #1	
<b>Title:</b> Participatory mapping exercises for land use, land use history, and local soil knowledge	
<b>Author:</b> Bui Le Vinh	<b>Subject:</b> Participatory mapping
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research	
<b>Start date:</b> 2015-08-02	<b>End date:</b> 2015-08-03
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> Participatory mapping of land use, land use history, and local soil knowledge
<p><b>Highlight description:</b> Since cadastre mapping is not yet to be launched in the district, another way of learning about the land uses of the village needs initiating quickly to collect information of land uses of Ma CSV. A base map is digitized from a google earth image downloaded for the village. Polygons are formed based on visible boundaries and different colour patterns on the image. These polygons do not have land-use information yet and need to be identified by Ma villagers. Roads, rivers/streams, ponds, and lakes are highlighted on the map as key landmarks. Land use types were identified for tree plantations, cassava, peanut, maize, green bean, paddy fields, tea, home garden, residence, road, river, military, lake,....</p> <p>The exact time when Ma was founded is unknown, but the farmers know for sure that the village has over 100 years of history. The easiest way to date back the village's approximate birth is to take the longevity of the first born-dead generation (a 94 year old man passed away 3 years ago) with an assumed time between the initial settlement and when the person was born (eg. 5-7 years or longer). Therefore, the village could have been founded at late or early 1900.</p> <p>From literature study, the quality of soils in an area depends not only on parent material but also on elevation, slope inclination, slope aspect, vegetation type, and, importantly, cultivation period (i.e. history of land uses after deforestation). Interestingly, some of these variables are mentioned by farmers during the discussion about soils and their quality in Ma CSV. Qualitative soil classification and quality assessment were made for upland and paddy soils.</p>	
<p><b>Introduction / Objectives:</b> Like many other remote districts in northern mountainous regions of Vietnam, Ma CSV in Vinh Kien commune does not have yet a detailed cadastre map made to plot level and a good soil map for the village. This makes it difficult to investigate different land-use types and understand soil quality at the research site. These two information categories are necessary for planning field trials and assessing crop suitability of introduced CSA interventions in the village. A land-use history study based on an indigenous land-use map can add more value to socio-economic and gender research later in this CSV.</p>	
<b>Results:</b> Three maps with legends	
<b>Partners:</b> None	

Submitted on 2016-03-10 at 04:26 UTC

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRX0MyNGRndFRQanc](https://drive.google.com/open?id=0B_-vCyjPLcyRX0MyNGRndFRQanc)  
[https://drive.google.com/open?id=0B\\_-vCyjPLcyReFRNNjNQWnJHb2M](https://drive.google.com/open?id=0B_-vCyjPLcyReFRNNjNQWnJHb2M)  
[https://drive.google.com/open?id=0B\\_-vCyjPLcyRNUlxOTVlbTRpM3c](https://drive.google.com/open?id=0B_-vCyjPLcyRNUlxOTVlbTRpM3c)

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Project highlight Information #1	
<b>Title:</b> Participatory land-use planning	
<b>Author:</b> Bui Tan Yen et al.	<b>Subject:</b> Local land use planning
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research	 
<b>Start date:</b> 2015-09-24	<b>End date:</b> 2015-09-25
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> To learn what farmers want to use their land for
<p><b>Highlight description:</b> A focus group discussion was organized at the village meeting hall with participants of village head and 15 farmers. During the meeting, participants analyzed constraints as well as opportunities of village's natural resources. Farmers in Ma village split agricultural land into separated fields. Each field has its own local name and bio-physical conditions. Based on own perception and experience, farmers described characteristics of soil, land form, irrigation and drainage situation and impact of weather extreme events, which are physical factors that they often use to make farming decision.</p> <p>Farmers indicated that crops in the lowland part of the village are vulnerable to extreme climate events such as cold spells, floods, hoarfrost, unusual hot spells and drought spells. In the upland part, serious soil erosion often occurs due to unusual high intensity rainfall. Being affected by typhoons and cyclones, a large number of forest trees fell in recent years.</p> <p>Taking into account the situation of land resources and unpredictable weather extreme events, farmers in Ma village discussed and specified the "best" land use option for each fields. A farmer explained that "irrigation water from natural flow is now less and less in spring season. Paddy fields such as Cay Si, Sap Nhim, Cay Cheo are strongly affected by drought." Mr. Le Van Tam, the village head, said "in the past, when Cao Bien Mountain was covered by dense forest, water level in springs was much higher than present. Since dense forest has been converted to planted forest, water shortage often occurs. Therefore, recovering natural forest and growing more trees within resident land is an option to solve water shortage, soil erosion and many other unflavored weather events".</p>	
<p><b>Introduction / Objectives:</b> In Vietnam, land use planning is often developed and implemented by government following top-down approach. Thereby, the land use plans are passed from higher to lower administrative levels. These plans are sometime not in line with land use strategies of farmers at village level. The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), International Centre for Tropical Agriculture (CIAT) and the Northern Mountainous Agriculture and Forestry Research Science Institute of Vietnam (NOMAFSI) conducted the 'Participatory Land Use planning for Climate Change adaptation strategies of Climate-Smart Villages (PLUP-CC)'</p>	

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**Results:** Participatory land use planning activity in Ma village helped to visualize the needs of farmers. The map together with detailed description of land use plan will support ideas for CCAFS and organizations' interventions in order to build Ma to become a Climat-Smart Village.

**Partners:** CCAFS SEA, NOMAFSI

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRcFEzaEViY01ETDA](https://drive.google.com/open?id=0B_-vCyjPLcyRcFEzaEViY01ETDA)

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Project highlight Information #1	
<b>Title:</b> Participatory GIS	
<b>Author:</b> Louis Parker et al.	<b>Subject:</b> <Not defined>
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion	
<b>Start date:</b> 2015-10-19	<b>End date:</b> 2015-11-11
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> To train on and survey land using participatory GIS tool
<p><b>Highlight description:</b> As Ma Village has a complex topography, with forested mountain areas, low lying paddy fields, and a patchwork of small cultivated islands on the lake, taking GPS points of the fields and asking farmers questions required a large team with understanding of the local context. As such, CIAT's PGIS team were accompanied by two experienced NOMAFSI staff, two commune staff, and two local farmers.</p> <p>So how does PGIS differ to other GIS data collection methodologies? A vital step in the planning and monitoring of future projects, PGIS can help prioritise spatially which climate-smart agricultural (CSA) practices are appropriate for particular communities and areas. Unlike land-use maps which have a fixed resolution, PGIS maps can be downscaled allowing future changes to be monitored based on solid baseline data and key metrics from key localities that serve as benchmark sites for timeline comparison (i.e. the Climate Smart Villages).</p> <p>As Stef de Haan says, "PGIS is unique in that it provides an opportunity to extract fine resolution (field level information) spatial data based on local knowledge and perceptions using short, simple and interactive survey. It can feed into the development of land use maps and remote sensing activities, and facilitates scaling up".</p> <p>The outputs of the PGIS study will help in the second phase of the FP 1.1 project, which involves piloting prioritized CSA practices, identifying which practices could be piloted in a spatially explicit manner, and which farmers are best equipped to undertake these practices is vital for future success.</p> <p>As Huong Pham (CIAT's Agricultural Economist) notes "a successful survey requires fitting into farmers' busy schedule, visiting the fields when they are undertaking required activities, such as planting or weeding. As a GIS team we need to be flexible and responsive to farmers' needs".</p>	
<p><b>Introduction / Objectives:</b> Smiling faces, laughter and a huge crowd of people greeted us as we arrived in the climate-smart Ma Village. An organised cooking competition was in full swing to celebrate World Food Day, Vietnamese Women's Day and of course, importantly, the start of the Participatory GIS (PGIS) training and survey</p>	
<b>Results:</b> a pGIS database that can be used for different research topics	
<b>Partners:</b> NOMAFSI	
<p><b>Links / Sources for further information:</b> <a href="https://drive.google.com/open?id=0B_-vCyjPLcyRWGdnSWJwX0c5YVU">https://drive.google.com/open?id=0B_-vCyjPLcyRWGdnSWJwX0c5YVU</a></p>	

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Project highlight Information #1	
<b>Title:</b> Development of action learning agenda for testing the selected CSA T&P and Stakeholders' meeting: sharing of 2015 activities and planning for 2016	
<b>Author:</b> Bui Le Vinh, Nguyen Duy Nhiem, Pham Thi Mai Huong	<b>Subject:</b> CSA participatory action learning agenda
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion	
<b>Start date:</b> 2016-01-22	<b>End date:</b> 2016-01-22
<b>Is global:</b> No	
<b>Country:</b> Vietnam	<b>Keywords:</b> Development of action learning agenda and stakeholder meeting in Ma
<p><b>Highlight description:</b> Positive feedbacks reflect potential synergy and collective action: During the meeting, main activities of the FP1.1 project in 2015 and action learning agenda for all CSA practices in 2016 were updated to participants. Prioritized CSA practices chosen through participatory workshop and cost-and-benefit analysis were presented and received very positive feedbacks from all participants due to their feasibility and workability within the context of the village. These CSA practices are cassava-grass strips model, fish intensification, cut-and-carry for cow raising, improvement of tree plantation and integrated cultivation system on sloping land.</p> <p>CIAT plays a “monitor” among the stakeholders: Right from the beginning, FP1.1 CIAT team would like to emphasize the important roles of local governments and villagers in implementing CSA practices and technologies in a sustainable way, which is very crucial to a successful participatory project. In order to engage these organizations as much as possible in adapting to and mitigating climate change to ensure food security, the team regards the project as a classroom in which CIAT is a “monitor”. “We would like you to think that we are in a class in which CIAT is just a “monitor” who orientates and coordinates all activities with technical supports. We encourage and wish you all would involve in implementing the CSA practices to improve the livelihood of Ma villagers in a changing climate. Therefore, our FP1.1 project is your project and please call it Ma villagers’ project” said Dr. Bui Le Vinh.</p> <p>A way forward: The positive attitudes of the local governmental institutions and Ma villagers towards the implementation of CSA practices of FP1.1 project emitted a positive sign of collective actions in an attempt to cope with climate change. Chosen CSA practices would be implemented in Ma CSV since February this year and hopefully good collective actions would be achieved.</p>	
<p><b>Introduction / Objectives:</b> In the third week of January 2016, one stakeholder meeting at Ma Climate Smart Village (CSV) in Vinh Kien commune, Yen Binh district, Yen Bai province was organized. The objectives of the meeting were to: (i) update main activities of CSA project in 2015; (ii) present the prioritized CSA practices and technologies that would be implemented in the village and feedback of stakeholders, especially farmers on these interventions; (iii) present general action plan of CSA project in 2016, specially the implementation of cassava-grass strips in February with farmers.</p>	

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**Results:** All farmer participants showed great enthusiasm and eagerness in adopting introduced practices, especially cassava-grass strips model which helps protect soils from erosion while providing grass for cows, buffaloes and/or fishes. A more detailed participatory action plan about participating farmers, necessary materials and support for the latter practice being commenced in February 2016 has been drafted with farmers. Other than prioritized CSA practices, farmers also wished the project to: (i) introduce high yielding and/or quality rice varieties; (ii) provide technical aid to investigate the causes of and curing measures for fish diseases and (iii) prevent the damage caused by red mite on cassava as in 2015.

Mr. Nguyen Kien Cuong, a project focal person from Yen Bai DARD also expressed his great enthusiasm in participating in FP1.1 project and shared with us about the provincial DARD policies that might be aligned with activities of FP1.1 to create a good synergy. The policies from this institution include the subsidy for farmers to make new fish cages, buy livestock and grow fruit trees, amongst others. The representatives from Yen Binh DARD and Vinh Kien commune also showed their great willingness to align with the policies from Yen Bai DARD to achieve a collective action. These positive attitudes reflects the awareness of local governments about the impacts of climate change and their interests in coping with it.

**Partners:** Yen Bai DARD, NOAFMSI, Ma farmers

**Links / Sources for further information:** [https://drive.google.com/open?id=0B\\_-vCyjPLcyRWIV6U25YbXplaXc](https://drive.google.com/open?id=0B_-vCyjPLcyRWIV6U25YbXplaXc)  
[https://drive.google.com/open?id=0B\\_-vCyjPLcyRZkE4akpWNE1WWUk](https://drive.google.com/open?id=0B_-vCyjPLcyRZkE4akpWNE1WWUk)

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## 6. Activities

Activity #1	
<b>Title:</b> Planning for CSA assessment-priority setting and CSV-level M&E	
<b>Description:</b> Developing protocols for assessment, priority setting and M&E Training-workshops for CSV implementation teams Monitoring and evaluation of CSA outcomes	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 17-02-2016
<b>Leader:</b> Campilan, Dindo <d.campilan@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Complete	

Activity #2	
<b>Title:</b> Action research for integrated agricultural technologies and practices -- 1st cycle	
<b>Description:</b> Participatory action research with women-men farmers' groups and community-based organizations: - multi-season evaluation trials on CSA technologies and practices - training and capacity building for CSA stakeholders - piloting CSA incentive mechanisms (instituta/services/resources) - learning-oriented monitoring and evaluation of action research	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Campilan, Dindo <d.campilan@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> - Detailed plans for testing the first group of CSA T&Ps were made and discussed with farmers for clarifications and agreements - Field preparation and design for testing - Farmer involvement - Experimental setups for different research topics based on collaborations with 2+ US universities -

Activity #3	
<b>Title:</b> Action research for integrated agricultural technologies and practices - 2nd cycle	
<b>Description:</b> Participatory action research with women-men farmers' groups and community-based organizations: - multi-season evaluation trials on CSA technologies and practices - training and capacity building for CSA stakeholders - piloting CSA incentive mechanisms (institutional/services/resources) - learning-oriented monitoring and evaluation of action research	
<b>Start date (dd-MM-yyyy):</b> 01-01-2016	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Campilan, Dindo <d.campilan@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	

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<b>Status:</b> On-going	<b>Justification:</b> - Detailed plans for testing the first group of CSA T&Ps were made and discussed with farmers for clarifications and agreements from August 2016 onwards - Farmer and field selection and design - Experimental setups for different research topics
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Activity #4	
<b>Title:</b> Knowledge sharing, outscaling and communications	
<b>Description:</b> Development of knowledge products for sharing project results beyond the CSVs and to influence similar initiatives across Southeast Asia	
<b>Start date (dd-MM-yyyy):</b> 01-01-2017	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Smith, Georgina <g.smith@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> - Documentation of research protocols, workshop proceedings, technical guidelines, consolidated processes and working papers - Cross-CSV visits - Sharing of project documents with other CSVs in the region of SEA and beyond - Press releases, blogs, videos, interviews, articles, leaflets, newsletters.

**Lessons regarding your project activities and possible implications for the coming planning cycle:** - CSA T&Ps with priorities should be implemented in the first cycle, for example the cassava-grass strips technologies, for other relevant ones to be built upon.  
- Farmer selection must be done with care to have address right targets of the project, i.e. improving lives and resilience of the poor and the marginalized  
- Data and information management must be planned well so documentation and data collection can be well done

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## 7. Leverages

<Not defined>

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**Title:** Tailored Agro-Climate Services and food security information for better decision making in Latin America

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	RP LAM - Latin America Region	<b>Mgmt. liaison contact</b>	Loboguerrero, Ana Maria <a.m.loboguerrero@cgiar.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Giraldo, Diana <d.giraldo@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

### Project is working on

Flaship(s)	Region(s)
FP2: Climate Information Services and Climate-Informed Safety Nets	RP LAM: Latin America

Bilateral project(s) contributing to this project
176 - Climate Resilient Planning: Interdisciplinary Research to Improve Information Provision for Decision Making
148 - Convenio MADR - Project with the Colombian Ministry of Agriculture on Climate Change and Agriculture
244 - Site-and climate- specific agriculture recommendations across time-scales USAID

### Summary

Whilst in other regions of the world there are a range of initiatives related to agroclimatic forecasting, there is a big gap in Latin America, which provides a tremendous opportunity to contribute with a targeted and well-integrated initiative to make a difference in agroclimatic information (based on historical analyses, monitoring systems and agro-climatic forecasts). In this sense, we propose to jointly develop and implement with national stakeholders, innovative approaches and tools based on local and scientific information for improving climate risk management by (i) taking into account gender aspects and simple food security indicators, (ii) combining local data on agroclimatic information with seasonal forecasts, (iii) improving information formats and delivery to decision-makers and farmers and (iv) strengthening and promoting the elaboration of policies, establishing a robust climatic indices to support and improve ongoing agricultural insurance pilot project.

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## 2. Partners

### Partner #1

**Institution:** BI - Bioversity International

#### Contacts

Type	Contact	Responsibilities and contributions
Project Coordinator	van Etten, Jacob <j.vanetten@cgiar.org>	Bioversity in Costa Rica has experience working on climate change adaptation and agroecological resilience at the local scale, treating food security as a socioeconomic problem more holistic than just agricultural yields. They work in scaling up local solutions, implemented an innovative approach to collect climate and food security information at the household level, using a sentinel site surveillance system that takes account of gender and social differentiation, information needs analysis, and crop production aspects. CATIE) involved in the project. Activity 2014-21 *Leader*. Activity 2014-22 *Leader*. Activity 2014-37 *Partner*.

### Partner #2

**Institution:** IRI - International Research Institute for Climate and Society

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Baethgen, Walter <baethgen@iri.columbia.edu>	IRI works on developing reliable climate information for improving climate risk management in agricultural systems with an emphasis on practical and verifiable use. They have experience in developing index insurance products to help farmers manage weather risk. IRI will contribute with the improve transparency and performance of climate forecasts in Colombia and the transfer of information to agricultural terms, implementation of a regional observatory for improved climate risk management in Colombia and support of the report of mapping networks. Activity 2014-37 *Partner*. Activity 2014-36 *Leader*.

### Partner #3

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**Institution:** CIP - Centro Internacional de la Papa**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Quiroz, Roberto <r.quiroz@cgiar.org>	CIP has expertise in climate reconstruction and downscaling as well as on incorporating local knowledge into the analysis of agro-climatic models. CIP will lead the reconstruction of climatologies, combine historical observations/satellite estimations and methods for interpolation and downscaling. CIP will contribute with the develop Interface for analyzing climate/reconstruct series, interpolation of observed data and satellite estimates Activity 2014-23 *Leader*.

**Partner #4****Institution:** ILRI - International Livestock Research Institute**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Van Wijk, Mark <m.vanwijk@cgiar.org>	ILRI has experience in livestock systems and quantitative analysis of household level indicators. They will host a postdoctoral/PhD student and supervise this person to work on intra-household decision-making and information access, and livestock production. Activity 2014-22 *Partner*.

**Partner #5 (Leader)****Institution:** CIAT - Centro Internacional de Agricultura Tropical**Contacts**

Type	Contact	Responsibilities and contributions
Project Leader	Giraldo, Diana <d.giraldo@cgiar.org>	Activity 2014-37 *Leader*. Develop a methodology for integrating climate forecasts with the crop models linked with appropriate decision and discussion support tools, could substantially improve operational decision making in agricultural management. Activity 2014-38 *Leader*. Dissemination mechanisms for farmers: innovative "formats" of products, "translating" climate information into agronomically relevant information.

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Partner	Blundo, Genowefa <g.blundo@cgiar.org>	Activity 2014-21 *Partner*. Collect information and design mapping networks in Colombia in order to understand current information flows and decision-making cycles, demand and gaps throughout the entire production chain of the involved maize and bean crops (from cultivar selection, to crop production, to consumption).
Partner	Arango Londoño, David <d.arango@cgiar.org>	Activity 2014-23 *Partner*. Development of an interface: RClintool who provides statistical analysis of agroclimatic data, in which the user can analyzing with timely information (meteorological stations and satellite) for decision making in crop.
Partner	Barrios Perez, Camilo <c.barrios@cgiar.org>	Activity 2014-36 *Partner*. Identify technologies to characterize, based on the historical data at different time scale, the agroclimatic conditions of the target regions, as well as monitor the present conditions using Decision Support Systems (DSS) through agro climatic indicators in order to reduce climate-related vulnerabilities and/or take advantage of environmental conditions in a better way.

## Partner #6

**Institution:** ACF International - Action Contre la Faim

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Gaytan, Ada <agaytan@ca.acfspain.org>	ACF's actions regarding "food security and livelihoods" consists of saving lives in crisis situations and protecting and preserving the means of existence for communities at risk. Lead field implementation and facilitate institutionalization processes in Guatemala. Action Contre la Faim (ACF) has implemented an innovative approach to collect climate and food security information in the field, using a sentinel site surveillance system. Activity 2014-21 *Partner*. Activity 2014-22 *Partner*.

## Partner #7

**Institution:** CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

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

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**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Imbach, Pablo <pimbach@catie.ac.cr>	Collect and produce new data products/pipelines, integrating socio-economic/ climate data for Honduras and Guatemala Activity 2014-23 *Partner*.

**Partner #8****Institution:** FENALCE - Federación Nacional de Cultivadores de Cereales**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Molina, Carlos <cmolina@fenalcecolombia.org>	Activity 2014-36 *Partner*. The Federación Nacional de Cultivadores de Cereales y leguminosas (FENALCE) help to identify what the need farmers in order to planning the products that will assist them the decision making, as well as the better way to transmit the project results to the farmers and evaluate the impact and usability of each technology that will be developed. On the other hand, this partner will play an important role supplying the agronomic information that will be required to use and validate the different crop models that will be used.

**Partner #9****Institution:** Columbia University**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Baethgen, Walter <baethgen@iri.columbia.edu>	The IRI was established as a cooperative agreement between NOAA's Climate Program Office and Columbia University. It is part of The Earth Institute, Columbia University, and is located at the Lamont Campus.

**Partner #10****Institution:** MADR - Ministerio de Agricultura y Desarrollo Rural

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

Type	Contact	Responsibilities and contributions
Partner	Ruiz, Alejandro <alejandro.ruiz@minagricultura.gov.co>	AGRONET Colombia was conceived by the MADR to form a network of integrated and decentralized information and communication that can provide timely and synthetic strategic information to those responsible for making political decisions in the sector at the same time, provide the various actors in the agro -chain - with special attention to small producers - locally relevant agricultural information on new techniques for sustainable food security and crop diversification to improve their profitability and market opportunities. Responsibilities: Improved AGROCLIMAS app Agronet-Colombia

**Partnerships overall performance over the last reporting period:** All partners are a very strong foundation for development of this project. The partnership FENALCE, CORPOICA - Colombia, and CATIE and ACF -Guatemala was fruitful in 2015. We carried out project activities together and regular planning and monitoring meetings. Cooperation with partners from the public sector (SESAN) slowed down towards the end of 2015 due to presidential elections and government transitions. Through constant communication and presence in stakeholder meetings we managed to maintain a good relationship throughout this transition phase. Project activities helped to complement the priorities of bilateral cooperation with the Colombia Ministry of Agriculture in 2015.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** The activity: analyzing climate/reconstruct series, interpolation of observed data and satellite, might be affected for non-participation of CIP, given the budget cuts. Government transitions have major implications for project planning cycles in Guatemala and should be taken into account throughout the project period. This applies to other countries in the region as well.

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### 3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Colombia
Country	Not applicable	Not applicable	Guatemala
Country	Not applicable	Not applicable	Honduras

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

(1) Private/Public sector stakeholders in at least two countries use validated tools for Agro-Climatic Risk Management in the elaboration of public policies and in decision-making to evaluation of adaptive strategies. The provision of information tailored to end users will increase the adoption of these tools. The farmer associations access agroclimate forecasts, reaching 60000 of farmers.

(2) Agricultural extension services make recommendations based on agro-climatic information using innovative mechanisms adapted to the specific conditions and to the identified needs of the different farmer communities.

(3) Sentinel sites produce validated data in a cost-efficient way and produce and deliver climate and food security information.

(4) Gender-disaggregated user feedback on new information products leads to increased control, by women and other marginalized groups, of assets, inputs, information and decision-making, will measure changes in the gender/social differentiation gap in access to climate and food security information.

**Annual progress towards outcome (end of 2015):** By the end of 2015, gender roles, social differentiation, key nodes and mapping information flows in Colombia and Guatemala will be identified throughout the entire production chain of maize and bean; from cultivar selection, cultural management practices, crop production and consumption. This information will be used as baseline to identify gaps and tailor agro-climatic information to the requirements and demands of farmers for their usability. This process will be facilitated by knowledge exchange and preliminary analysis of the household survey data ready to show gender aspects of access to food, showing participation of women in sentinel sites.

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**Annual progress towards project outcome in the current reporting cycle (2015):** In Colombia, 12 focus groups in Cordoba and Santander were carried out with farmers to map out the entire network of actors who provide climate, prices, agronomic and financial information to farmers. The results are detailed in a CCAFS working paper No.88 and an Info Note (<http://hdl.handle.net/10568/71109>), which summarizes the results. Both documents have been shared with the local partners FENALCE and CORPOICA, who supported the implementation of the workshops. Household surveys in Colombia will be carried out in mid-2016 in order to have data from the same year of implementation with farmers. The sampling strategy might be affected by the uncertainty in budget cuts.

In Guatemala we developed a prioritization strategy for the SESAN sentinel site food security early warning system based on secondary data. This helps the SESAN to identify and prioritize regions for the new establishment of sentinel sites. The results were presented, shared and validated in a workshop with representatives of SESAN and other stakeholders. The results will be part of the sentinel site guidelines of SESAN that will be updated before mid 2016.

An inventory of agroclimatic services for Central America and Colombia (working paper No. 89) has been completed and shared with project partners. In Guatemala we conducted 9 in-depth interviews with key informants to evaluate the most important climate information products identified by the inventory. The results of the evaluation and the inventory were shared and validated with the members of a climate-information roundtable of the SESAN (PronósticoSAN). The evaluation study is ongoing.

**Communication and engagement activities have contributed to achieving your Project outcomes:** All activities in Colombia are being carried out with the support and feedback from local institutions, in particular FENALCE and CORPOICA, which increases ownership, dissemination of results and the development of user-oriented products. Local reporters disseminated preliminary results from the network mapping in local media (<http://www.vanguardia.com/economia/local/332600-sequia-en-santander-genero-la-perdida-del-80-de-la-cosecha-de-frijol>).

In Guatemala, all project activities are carried out in close cooperation with our partners ACF and SESAN. Thus we assure adaptation of our products to the needs of the stakeholder and we support the empowerment of the SESAN in the management of the sentinel site system.

**Evidence documents of progress towards outcomes:** [CCAFS\\_InfoNote\\_Agroclimas.pdf](#)

**Annual progress towards outcome (end of 2016):** By the end of 2016, will be incorporated new indicators in the SESAN in Guatemala. Improving the data analysis to make the process more user-friendly and to help consolidate and institutionalize by the Ministry (MADR) in Colombia the local and national Network of Technical Committees Agroclimatic, where the results of agroclimatic models will be discussed and validated at each table and then the newsletter with the conclusions (measures of adaptation strategies) will be created

**Annual progress towards outcome (end of 2017):** By the end of 2017, More than 35,000 farmers and institutions of public / private sector know the local and national agroclimatic newsletter through diffusion mechanisms (round tables, SMS, web, bulletins, newspapers, videos) and use it as support for decision-making in the applications adaption strategies with the implementation and validation of agro-climate forecast pilots given during the mid 2015 - 2016.

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**Annual progress towards outcome (end of 2018):** By the end of 2018, web site to assess agro-climate risks in Colombia will be available. The website will provide information for different types of users about environmental conditions (past, present, future) for each region growing bean and maize. The web page outputs will be automatically updated every time there is new information available, which will assist users to plan future activities.

**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 involvement of local institutions since the inception of the project is helping to shape the activities towards products that are actionable and relevant to next users.

## 4.2 Contribution to CCAFS Outcomes

**RP LAM - Outcome 2019:** Meteorological Services generate tailored climate information for decision-makers both at national and local level. Ministries of Agriculture generate and communicate tailored agro-climate services through extension services to help smallholder farmers to reduce climate risks, as well as food security information to create informed safety nets. Research institutions develop demand-driven insurance options based on agro-climate information, seed markets, and CSA context-specific options. Private Sector contributes to the development and implements insurance options for smallholder farmers.

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

2019	
<p><b>Target value:</b> 3 Institutions FENALCE in Colombia (Cereal and Legume Growers-growers union), INSIVUMEH in Guatemala (meteorological service) and ZAMORANO in Honduras (agricultural university)</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p>
<p><b>Target narrative:</b> - Colombia, Honduras and Gutemala, the goal is to reach 2200 users of RClimTool, through a web-based platform.            -The agricultural extension services make recommendations based on agro-climatic information using innovative outreach mechanisms adapted to the specific conditions and to the identified needs informing 60000 number of farmers to take production decisions.            With AGRONET sent 280,000 SMS reporting of results, developments, events and news related to the project AGROCLIMAS,</p>	

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## 2019

**The expected annual gender and social inclusion contribution to this CCAFS Outcome:** Guatemala will have a fully implemented food security information system that systematically distributes tailored information about crop production and seasonal climate forecasts to inform decision-making about food security safety nets at local, regional and national levels.

## 2015

**Target value:** 3 Institutions FENALCE, MADR in Colombia and SESAN in Guatemala

**Cumulative target to date:** Cannot be Calculated

**Target achieved:** 4.0

**Target narrative:** - FENALCE the National Federation of Cereal and Legume Growers understood current current flows of knowledge information, demand and gaps, decision-making cycles in which climate and food security information is used or potentially used in government, non-governmental organizations, rural families. This mapping of information will allow to better identify sources of information and key players that will enable them to make better decisions.

-MADR the Ministry of Agriculture and Rural Development through of AGRONET, will develop a communication strategy results to key decision makers in the Colombia government, involved in the chain of maize and bean crops.

-SESAN has articulated a clear vision for the national food security information system, including the needs for products derived from CCAFS science, based on a solid assessment of user requirements and needs.

A mapping networks to support the elaboration of public policies with these three institutions, in order to understand current information (agro-climate and food security), demand and gaps.

**Narrative for your achieved targets, including evidence:** With key experts of SESAN, four areas of research needs were identified. These are a prioritization strategy for new sentinel sites, the evaluation and validation of the data generated in the sites, the elaboration of an integrated data analysis instrument and improvement in the presentation of the results. The key areas were validated by key stakeholders of the surveillance system in a roundtable discussion.

All activities in Colombia are being carried out with the support and feedback from local institutions, in particular FENALCE and CORPOICA, which increases ownership, dissemination of results and the development of user-oriented products.

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

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** In 2015, together with SESAN and our partner ACF we designed a study to understand the gender dynamics in decision making processes in the sentinel sites. The study will be finished before April 2016. The results will help to develop a gender strategy for the sentinel site system. Continue and finish our work in gender roles, social differentiation, key nodes and mapping information flows in Colombia, this information will be used as baseline to identify gaps and tailor agro-climatic information to the requirements and demands of farmers for their usability to 4500 maize farmers and 3000 bean farmers in Colombia.

## 2016

**Target value:** 2

**Cumulative target to date:** Cannot be Calculated

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## 2016

**Target narrative:** -SESAN has identified a new validated set of key indicators to monitor food security based on household food security analyses done by CCAFS scientists.

FENALCE and agricultural extension uses the databases and tools developed by CCFAS. Where RClimTool will become the main reference to increase their knowledge and skills about the use and statistical analysis of climatic information which will allow them to understand and characterize the climatic condition and the relationships with agricultural information of each of the areas and so, they generate agroclimatic newsletters.

**The expected annual gender and social inclusion contribution to this CCAFS Outcome:** By the end of 2016 In order to achieve the proposed outcomes we assume that local and national governments (such as Pacto Hambre Zero in Guatemala), development agencies such as The World Bank and USAID, and large grower associations (such as Fenalce) with all of whom we have ongoing partnerships, will increase their efforts for embedding climate risk management approaches and tools into their activities to enhance the adaptive capacity of production systems and improve food security in the region.

## 2014

<b>Target value:</b> <Not defined>	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> <Not defined>
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**Target narrative:** <Not defined>

**Narrative for your achieved targets, including evidence:** <Not defined>

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

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

**Indicator #2:** FP2 Indicator: Increase in research-informed demand-driven investments in climate services for agriculture and food security decision-making (millions)

## 2019

<b>Target value:</b> 2,000,000USD	<b>Cumulative target to date:</b> Cannot be Calculated
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**Target narrative:** By the end of 2018, web site to assess agro-climate risks in Colombia will be available. The website will provide information for different types of users about environmental conditions (past, present, future) for each region growing bean and maize. The web page outputs will be automatically updated every time there is new information available, which will assist users to plan future activities.

**The expected annual gender and social inclusion contribution to this CCAFS Outcome:** NAColombia FENALCE and at least two gremios (growers federation) more, will have a validated functional system to provide real-time weather information and agro-climatic forecasts through automated bulletins giving farmers through extension services, reliable information about: When to plant? When to harvest? Which variety to choose? Irrigated or rainfed use? Density of sowing?

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2015		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> 1280.0
<b>Target narrative:</b> Initially a diagnostic (baseline) will allow the next users to better identify sources of information and key players that will enable them to make better decisions.		
<b>Narrative for your achieved targets, including evidence:</b> From understanding the needs of farmers, trough of mapping of actors and investment of MADR, institutions as FENALCE and CORPOICA are actively participating in the national and local agro-climatic committees to discuss what those portfolios most appropriate measures according to their conditions, priorities and needs from climatic (past, monitoring and forecast) and agronomic information (crop models) that are available.		
The deputy minister of agriculture in an interview in TV highlighted the importance and sustainability of agroclimatic newsletters and through them as farmers are informed every month and are preparing for e.g. the impacts of the El Niño phenomenon		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> NA		

2016	
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0
<b>Target narrative:</b> Improving the data collection processes, databases and data analysis (Scripts in R) to make the process more user-friendly and to help consolidate the network at local and national level so that the information feeds into decision-making on food security, agroclimatic information at all levels. Will collect the information of risks associated with climate for crops of beans and maize, as a first approximation of insurance based on climatic indices.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> NA	

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

### 4.3 Other Contributions

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**Contribution to other CCAFS Impact Pathways**

1. Contribute to a research agenda with the others projects in Flagship 2 to identify common interests
2. Access to climate information, which is addressed by linking to extension services and local communities.
3. Increase access to food in areas where extreme events affect, by improving the planning for emergency relief through better and more timely delivered indicators
4. Demonstrating the value of integrating information on climate variability and extremes into agro-meteorological packages.
5. Establishing participatory early warning systems, improving insurance programs and implementing communities of practice to build seasonal forecast network.
6. Informing farmers through conventional communication channels.

**Collaborating with other CRPs:** <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> Mapping information networks in Colombia to support local institutions and address farmer's needs</p>
<p><b>Outcome statement:</b> This is a "Progress towards outcome": The project team in Colombia implemented participatory workshops to map out the network of actors providing prices, climate, financial and technical information to maize and bush bean farmers in Cordoba and Santander, disseminating results with FENALCE and CORPOICA. The results are being used to design subsequent activities of the project addressing farmer's information needs.</p>
<p><b>Research Outputs:</b> 1. CCAFS Working Paper "Mapeo de actores y necesidades de información agroclimática en los cultivos de maíz y frijol en sitios piloto - Colombia" detailing workshop results, including: farmers need targeted, local, reliable and timely information, enabling better decisions planting varieties, inputs, soil and crop management, before climate variability events; it is strategic to develop information transmission systems that take advantage of the trust farmers have in other farmers and technicians, such as through the use of social networks (media). The preferred means of transmitting information are telephone and radio. The use of applications on the phone is an effective way to receive and share information in real time. 2. CCAFS Info Note "Información agro-climática local, confiable y oportuna, una necesidad de los agricultores colombianos" summarizing the WP</p>
<p><b>Research Partners:</b> Corporación Colombiana de Investigación Agropecuaria (CORPOICA)</p>
<p><b>Activities that contributed to the outcome:</b> Between April and July 2015, the project team in Colombia conducted 27 semi-structured interviews with key informants at the national and departmental level and 12 focus groups with a total of 151 farmers in the departments of Córdoba (maize production) and Santander (bush beans production). Local technicians from FENALCE and CORPOICA supported the implementation of the workshops, which increases the chances of uptake of results by these institutions and the interest from farmers.</p>
<p><b>Non-research Partners:</b> Federación Nacional de Cultivadores de Cereales y Leguminosas (FENALCE)</p>
<p><b>Output Users:</b> FENALCE, CORPOICA, MADR, CIAT</p>
<p><b>How the output was used:</b> The outcome is in progress: outputs were disseminated with FENALCE and CORPOICA, moreover they were made public on CCAFS' website. CIAT team will use the results of the network mapping to guide implementation of activities with farmers in 2016.</p>
<p><b>Evidence of the outcome:</b> This is a progress towards outcome and evidence of use is not yet available. As an example of dissemination of results, a local newspaper in Santander reports preliminary findings: <a href="http://www.vanguardia.com/economia/local/332600-sequia-en-santander-genero-la-perdida-del-80-de-la-cosecha-de-frijol">http://www.vanguardia.com/economia/local/332600-sequia-en-santander-genero-la-perdida-del-80-de-la-cosecha-de-frijol</a></p>
<p><b>References:</b> Blundo Canto, G., Giraldo, D., Gartner, C., Alvarez-Toro, P., Perez, L. 2016. Mapeo de Actores y Necesidades de Información Agroclimática en los Cultivos de Maíz y Frijol en sitios piloto - Colombia. CCAFS Working Paper no. X. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Disponible en línea: <a href="http://www.ccafs.cgiar.org">www.ccafs.cgiar.org</a> Blundo Canto, G., Giraldo, D., Gartner, C., Alvarez-Toro, P., Perez, L. 2016. Información agro-climática local, confiable y oportuna, una necesidad de los agricultores colombianos. CCAFS Info note no. X. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Disponible en línea: <a href="http://www.ccafs.cgiar.org">www.ccafs.cgiar.org</a></p>
<p><b>The primary 2019 outcome indicator that this case study is contributing to:</b> FP2 Indicator: Number of regional, national, and/or sub-national initiatives incorporating research outputs to develop or improve major demand-driven, equitable, climate informed services that support rural communities</p>

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**Explanation of the link between your outcome story and the CCAFS indicators:** Given that the project has started in Spring 2015, this is a progress towards outcome and not a fully developed outcome yet.

**Year:** 2015

**Annexes uploaded:** [PR Comms Summary 2015 Agroclimas.docx](#)

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<p><b>FP2 - MOG # 4:</b> Decision support systems improved or developed for incorporation into national food security safety net programs</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 3:</b> Weather related Insurance products are designed, tested, and brought to scale with implementing partners</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP2 - MOG # 1:</b> 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</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>

## Major Output groups - 2014

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

**FP2 - MOG # 3:** 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 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>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

## Major Output groups - 2015

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

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

In 2015 we will be working towards outcomes planned for subsequent years. Activities for 2015 that include a gender aspect are the analysis of household surveys to analyze intrahousehold allocation of food and resources in order to create insights to improve food security

**Brief summary of your actual 2015 contribution towards the selected MOG:**

RHoMIS surveys detailed information about the gender control over income streams within the households and allows for gender disaggregated analysis of several of the indicators. For the sentinel site system in SESAN we designed a study to understand female participation in decision making processes in the sentinel site community committees.

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

A gender-sensitive strategy will be used in different activities to discuss the functioning of the sentinel sites with community groups. We will be able to show how insights from the analysis of household data and the functioning of sentinel sites will have influence the design and use of new indicators

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

The RHoMIS working paper presents the gender equity indicator that helps to understand the gender dimension in income control.

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

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

- Collaboration agreement signed between the Information and Communication Network of the Agricultural Sector - AGRONET, MADR and CCAFS Agroclimas to spread all results generated in the project to farmers
- Framework agreement between Honduras's Ministry of Agriculture and Livestock and CIAT to generate a roadmap and joint work in Honduras

**Brief summary of your actual 2015 contribution towards the selected MOG:**

The work in Honduras might be affected in 2016 by the uncertainty in budget cuts. Nevertheless, last year a framework agreement was signed between Honduras's Ministry of Agriculture and Livestock and CIAT and Agroclimas spreading all results generated in the project to 270,000 registered users in AGRONET.

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

Work in identifying gender roles and social differentiation throughout the entire production chain of the involved crops, to tailor the required agro-climatic information and to validate usability. Complete mapping based on interviews and focus group discussions with farmers and conducting interviews with key stakeholders.

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

The key nodes and mapping information flows in Colombia will be used as baseline in 2016 to identify gaps and tailor agro-climatic information to the requirements and demands of farmers for their usability to 4500 maize farmers and 3000 bean farmers in Colombia

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**FP2 - MOG # 3:** 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**

Will collect the information of risks associated with climate for crops of beans and maize, as a first approximation of insurance based on climatic indices.

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Characterization of Crop Environments (Bean and Maize) to support the adaptation to climate variability in Colombia, which will allow to select the better site with the best agro-environmental condition (include climate, soil and agronomic factors) in order to have the best plant performance.

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

NA

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

NA

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

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

Implementation of national and regional agro-climatic tables (MTA); are local platforms in which different actors have the opportunity to discuss what those portfolios most appropriate measures according to their conditions, priorities and needs from climatic (past, monitoring and forecast) and agronomic information (crop models) that are available.

**Brief summary of your actual 2015 contribution towards the selected MOG:**

The deputy minister of agriculture in an interview in TV highlighted the importance and sustainability of national /local technical agroclimatic committees and agroclimatic newsletters and through them as farmers are informed every month and are preparing for e.g. the impacts of the El Nino phenomenon,

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

Collect information and design mapping networks in Colombia in order to understand current information (agro-climate and food security), demand and gaps. Identifying gender roles and social differentiation throughout the entire production chain

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Continue our work in identifying gender roles and social differentiation throughout the entire production chain of the involved crops, to tailor the required agro-climatic information and to validate usability. Complete mapping based on interviews and focus group discussions with farmers (maize, bean) in Colombia.

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

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

Improve transparency and performance of climate forecasts in Colombia and the transfer of information to agricultural terms, Support for the national and regional agroclimatic technical tables (4) each month. Training Workshop: Using computational and statistical tools to support decision-making in agriculture --- Honduras

**Brief summary of your actual 2015 contribution towards the selected MOG:**

Monthly Agroclimatic Bulletins being produced with Ministry of Agriculture monthly being used by farmers organisations, trade federations and local government organisations providing extension to proactively manage climate risks generated by El Nino in 2015. The role of agroclimatic forecast, are discussed and validated at each table (national and local)

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

Create a community of practice in climate forecasts in the Andean region (COL, PE) and Central America (GT, HN)

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

The institutions know our work (through twitter, blogs, conferences, exchanges, newsletter). Brand positioning #agroclimas in twitter, e.g. the workshop on climate forecast.

### Major Output groups - 2016

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

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

indicators based on these insights in the National Information System on Food and Nutritional Security (SESAN) in Guatemala. SESAN has identified a new validated set of key indicators to monitor food security based on household food security analyses done by CCAFS scientists.

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

We will work in an iterative, collaborative way with SESAN to improve the informationsystem. This will ensure that efforts are directed at needs that arise in the construction process.

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

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

specific agro-climatic indicators, allowing characterization of the incidence of normal or climatic events on crops and provide new knowledge to support the decision making when implementing adaptation strategies and agro-climatic risk management

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

Continue and finish our work in gender roles, social differentiation, key nodes and mapping information flows This information will be used as baseline to identify gaps and tailor agro-climatic information to the requirements and demands of farmers for their usability to 4500 maize farmers and 3000 bean farmers in Colombia.

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**FP2 - MOG # 3:** 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**

processing is done of data from weather stations, satellite images and crop yields available from Honduras; calculating relevant indices linked to agricultural insurance (e.g. Total precipitation rate to ensure crop failure due to drought)

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

NA

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

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

Research challenge we are trying to address is user experience and influence on decision-making of information and information (re)design based on these insights. We have discovered that many info products are not used much.

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

NA

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

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

The Flagship 2 portfolio Organize teleconferences with a well defined agenda, short presentations from the different projects ,b). Webinars could be suggested as soon as we have interesting things to share, c) Support each month for the national and six regional agroclimatic technical tables and newsletter.

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

NA

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** Some activities and strategies might be affected by the uncertainty in budget cuts and government transitions (CCAFS and Ministries of Agriculture) in 2016

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> RClimTool: A free application analyzing climate series, reconstruct series, and satellite estimates.	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Tools
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user #1
National meteorological institutions (IDEAM-CO, INSIVUMEH-GT, SMG-HN) and agricultural extension services
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> With this tool, partners (mainly in Latin America) will increase their knowledge and skills about the use and statistical analysis of climatic information which will allow them to understand and characterize the climatic condition and the relationships with agricultural information.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Knowledge sharing through dissemination workshops about the tool capacity and its application on real case studies.

Next-user #2
Daniel Osgood - IRI
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> In this tool all the processing is done of data from weather stations, satellite images and crop yields available from Honduras; calculating relevant indices linked to agricultural insurance (e.g. Total precipitation rate to ensure crop failure due to drought)
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Hands on workshops plus online continuous support with Dan Osgood

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Arango Londoño, David <d.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa

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

Deliverable dissemination	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	<Not defined>
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #2

Main Information	
<b>Title:</b> Methods to analysis of satellite images TRMM, CHIRPS and AgMERRA	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Submitted on 2016-03-03 at 21:22 UTC

### Next-user

National meteorological institutions (IDEAM-CO, INSIVUMEH-GT, SMG-HN)

**Knowledge, attitude, skills and practice changes expected in next-user:** National met institutes develop enhance their skills for providing the information demanded for decision-making in the smallholders agriculture using the tools generated in this activity.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Hands on workshops plus online continuous support.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa

**Partner #2:** Arango Londoño, David <d.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	5

### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

### Deliverable Metadata

Submitted on 2016-03-03 at 21:22 UTC

**Description:** In this research we propose using Generalized Additive Models (GAM) and Wavelet Transformation, integrated with satellite data (TRMM, AgMerra and CHIRSP) and observed field information for estimating daily precipitation data. This approach helpful to complete missing data in the stations whose records present a significant percentage of voids and also for interpolate precipitation. The results for Cordoba region in Colombia suggest that the proposed methodologies has good performance compared to the original data from TRMM, AgMerra or CHIRPS which have biases that need to be corrected.

The objectives was: a) Perform quality control of daily rainfall data that come from weather stations available by IDEAM in the department of Cordoba, b) evaluate the quality of different satellite products TRMM, AgMerra and CHIRPS based on information from the network of meteorological stations IDEAM in Cordoba, c) describe the methodologies proposed: Wavelet Transform and GAM models for the correction of satellite products daily rain and, d) Compare the performance of each source of information and correction by the method of cross-validation.

Deliverable list:

- Research report: Test of temperature data, AgMerra - IDEAM (obs. stations) Attached
- Working paper: Evaluation of sources and methodologies for the correction of satellite precipitation products (Attached)
- Workshops: Fewsnets (CHIRPS & Tools), RCLimTool (Honduras & Colombia)
- 4 BlogPost
  - <http://dapa.ciat.cgiar.org/rclimtool-mas-alla-de-datos-climaticos/>
  - <http://dapa.ciat.cgiar.org/integracion-de-productos-satelitales-y-datos-de-estaciones-meteorologicas/>
  - <http://dapa.ciat.cgiar.org/fews-net-seguridad-alimentaria-y-agroclimatologia/>
  - <http://dapa.ciat.cgiar.org/rclimtool-asbama/>

**Creator / Authors:** David Arango-Londoño, Mariella Carbajal, Adolfo Posadas, Diana Giraldo, Roberto Quiroz 2016. Evaluación de Fuentes y Metodologías para la Corrección de Productos Satelitales de Precipitación Diaria en Zonas Tropicales.

**Author Identifier:** <Not defined>

**Publication / Creation date:** March 2016 CCAFS Working Paper no. X

**Language:** es

**Coverage:** Colombia

#### Deliverable Data sharing

[AgMERRA - IDEAM.pdf](#)

[WP CCAFS TRMM-CHIRPS.pdf](#)

### Deliverable #3

#### Main Information

**Title:** Participatory climate event simulation exercises

Submitted on 2016-03-03 at 21:22 UTC

<b>MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Case Study
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

#### Next-user

Extension agencies and grower associations
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Produce Information that is UNDERSTANDABLE and ACTIONABLE for Planning, Decision-making, and Policies. Simulation exercises that depicted their crop management strategies and expose them to different types of climate information through multiple simulations.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Use participatory methods, such as interactive games and role plays, to help farmers through of extension services to learn about the climate variability, agroclimate forecast. Capacity building through training, workshops, monitoring and evaluation of changes in practice

#### Partners contributing to this deliverable

<b>Partner #1 (Responsible):</b> Gaytan, Ada <agaytan@ca.acfspain.org>, ACF International - Action Contre la Faim
<b>Partner #2:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Submitted on 2016-03-03 at 21:22 UTC

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> Household analysis to determine improved indicators taking into account intrahousehold allocation of food	
<b>MOG # 4:</b> Decision support systems improved or developed for incorporation into national food security safety net programs	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> The paper is a draft version that will be submitted to a peer-reviewed journal.

Next-user
SESAN
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> SESAN will gain insights in how to improve the food security monitoring system and adopt a number of improvements in indicators, data collection, and data processing.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> We will work in an iterative, collaborative way with SESAN to improve the information system. This will ensure that efforts are directed at needs that arise in the construction process.

Submitted on 2016-03-03 at 21:22 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

**Partner #2:** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

## Deliverable Ranking

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

## Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

## Deliverable Metadata

**Description:** The RHoMIS (Rural Household Multiple Indicator Survey) tool consists of a farm household survey that can be conducted on a digital platform using smart phones or tablets using the Open Data Kit (ODK) suite of software installed on Android based mobile phones or tablets (Hartung et al. 2010). Data can be directly uploaded to a web-server, and an associated set of analysis tools programmed in R extract the data and calculate indicators. The framework has been set up in such a way that additional modules of questions and indicators can be incorporated and analysed depending on the local study needs. In the supplementary material the paper version of the survey is included, while the ODK source code is available on request from the corresponding author. In the near future we will make the tools available through a website. Paper is unpublished as it will be submitted to a peer-reviewed journal.

**Creator / Authors:** Hammond, James; van Etten, Jacob; Van Wijk, Mark; Teufel, Nils; Lannerstad, Mats; Valbuena, Diego; Douxchamps, S.;

**Author Identifier:** <Not defined>

**Publication / Creation date:** 16/2/2016

**Language:** English

**Coverage:** <Not defined>

## Deliverable Data sharing

[AGSY5200R1.pdf](#)

Submitted on 2016-03-03 at 21:22 UTC

**Deliverable #5**

Main Information	
<b>Title:</b> Mapping networks -Guatemala: Baseline, initial diagnosis flow of knowledge and information	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<p><b>Justification for cancelling the deliverable:</b>            Together with ACF we elaborated a baseline study looking at information flows, information needs, decision-making processes and stakeholders in the sentinel site surveillance system. The baseline study focuses on the sentinel sites in the region of the Guatemalan dry corridor. This region shows the highest incidence of acute child undernutrition in the country. At the same time it is regularly hit by agricultural droughts.            The document includes a comprehensive description of the design of the surveillance system. We evaluate the current system against this benchmark.</p> <p>We present a draft version of the report on climate information products in Central America. The inventory of climate information products is completed. The evaluation of climate-information products by key stakeholder is on-going. Government transition slowed down the interview process with key informants. The final version of the report will be available before April 2016. The preliminary results were presented in PronósticoSAN, a food security and climate information roundtable organized by SESAN.</p>

Next-user
SESAN
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> SESAN will have a clear idea of the current situation, remaining gaps and needs to prioritize efforts to adopt the sentinel site systems as part of SISAN (the national food security monitoring system)

Submitted on 2016-03-03 at 21:22 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** SESAN will be involved throughout the study, from design to interpretation  
A communication strategy will be developed to inform different levels with SESAN of the results

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** Inventory of agroclimatic information and evaluation of the usability of the products. Draft version, study will be updated before April 2016

**Creator / Authors:** Laboratorio de Modelado Ambiental CATIE

**Author Identifier:** <Not defined>

**Publication / Creation date:** Dicember 2015

**Language:** Spanish

**Coverage:** <Not defined>

#### Deliverable Data sharing

[CBouroncle\\_EGiron\\_ProductosAgroClim\\_GTM 02DIC15.pdf](#)

[LINEA DE BASE\\_SC\\_ACF.pdf](#)

[informe LMA diciembre 2015 v2.pdf](#)

Submitted on 2016-03-03 at 21:22 UTC

**Deliverable #6**

Main Information	
<b>Title:</b> Mapping networks - Guatemala: flow of knowledge and information for informing decision-making cycles	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
SESAN
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> SESAN will know how the improved food security network has influence information flows and decision-making cycles
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The policy brief will be presented in a formal event, organized jointly with SESAN A strategic communication strategy will be developed to present the results to key decision makers in the Guatemalan government

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

Submitted on 2016-03-03 at 21:22 UTC

Dissemination URL: [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**  
<Not defined>**Deliverable #7****Main Information****Title:** Design a web page with RClimTool and document all the methodological development of this tool**MOG # 1:** New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries**Main Type:** Tools and Computer Software**Sub Type:** Website**Year of expected completion:** 2017**Status:** <Not defined>**Next-user**

National meteorological institutions (IDEAM-CO, INSIVUMEH-GT, SMG-HN) and agricultural extension services

**Knowledge, attitude, skills and practice changes expected in next-user:** This activity will promote and facilitate the use of free tools for the analysis of agroclimatic data in order to provide useful results for decision-making. The national met institutions and extension services will make more use of these tools.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Publish the results and methodologies used by a website that any user can access (open source).**Partners contributing to this deliverable**

Submitted on 2016-03-03 at 21:22 UTC

**Partner #1 (Responsible):** Arango Londoño, David <d.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #8

#### Main Information

**Title:** Evaluate RClimTool through case studies with local information of the countries involved in the project.

Submitted on 2016-03-03 at 21:22 UTC

<b>MOG # 1:</b> 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	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

#### Next-user

National meteorological institutions (IDEAM-CO, INSIVUMEH-GT, SMG-HN) and agricultural extension services

**Knowledge, attitude, skills and practice changes expected in next-user:** Get feedback from the results obtained for each of the countries involved and identify the advantages obtained with the use of the tool for the analysis of climatic data. The national met institutions and agricultural extension services will have more feedback about information needs at the local scale.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Organize workshop to show the results obtained through the use of the tool

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa

**Partner #2:** Arango Londoño, David <d.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

Submitted on 2016-03-03 at 21:22 UTC

<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #9

### Main Information

<b>Title:</b> Improved AGROCLIMAS app Agronet-Colombia	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Communication Products and Multimedia	<b>Sub Type:</b> Social media outputs
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

### Next-user

MADR
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Understanding of the potential usefulness of different types of climate information (scenarios, uncertainties). Innovative “formats” of products, “translating” climate information into relevant information (Agronomy/Water/Health at different Scales (Temporal, Spatial).
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Share information products with the other projects to identify specific demands Establish continuous communication

### Partners contributing to this deliverable

<b>Partner #1 (Responsible):</b> Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Ruiz, Alejandro <alejandro.ruiz@minagricultura.gov.co>, MADR - Ministerio de Agricultura y Desarrollo Rural

Submitted on 2016-03-03 at 21:22 UTC

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

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #10

Main Information	
<b>Title:</b> Innovative “formats” of products, “translating”	
<b>MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2016	

Submitted on 2016-03-03 at 21:22 UTC

**Status:** <Not defined>**Next-user**

MADR, SESAN, FENALCE, ACF

**Knowledge, attitude, skills and practice changes expected in next-user:** Understanding of the potential usefulness of different types of climate information (scenarios, uncertainties). Innovative “formats” of products, “translating” climate information into relevant information (Agronomy/Water/Health at different Scales (Temporal, Spatial).

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Workshops with institutions services and agronomist for they understand the needs of their sectors mutually  
Collaboration with FP1 project on extension services in LAM

**Partners contributing to this deliverable**

**Partner #1 (Responsible):** Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

**Partner #3:** Gaytan, Ada <agaytan@ca.acfspain.org>, ACF International - Action Contre la Faim

**Partner #4:** Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales

**Partner #5:** Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

**Deliverable Ranking**

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

**Deliverable dissemination**

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

**Deliverable Metadata**

Submitted on 2016-03-03 at 21:22 UTC

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

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #11

#### Main Information

<b>Title:</b> Services of SMS and agroclimatic newsletters to Farmers	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Communication Products and Multimedia	<b>Sub Type:</b> Articles for media or news
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

#### Next-user

Agronet-MADR Extension agencies and grower associations
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Understanding of the potential usefulness of different types of climate information (scenarios, uncertainties). Innovative “formats” of products, “translating” climate information into relevant information (Agronomy/Water/Health at different Scales (Temporal, Spatial).
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Capacity building through training, workshops, monitoring and evaluation of changes in practice

#### Partners contributing to this deliverable

<b>Partner #1 (Responsible):</b> Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
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Submitted on 2016-03-03 at 21:22 UTC

**Partner #2:** Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales

**Partner #3:** Ruiz, Alejandro <alejandro.ruiz@minagricultura.gov.co>, MADR - Ministerio de Agricultura y Desarrollo Rural

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b>
<Not defined>

## Deliverable #12

#### Main Information

<b>Title:</b> Climate forecasts and the transfer of information to agricultural terms
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Submitted on 2016-03-03 at 21:22 UTC

<b>MOG # 1:</b> 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	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

#### Next-user

Ministries of Agriculture, grower associations and extension agencies

**Knowledge, attitude, skills and practice changes expected in next-user:** Applied and draw attention to needs and methods of integrating climate modelling systems with agricultural modelling systems. Identifying seasonal variability (temperature, precipitation, etc.) of importance to farmers and its predictability along with the risks and uncertainties associated to have an "agriculture prepared": local knowledge + scientific tools + appropriate policy.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The role of agroclimatic forecast, are discussed and validated at each table (national and local), then the newsletter with the conclusions and measures of adaptation strategies is created. In total 2015 we generated 12 national and 14 regional newsletters. And these are published on the website of each institution participating

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

#### Deliverable Ranking

<b>Address gender and social inclusion aspect</b>	1
<b>Potential for/ actual contribution to outcomes</b>	3
<b>Level of shared ownership (partnerships across org.)</b>	5
<b>What is your personal perspective of the importance of this product</b>	5

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** other

**Dissemination URL:** [<Not defined>](#)

Deliverable Metadata

Submitted on 2016-03-03 at 21:22 UTC

**Description:** The Working Paper No. XX show the inventory of the state of the art in climate information products in Colombia. It is expected that this document will become a guide to know the range of climate information available on the Internet, which is relevant in making agricultural decisions, identifying what their main users and what mechanisms are used information flow. The methodology that guides this document is based on the technical report by CATIE, 2015

From 1 to 10 September, a workshop was held in CIAT on "skill of climate prediction models", Exchanging experiences with meteorological services and the other institutions that working in agro climate forecast with the main objective of creating a technical work table (discussion, evaluation, case studies and challenges) of possible routes to improve the use of climate prediction models in Colombia, Honduras, Guatemala and Peru, through:

- Create a community of practice in climate forecasts in the Andean region (COL, PE) and Central America (GT, HN)
- Improve transparency and performance of climate forecasts in Colombia in the local technical agroclimatic committees
- Improve the use of the IRI's Climate Predictability Tool (CPT), combining different variables and areas predictors.
- Support for the national and local technical agroclimatic committees

The workshop was conducted by the International Research Institute for Climate and Society (IRI), and the International Center for Tropical Agriculture (CIAT) with participating institutions (Acronym in Spanish): Colombian Corporation for Agricultural Research (CORPOICA), Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), National Federation of Growers Cereals and Legumes (FENALCE), National Federation of Rice (FEDEARROZ), Refocosta, Center research Sugarcane in Colombia (CENICAÑA), National Weather Service Honduras (SMNH), National Institute of Seismology, Volcanology Meteorology and Hydrology in Guatemala (INSIVUMEH) and National Meteorology and Hydrology Service of Peru (SENAMHI).

From 13 to 17 July in Tegucigalpa, a training workshop was held on: Using computational and statistical tools to support decision-making in agriculture, Was a joint agenda with the Ministry of Agriculture and Livestock (SAG), on the premises of the Permanent Commission of Contingencies (COPECO) for different SAG officials, COPECO, PNUD, INFOAGRO

The workshops and the results will be reflected in this deliverable. Also, through the support in the MSc thesis submitted to National University of Ireland, Galway in characterization of regional atmospheric circulation patterns and their relationship with observed temperature and precipitation in Colombia: An AGROCLIMAS Project by Thaize Baroni.

Deliverables list:

- Working Paper: Inventory of agroclimatic information services in Colombia (Attached)  
<http://dapa.ciat.cgiar.org/estado-del-arte-de-los-productos-de-informacion-climatica-en-colombia-una-guia-para-conocer-la-oferta-de-informacion-agroclimatica-y-de-seguridad-alimentaria-en-colombia/>
- Report: Resampling Method (attached)
- Research project: MSc thesis characterization of regional atmospheric circulation patterns (Attached)
- Report: National/local technical agro-climatic committees and collaboration agreement with AGRONET (Attached)
- Workshops:
  - <http://dapa.ciat.cgiar.org/futbol-y-clima-taller-de-prediccion-climatica/>
  - <http://dapa.ciat.cgiar.org/agroclimas-llega-a-honduras-fortaleciendo-la-informacion-con-herramientas-y-metodologias/>
- Speaker in 3 workshops (US,PA, SV)
  - Climate Prediction Applications Science Workshop (CPASW):  
<http://aces.nmsu.edu/cpasw/documents/3-giraldod-cpasw2015.pdf>
  - Foro Regional de Cambio Climático y Sanidad Agropecuaria - OIRSA: Conference Proceedings (Attached-draft)

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The institutions know our work (through twitter, blogs, conferences, exchanges, newsletter). Brand positioning #agroclimas in twitter, e.g. the workshop on climate forecast, 982 people followed the news in twitter

**Creator / Authors:** Perez Marulanda, L., Blundo Canto, G., Gärtner Vargas, C., Giraldo Mendez, D. 2016. Estado del arte de los productos de información climática en Colombia. CCAFS Working Paper no. X.

**Author Identifier:** <Not defined>

**Publication / Creation date:** March 2016 CCAFS Working Paper no. X

**Language:** es

**Coverage:** Colombia

#### Deliverable Data sharing

[Resampling.pdf](#)

[MScCCAFS+research+project\\_ThaizeBaroni.pdf](#)

[Agreement AGRONET-MADR.pdf](#)

[Conference Proceedings \\_OIRSA \(rough copy\).pdf](#)

[Working Paper Inventory of agroclimatic information services in Colombia.pdf](#)

### Deliverable #13

#### Main Information

**Title:** Local case studies to evaluate the performance of agro-climatic forecasts in Guatemala and Colombia

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

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

**Sub Type:** Case Study

**Year of expected completion:** 2018

**Status:** <Not defined>

#### Next-user

SESAN, FENALCE, ACF

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**Knowledge, attitude, skills and practice changes expected in next-user:** SESAN and ACF will implement agro-climatic forecasts and validate the methodology in sentinel sites in Guatemala. FENALCE in Colombia will install experimental parcels comparing traditional management vs. enhanced management taking advantage of agro-climatic forecasts to enable comparison.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Each organization will be included in the design and planning phase of this deliverable in order to build a common understanding from the outset. Workshops with farmers and field days will be held and these local organizations to build a common understanding of information needs and constraints among farmers.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

**Partner #2:** Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

Submitted on 2016-03-03 at 21:22 UTC

**Deliverable files**

&lt;Not defined&gt;

**Deliverable #14**

Main Information	
<b>Title:</b> Support for the national and regional agroclimatic technical tables	
<b>MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
FENALCE and national meteorological institutions
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> This exercise will hopefully generate useful seasonal climate forecasts, that with validation will increase confidence among users. With increasing confidence and understanding of the data product (and associated uncertainties), there will be increasing uptake by the next users and the agricultural extension services that work directly with farmers.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Identify strategic decisions need to be made continuously and agroclimate forecast-related information might only be highly relevant for some of these decisions.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International
<b>Partner #3:</b> Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

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

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Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #15

Main Information	
<b>Title:</b> Integration forecasts with the Map Rooms to view and download the results and agroclimatic newsletters	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Communication Products and Multimedia	<b>Sub Type:</b> Articles for media or news
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	
Next-user	
FENALCE and MADR	

Submitted on 2016-03-03 at 21:22 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** The next users will disseminate the agro-climatic forecast information through their websites, publication materials and other forms of communication with farmers.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** With increasing confidence in the agro-climatic forecasts and demonstrated value to support decision-making, the next users will hopefully demand more of this information and incorporate it as a critical part of their strategies for supporting farmers.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales

**Partner #3:** Ruiz, Alejandro <alejandro.ruiz@minagricultura.gov.co>, MADR - Ministerio de Agricultura y Desarrollo Rural

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

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Deliverable Data sharing
<p><b>Deliverable files</b> &lt;Not defined&gt;</p>

## Deliverable #16

Main Information		
<p><b>Title:</b> Agroclimatic zones (include characterization) in Colombian: maize-beans producing areas.</p>		
<p><b>MOG # 1:</b> 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</p>		
<table border="1"> <tr> <td> <p><b>Main Type:</b> Reports, Reference Materials and Other Papers</p> </td> <td> <p><b>Sub Type:</b> Research report</p> </td> </tr> </table>	<p><b>Main Type:</b> Reports, Reference Materials and Other Papers</p>	<p><b>Sub Type:</b> Research report</p>
<p><b>Main Type:</b> Reports, Reference Materials and Other Papers</p>	<p><b>Sub Type:</b> Research report</p>	
<p><b>Year of expected completion:</b> 2015</p>		
<p><b>Status:</b> Complete</p>		

Next-user #1
<p>FENALCE</p>
<p><b>Knowledge, attitude, skills and practice changes expected in next-user:</b> FENALCE will improve their knowledge about the different agro climatic zones that are in the areas dedicated to maize and bean crops, wich will allow them to select the better site with the best agro-environmental condition (include climate, soil and agronomic factors) in order to have the best plant performance.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Days to exchange results were technical assistants known these products in order to validate the results according with their prior knowledge. This advertising strategy would be really important for farmer to be informed about the last news related with climate conditions, markets, new technologies among other things.</p>

Next-user #2
<p>Agriculture and rural development ministry</p>
<p><b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Government users will know the vulnerability grade that exist in maize and beans regions, when a climate variability event is occurring. This information will be relevant for them in order to assist on public policies implementation to reduce the climatic risk and be more resilient under these kind of events.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Invite members from Agriculture ministry to participate in activities where these results will be discuss, in order to know how relevant these results are for them and how they can use it for decision making.</p>

Submitted on 2016-03-03 at 21:22 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Barrios Perez, Camilo <c.barrios@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales

## Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

## Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

## Deliverable Metadata

**Description:** This report, is a methodology for the identification and characterization of agro-climatic growing areas bean, technicized and traditional maize in Colombia. The methodology is based on identifying contrasting soil and climatic environments from historical climate information and physico-chemical soil variables which have high influence on the growth of crops, and the interaction they have with the environment in which they develop. These results are part of the process of generating agro-climatic information from the past, for understanding the risk level of farmers to different scenarios of climate variability

Deliverables list:

- Research Report: Characterization of Crop Environments to support the adaptation to climate variability in Colombia

**Creator / Authors:** Barrios C., and Alvarez-Toro P. 2016. Caracterización ambiental para la apoyar la adaptación a la variabilidad climática en zonas productoras de frijol y maíz en Colombia. Documento de trabajo CCAFS no. XX.

**Author Identifier:** <Not defined>

**Publication / Creation date:** March 2016 CCAFS Working Paper no. X

**Language:** es

**Coverage:** Colombia

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Deliverable Data sharing
<a href="#">Reporte Caracterización Ambiental-1.pdf</a>

**Deliverable #17**

Main Information	
<b>Title:</b> Methodology development to monitor current agroclimatic conditions.	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Technical assistants from FENALCE.
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> People who assist maize and beans farmers will know new methodologies that can implement to monitor the current climate conditions through the use of climate information from weather stations and satellite images that allow create indexes with agronomic sence.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> To monitor in a better way the climate conditions in a real time. This work together will allow us to define variables or indexes that farmers consider relevant to plan in a short time the work that they will make in the field.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Barrios Perez, Camilo <c.barrios@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales
<b>Partner #3:</b> Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	<Not defined>
<b>Potential for/ actual contribution to outcomes</b>	<Not defined>
<b>Level of shared ownership (partnerships across org.)</b>	<Not defined>

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What is your personal perspective of the importance of this product	<Not defined>
<b>Deliverable dissemination</b>	
<b>Open access restriction:</b> <Not defined>	
<b>License adopted:</b> <Not defined>	
<b>Dissemination Channel:</b> <Not defined>	
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>	
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<b>Author Identifier:</b> <Not defined>	
<b>Publication / Creation date:</b> <Not defined>	
<b>Language:</b> <Not defined>	
<b>Coverage:</b> <Not defined>	
<b>Deliverable Data sharing</b>	
<b>Deliverable files</b> <Not defined>	

**Deliverable #18**

<b>Main Information</b>	
<b>Title:</b> New indicators and analysis on the basis of sentinel site data	
<b>MOG # 4:</b> Decision support systems improved or developed for incorporation into national food security safety net programs	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	
<b>Next-user #1</b>	
SESAN	

Submitted on 2016-03-03 at 21:22 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** SESAN is aware of the importance of insights based on household and gender analysis  
 SESAN incorporates new indicators based on these insights in the National Information System on Food and Nutritional Security (SISAN)

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Presentation of results of analysis to SESAN  
 Follow up to implement the indicators in the database and reports

#### Next-user #2

4 COMUSAN

**Knowledge, attitude, skills and practice changes expected in next-user:** 4 COMUSAN are aware of the importance of insights based on household and gender analysis (pilot)  
 COMUSAN adopt the new indicators in the data collection and reporting formats

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** We will give detailed attention to the needs and requirements of the COMUSAN in four municipalities where the sentinel sites are working reasonably well through workshops and visits.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Gaytan, Ada <agaytan@ca.acfspain.org>, ACF International - Action Contre la Faim

**Partner #2:** Van Wijk, Mark <m.vanwijk@cgiar.org>, ILRI - International Livestock Research Institute

**Partner #3:** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

**Partner #4:** Imbach, Pablo <pimbach@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

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**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #19

Main Information	
<b>Title:</b> New information products on the basis of sentinel and climate data	
<b>MOG # 1:</b> 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	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user #1
SESAN
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> SESAN will produce relevant information products for food security decision-making based on data from the sentinel sites
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> SESAN will be continuously informed about progress on the project, persons responsible for SISEAN will co-design products and be responsible for parts of the process.

Next-user #2
MAGA

Submitted on 2016-03-03 at 21:22 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** MAGA will use information products produced by SISAN for its decision-making

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** We will keep key persons from MAGA involved in the project by inviting them to meetings and keeping them informed about progress. We will engage with the GIS Lab to include information from the sentinel sites in its Agrometeorological Bulletin.

### Next-user #3

Ministry of Health and Social Assistance (MSPAS)

**Knowledge, attitude, skills and practice changes expected in next-user:** MSPAS will use information products produced by SISAN for its decision-making

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** ACF will engage MSPAS through existing contacts to feed SISAN data into its statistics, bulletins, etc.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

### Deliverable Ranking

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

### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

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

**Author Identifier:** <Not defined>

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**Language:** <Not defined>

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Coverage: &lt;Not defined&gt;

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #20

### Main Information

**Title:** Monitoring, evaluation and lesson learnt

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

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

**Sub Type:** Research report

**Year of expected completion:** 2018

**Status:** <Not defined>

### Next-user #1

SESAN

**Knowledge, attitude, skills and practice changes expected in next-user:** SESAN knows about the strengths and weaknesses of the current system  
SESAN is committed to maintaining the monitoring system and its continued improvement

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The study will be designed jointly with SESAN  
The study will be shared with SESAN and announced in a joint event with all partners

### Next-user #2

FAO, Save the Children USA, Mercy Corps, Oxfam, CRS, PMA COOPI

**Knowledge, attitude, skills and practice changes expected in next-user:** Organizations involved in setting up sentinel sites adopt the new indicators and formats and contribute to linking sentinel sites to the national system, SISOAN

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The organizations will be informed throughout the project about progress through the National Roundtable on Sentinel Site Analysis.  
We will accompany organizations in implementing the new indicators and formats.

### Partners contributing to this deliverable

Submitted on 2016-03-03 at 21:22 UTC

**Partner #1 (Responsible):** Blundo, Genowefa <g.blundo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #21

#### Main Information

**Title:** A report of mapping networks -Colombia: Baseline for information flow and impact assessment, initial diagnosis

Submitted on 2016-03-03 at 21:22 UTC

<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

#### Next-user

FENALCE and CORPOICA

**Knowledge, attitude, skills and practice changes expected in next-user:** Mapping networks is performed about: what knowledge is needed, what knowledge already exists, where the gaps, who needs the knowledge, and how it will be used. The information will allow the next users to better identify sources of information and key players that will enable them to make better decisions.

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

1. Working meetings to identify key nodes that are involved in the chains of beans and maize, stakeholder participation by link, weight of each actor in the chain, research agenda and gaps.
2. Facilitacion and Focus Groups Network
3. Surveys to different levels

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Blundo, Genowefa <g.blundo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Molina, Carlos <cmolina@fenalcecolombia.org>, FENALCE - Federación Nacional de Cultivadores de Cereales

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** cgspace

**Dissemination URL:** <https://cgspace.cgiar.org/handle/10568/71110>

### Deliverable Metadata

**Description:** This working paper presents the results of the mapping of actors and of agroclimatic information needs in pilot sites in Colombia for two annual crops, fundamental for food security: maize and bush beans. The mapping of the actors that transmit information to farmers, the confidence the latter have in the information provided, and their information needs for decision-making, allows us to understand the broad spectrum of issues and priorities to be taken into account in the production of these crops, and suggest solutions that are useful, relevant, reliable, sustainable and applicable. Under this assumption, we conducted 27 semi-structured interviews with key informants and 12 focus groups with a total of 151 farmers in the departments of Córdoba and Santander.

Results show that one of the priorities of farmers is to receive reliable local agroclimatic information that enables them to take decisions on planting, varieties, inputs, soil and crop management, that address climate variability. We find a generalized distrust of official institutions that transmit weather information, and a feeling that institutions are not interested in smallholders. Farmers resort to indebtedness to produce beans and maize, or subsidize production with cash crops, while access to agricultural insurance is limited.

The format preferred to receive weather information is text messages (phone) and information through the local radio. The creation of groups of farmers and experts who interact in person or virtually seem a useful and reliable alternative to receive and share information in real time. However, farmers are only interested in adopting farm management changes after a forecast if: a) the information is local, b) the information is given by a trusted source such as experts or other farmers, c) the information is transmitted at the right time for decision-making d) the effects of taking these decisions are measurable, verifiable and validated, for example, through pilots or results from experimental plots in two consecutive years.

#### Deliverables List:

- Working paper: Mapping networks
- Infonote: <https://cgspace.cgiar.org/handle/10568/71109>
- StoryMap:  
<http://csi.maps.arcgis.com/apps/MapJournal/index.html?appid=cf80a6f0bb014b56b8cfee3ef9fef49a>
- 5 BlogPost:  
<http://dapa.ciat.cgiar.org/farming-is-an-adventure-a-glance-at-climate-variability-in-santander-colombia/>  
<http://dapa.ciat.cgiar.org/redes-de-informacion-de-maiz-y-frijol-en-colombia/>  
<http://dapa.ciat.cgiar.org/informacion-climatica-local-un-reto-para-la-produccion-de-maiz-en-cordoba/>  
<http://dapa.ciat.cgiar.org/comprendiendo-las-dinamicas-y-necesidades-de-los-productores-de-frijol-en-santander/>  
<http://dapa.ciat.cgiar.org/los-agricultores-quieren-informacion-util-relevante-confiable-y-aplicable/>
- Press release: <http://www.vanguardia.com/economia/local/332600-sequia-en-santander-genero-la-perdida-del-80-de-la-cosecha-de-frijol>
- CSPNewsletter: [http://www.climate-services.org/wp-content/uploads/2015/08/CSPNewsletter\\_July-2015.pdf](http://www.climate-services.org/wp-content/uploads/2015/08/CSPNewsletter_July-2015.pdf)

**Creator / Authors:** Blundo Canto G, Giraldo D, Gartner C, Alvarez-Toro P, Perez L

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2016-02-19T15:27:43Z, 2016-02-19T15:27:43Z, 2016-02-18

**Language:** es

**Coverage:** Santander and Cordoba in Colombia

Submitted on 2016-03-03 at 21:22 UTC

Deliverable Data sharing	
<b>Deliverable files</b> <Not defined>	

## Deliverable #22

Main Information	
<b>Title:</b> A report of mapping networks -Colombia: Monitoring information flows and impact measurement	
<b>MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
FENALCE and MADR
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> From the baseline, tracking and monitoring will be done (2016-2018). Mapping all processes in decision cycles, as the information flows from the local to national level (vice versa) and how through agro-climatic information using innovative outreach-mechanisms adapted to the specific conditions, can make better decisions and improve their flows of information.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The policy brief will be presented in a formal event, organized jointly with FENALCE A strategic communication will be developed to present the results to key decision makers in the Colombia government

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Blundo, Genowefa <g.blundo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Gaytan, Ada <agaytan@ca.acfspain.org>, ACF International - Action Contre la Faim

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

Submitted on 2016-03-03 at 21:22 UTC

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #23

Main Information	
<b>Title:</b> Data library and maprooms implementation: Observatory display to end users.	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
Technical assistants, agriculture ministry, Colombian agricultural research centers and meteorology services.

Submitted on 2016-03-03 at 21:22 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Users will use a set of agroclimatic products (usually maps such) such as agroclimatic zonation, climate anomalies, vulnerability area, agroclimatic indexes and climatic condition in a real time in order to implement an early warning system that support farmers to make a better decisions in terms on agricultural management practices.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Dissemination workshop with potential users in which we will show the main products, applicability, access to information and how they can use it to support the decision making.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

**Partner #2:** Barrios Perez, Camilo <c.barrios@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

Submitted on 2016-03-03 at 21:22 UTC

Deliverable Data sharing	
<b>Deliverable files</b> <Not defined>	

## Deliverable #24

Main Information	
<b>Title:</b> Desing of the Observatory, water risks in the Colombian agricultural sector.	
<b>MOG # 5:</b> Evidence and knowledge products synthesizing national gaps and opportunities to guide regional and global investment in climate informed agricultural and food security decision-making	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Website
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
Technical assistants, agriculture ministry, Colombian agricultural research centers and meteorology services.
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Users will use a set of agroclimatic products (usually maps such) such as agroclimatic zonation, climate anomalies, vulnerability area, agroclimatic indexes and climatic condition in a real time in order to implement an early warning system that support farmers to make a better decisions in terms on agricultural management practices.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Dissemination workshop with potential users in which we will show the main products, applicability, access to information and how they can use it to support the decision making

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Baethgen, Walter <baethgen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society
<b>Partner #2:</b> Barrios Perez, Camilo <c.barrios@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Submitted on 2016-03-03 at 21:22 UTC

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Key next user for the 2015 period is the Guatemalan food security secretariat SESAN. SESAN is a key game changer as it coordinates the national food security strategy and is a key player in the topic of climate information system by hosting two stakeholder roundtables on climate information and being member of several initiatives aimed at improving the use of climate information for national food security policy.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Bioversity is active participant in two of the roundtables led by SESAN. Bioversity presented inputs for a strategy to prioritize new sentinel site communities and first insights on the validation of the data generated in the sentinel sites. Bioversity initiated a workshop for validating these research results. In this workshop, Bioversity led a SWOT analysis that resulted in a strategic planning framework for 2016. Bioversity research activities are an integral part of this planning framework.</p> <p>The work on sentinel site prioritization will be included in SESAN's territorial strategy 2016 that will be elaborated by the new secretary of the organization.</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> Deliverables 141 and 431</p>
<p><b>Lessons and implications for the next planning cycle:</b> We have learned that being present in regular meetings is very important. Bioversity has one colleague based in Guatemala who is responsible for this relationship-building task. We will continue to invest time in relationship-building with our SESAN counterparts.</p>

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> Bioversity International meets with secretary of SESAN to foster collaboration	
<b>Author:</b> Bioversity SESAN	<b>Subject:</b> <Not defined>
<b>Publisher:</b> SESAN	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2015-09-23
<b>End date:</b> 2015-09-23	<b>Is global:</b> No
<b>Country:</b> Guatemala	<b>Keywords:</b> Food security early warning system; sentinel sites; Guatemala
<b>Highlight description:</b> Bioversity International together with ACF and CATIE met with the SESAN secretary German González. Objective of the meeting was to foster the collaboration between Bioversity and the Guatemalan institution. The secretary welcomed the visit and informed the institution officially about our collaboration.	
<b>Introduction / Objectives:</b> Objective of the meeting was to foster the collaboration and start a fruitful communication process between the public institution SESAN and Bioversity scientists. Project objectives were introduced and discussed.	
<b>Results:</b> SESAN validated the project objectives and integrated them into their planning process.	
<b>Partners:</b> ACF, CATIE, SESAN.	
<b>Links / Sources for further information:</b> <a href="http://sesan.gob.gt/index.php/noticias/region-central/item/1674-buscan-fortalecer-los-sitios-centinela">http://sesan.gob.gt/index.php/noticias/region-central/item/1674-buscan-fortalecer-los-sitios-centinela</a>	

Submitted on 2016-03-03 at 21:22 UTC

Project highlight Information #1	
<b>Title:</b> CATIE and CIAT report on the state of the art of agroclimatic services in CentroAmerica and Colombia, applying an inventory methodology developed by CATIE	
<b>Author:</b> CATIE , CIAT	<b>Subject:</b> Inventory of agroclimatic information services in Central America and Colombia
<b>Publisher:</b> CATIE, CCAFS	<b>Year:</b> 2015
<b>Project highlights types</b> Inter-center collaboration	
<b>Start date:</b> 2015-08-01	<b>End date:</b> 2015-11-01
<b>Is global:</b> No	
<b>Country:</b> Colombia Guatemala	<b>Keywords:</b> Agroclimatic information services, Central America, Colombia, Inventory
<p><b>Highlight description:</b> In 2015 CATIE generated a report with the state of the art of agroclimatic information services in Central America, with a focus on Guatemala. The inventory is based on a documentary work of publications available on the Internet for Guatemala between 2005 and 2014, but also includes publications for Costa Rica, El Salvador, Nicaragua and Central America as a region. The list includes the current situation and forecasts of weather variables and climate; other information relevant to the agricultural sector, especially basic grains and the main cash crops in the region, and food security.</p> <p>CIAT, based on the methodology developed by CATIE and following the same report structure, has replicated the work for agroclimatic information services available on the Internet for Colombia.</p>	
<p><b>Introduction / Objectives:</b> The inventories for Central America and Colombia are meant as a guide for those who want to know the range of climate information available on the Internet for these areas, in particular that is relevant to farming decisions, identifying the main users to whom information is addressed and the mechanisms of information dissemination that are used.</p>	

Submitted on 2016-03-03 at 21:22 UTC

**Results:** Results that apply to both Central America and Colombia: most publications come from meteorological services and ministries. The contribution of NGOs, the private sector and academia is very low.

The efforts of international technical cooperation aim at optimizing the distribution of aid for famine prevention. Information sources for forecasts are rarely mentioned, and forecasts generally do not communicate the inherent uncertainty. Almost all publications have a conventional newsletter format on the website and / or downloadable PDF. The use of graphics is important, such as maps, charts, graphs, photos and remote imagery. These are presented at national level, with little detail to different regions of the country. Most information is disseminated exclusively through websites.

Central America: Weather data come from national networks of stations and organizations outside the region. Almost all publications have a conventional newsletter format on the website and / or downloadable PDF. According to the criteria established by CATIE, only three publications could be used by producers. Less than half of the publications includes recommendations or findings important for agriculture.

Colombia: The geographic scope is most commonly at the national level, but several publications are available for major cities, specific departments or provide forecasting and recommendations at regional level.

The type of users to whom the information is directed are usually technicians, but there are several publications suitable for the use of producers who have access to the internet.

Several publications provide recommendations to support decision-making in the agricultural sector, whether by crops or productive region.

**Partners:** CATIE  
CIAT  
Bioversity International

**Links / Sources for further information:** CATIE. 2015. Estado del arte de los productos de información agroclimática en América Central. Informe Técnico. Proyecto "Servicios de información agroclimáticos y para la seguridad alimentaria adaptados para una mejor toma de decisiones en América Latina - AGROCLIMAS". Laboratorio de Modelado Ambiental

Perez Marulanda, L., Blundo Canto, G., Gärtner Vargas, C., Giraldo Mendez, D. 2016. Estado del arte de los productos de información climática en Colombia. CCAFS Informe Técnico no. X. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Disponible en línea: [www.ccafs.cgiar.org](http://www.ccafs.cgiar.org)

## 6. Activities

Activity #1	
<b>Title:</b> Characterizing information flows, demand, gaps, decision-making cycles and measuring impact	
<b>Description:</b> In this activity, we characterize current flows of knowledge and information and decision-making cycles in which climate and food security information is used or potentially used in government, non-governmental organizations, rural families. This characterization will serve to understand current information demand and gaps, define priorities and information requirements (contents, channels, formats, sophistication) and segregate different types of target users.	
<b>Start date (dd-MM-yyyy):</b> 01-05-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> On-going	<b>Justification:</b> Together with ACF we undertook a baseline study of sentinel sites in the Guatemalan dry corridor. This study details all stages of the food security information system, evaluates the functioning and analyzes the information use in decision making processes at the local, department and national level. This study helps to identify obstacles and problems in the sentinel site surveillance system. Thus, we can target our research to the needs of SESANs surveillance system. We evaluated several existing information products with key decision-makers from the public and international sector in Guatemala. The results contribute to our understanding on how far decision-makers rely on agroclimatic information, we identify information needs and improve our understanding on how climate information should be presented in order to be relevant for decision-makers.

Activity #2	
<b>Title:</b> Creating improved food security information system	
<b>Description:</b> The overall aim of this activity is to help Guatemala fulfill its goal to build and maintain a national food security surveillance system. Research will involve household surveys and perform targeted new surveys to understand climate vulnerability and intra-household allocation of resources, in order to (i) make tracking of food security and climate risk affordable and reliable (ii) tailor climate information products to take into account local livelihood situations and make gender-sensitive targeting of information possible. To ensure uptake, this research will feed into the aspect of the activity that aims to make practical changes in how information is recorded and distributed in the current food security monitoring system. The activity will improve indicators, data collection, databases and data analysis to make the process more user-friendly and to help consolidate the monitoring system so that the information feeds into decision-making on food security in Guatemala.	
<b>Start date (dd-MM-yyyy):</b> 01-08-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018

Submitted on 2016-03-03 at 21:22 UTC

<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> On-going	<b>Justification:</b> We conducted a household survey in Guatemala with more than 300 households using Open Data Kit. We included gender indicators as well as indicators of climate vulnerability. The analysis showed clear gender-based differences in vulnerability which will be presented to relevant stakeholders as input in the design of the food security monitoring system. We submitted a manuscript based on these data to Agricultural Systems (major revisions). In 2016, we will start to work on a deeper analysis of the data and transfer lessons to SESAN.

### Activity #3

<b>Title:</b> Develop Interface for analyzing climate/reconstruct series, interpolation of observed data and satellite estimates	
<b>Description:</b> CIP, CIAT and IRI are building interfaces (open access, R software) for quality control, filling missing data, homogeneity analyses, etc. Also, methods for interpolation of observed data and satellite estimations. Characterize climate-related risks (drought intensity, return periods, dry spells, etc.), identify interventions (technologies, policies) that worked best in the past under unfavorable climate conditions (droughts, floods) at different scales (national, regional, farm).	
<b>Start date (dd-MM-yyyy):</b> 01-05-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa	

<p><b>Status:</b> On-going</p>	<p><b>Justification:</b> We proposed using Generalized Additive Models (GAM) and Wavelet Transformation, integrated with satellite data (TRMM, AgMerra and CHIRSP) and observed field information for estimating daily precipitation data. This approach helpful to complete missing data in the stations whose records present a significant percentage of voids and also for interpolate precipitation. The results for Cordoba region in Colombia suggest that the proposed methodologies has good performance compared to the original data from TRMM, AgMerra or CHIRPS which have biases that need to be corrected.</p> <p>Activities:</p> <ul style="list-style-type: none"> <li>• Test of temperature data, AgMerra - IDEAM (obs. stations)</li> <li>• Evaluation of sources and methodologies for the correction of satellite precipitation products</li> <li>• Conduct a Workshops: Fewsnets (CHIRPS &amp; Tools), RCLimTool (Honduras &amp; Colombia)</li> <li>• Write 4 BlogPost</li> </ul> <p>The activity: analyzing climate/reconstruct series, interpolation of observed data and satellite, might be affected for non-participation of CIP, given the budget cuts in 2016.</p>
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**Activity #4**

<p><b>Title:</b> Implementation of a regional observatory for improved climate risk management in the Colombian agricultural sector.</p>	
<p><b>Description:</b> Development of a website that will contain a set of agroclimatic information (usually maps). Combine climate information (e.g., temperatures, rainfall, Standardized Precipitation Index, WASP, assess existing/develop new drought indices), remotely sensed vegetation indices (NDVI, EVI, FAPAR), and soil water balances (based on climate information, land use and soil characteristics). The combination of this information will result in Early Warning and Early Response Systems.</p>	
<p><b>Start date (dd-MM-yyyy):</b> 01-08-2015</p>	<p><b>End date (dd-MM-yyyy):</b> 31-12-2018</p>
<p><b>Leader:</b> Baethgen, Walter &lt;baethgen@iri.columbia.edu&gt;, IRI - International Research Institute for Climate and Society</p>	
<p><b>Status:</b> On-going</p>	<p><b>Justification:</b></p> <ul style="list-style-type: none"> <li>• Characterization of Crop Environments to support the adaptation to climate variability in Colombia</li> <li>• Generation Maps, climate &amp; soil data and scripts in R</li> <li>• Write a BlogPost</li> </ul>

Submitted on 2016-03-03 at 21:22 UTC

<b>Title:</b> Develop a methodology for integrating climate forecasts with the crop models and the local knowledge.	
<b>Description:</b> Integrated, interdisciplinary crop performance forecasting systems, linked with appropriate decision and discussion support tools, could substantially improve operational decision making in agricultural management. Provide relevant information of the “future” through: Improve seasonal climate forecasts (next 3 months), increase spatial resolution (forecasts at station level, high-resolution grids), study predictability of agronomically relevant variables such as weather-within-climate (e.g., dry spells), SPI, drought indices, etc., “Translate” seasonal climate forecasts into agronomic outlooks (e.g., soil water content, crop yields) and explore predictability of shorter periods (10 days – months).	
<b>Start date (dd-MM-yyyy):</b> 01-04-2015	<b>End date (dd-MM-yyyy):</b> 01-11-2018
<b>Leader:</b> Giraldo, Diana <d.giraldo@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<p><b>Justification:</b> A workshop was held in CIAT on "skill of climate prediction models", Exchanging experiences with meteorological services and the other institutions that working in agro climate forecast with the main objective of creating a technical work table (discussion, evaluation, case studies and challenges) of possible routes to improve the use of climate prediction models in Colombia, Honduras, Guatemala and Peru and in Tegucigalpa, a training workshop was held on: Using computational and statistical tools to support decision-making in agriculture, Was a joint agenda with the Ministry of Agriculture and Livestock (SAG).</p> <p>The workshops and the results will be reflected in this deliverable. Also, through the support in the MSc thesis submitted to National University of Ireland, Galway in characterization of regional atmospheric circulation patterns and their relationship with observed temperature and precipitation in Colombia: An AGROCLIMAS Project by Thaize Baroni.</p> <p>The institutions know our work in agroclimatic forecast (through twitter, blogs, conferences, exchanges, newsletter). Brand positioning #agroclimas in twitter, e.g. the workshop on climate forecast, 982 people followed the news in twitter</p>

### Activity #6

<b>Title:</b> Dissemination mechanisms for farmers: innovative “formats” of products.	
<b>Description:</b> Participatory climate event simulation exercises will help to evaluate and refine the products and delivery mechanisms, engaging all stakeholders in a very practical way. Farmer’s information network will provide the feedback needed to improved climate information packaging and confidence in forecasting skills. Also, our project includes exchanges among farming families of the region.	
<b>Start date (dd-MM-yyyy):</b> 03-08-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018

Submitted on 2016-03-03 at 21:22 UTC

<p><b>Leader:</b> Giraldo, Diana &lt;d.giraldo@cgiar.org&gt;, CIAT - Centro Internacional de Agricultura Tropical</p> <p><b>Status:</b> On-going</p>	<p><b>Justification:</b> Agroclimas spreading all results generated in the project to 270,000 registered users, including institutions and farmers alike, through a collaboration agreement signed between the Information and Communication Network of the Agricultural Sector - AGRONET Colombia's Ministry of Agriculture and CCAFS.</p> <p>Support of national and regional agro-climatic tables (MTA), local platforms in which different actors have the opportunity to discuss what those portfolios most appropriate measures according to their conditions, priorities and needs from climatic (past, monitoring and forecast) and agronomic information (crop models) that are available.</p>
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**Lessons regarding your project activities and possible implications for the coming planning cycle:** In 2015 we have achieved that CIAT/CCAFS is positioned in the media (TV, news, interviews) , through work design and implementation of seasonal forecasts pilots and consistent adaptive actions involving climate and crop models incorporating local knowledge into the analysis of agro-climatic models through the national and regional agroclimatic technical committees and newsletter each month.

Some activities and strategies might be affected by the uncertainty in budget cuts and government transitions (CCAFS and Ministries of Agriculture) in 2016

Submitted on 2016-03-03 at 21:22 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-04 at 12:21 UTC

# BILATERAL W3\_ONLY

**Title:** (CIAT LAM) Relevant Climate Change Information meets Decision-Making to influence Policy and Institutions for Climate Resilient Food Systems

<b>Start date (dd-MM-yyyy)</b>	01-03-2014	<b>End date (dd-MM-yyyy)</b>	31-12-2017
<b>Management liaison</b>	F4 - Flagship 4	<b>Mgmt. liaison contact</b>	Thornton, Philip <p.thornton@cgiar.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Laderach, Peter <p.laderach@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

## Project is working on

Flaship(s)	Region(s)
FP3: Low Emissions Agricultural Development	RP LAM: Latin America
FP4: Policies and Institutions for Climate-Resilient Food Systems	

Bilateral project(s) contributing to this project
148 - Convenio MADR - Project with the Colombian Ministry of Agriculture on Climate Change and Agriculture
149 - Remote Sensing as a Monitoring Tool for Smallholder's Cropping Area Determination
154 - Sustainable development options to enhance climate change mitigation and adaptation capacities in Colombian and the Peruvian Amazon.
225 - CORMACARENA
226 - CVC
227 - Pragmatic economic valuation of adaptation risk and responses across scales

## Summary

Latin America is at a critical point in time where many governments and well-organized sectors are developing their mitigation and adaptation strategies. CCAFS supports these processes through the excellent partnerships and ongoing climate change research across Latin America, specifically in Costa Rica, Colombia and Peru. The project works closely together with ministries and research centers to make sure that the latest climate science is

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being used for NAMAs and NAPs. This project has important opportunity to share and exchange knowledge and learning across LAM as it works in several countries on similar

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topics, whereas most of the stakeholders usually only interact within their own country. The platforms of interactions are through the NAMA and NAP development.

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## 2. Partners

### Partner #1

**Institution:** CIP - Centro Internacional de la Papa

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Quiroz, Roberto <r.quiroz@cgiar.org>	CIP leads the NAMA development activity in Peru: Promoting the development of a High Andes-oriented agricultural NAMA in Peru. CIP will also contribute overall to the NAMA discussion across the LAM region and help facilitate relations and interaction with the Peruvian government in respect to the COP in Peru. Activity 2014-30 *Leader*. Activity 2014-393 *Leader*.
Project Coordinator	Turin, Cecilia <c.turin@cgiar.org>	Activity 2014-29 *Partner*.

### Partner #2

**Institution:** BI - Bioversity International

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	van Etten, Jacob <j.vanetten@cgiar.org>	BI discontinues its activities in 2016.

### Partner #3 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Laderach, Peter <p.laderach@cgiar.org>	Activity 2014-6 *Leader*. Activity 2014-392 *Leader*. Activity 2014-402 *Leader*. Activity 2014-403 *Leader*.

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Partner	Laderach, Peter <p.laderach@cgiar.org>	Project coordinator
Partner	Twyman, Jennifer <j.twyman@cgiar.org>	Activity 2014-29 *Leader*.
Partner	Tapasco, Jeimar <j.tapasco@cgiar.org>	Activity 2014-31 *Leader*. Activity 2014-32 *Leader*.

## Partner #4

**Institution:** MAG - Ministerio de Agricultura

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Gonzalez, Guillermo <ggonzalez-pdr@mag.go.cr>	Activity 2014-6 *Partner*.

## Partner #5

**Institution:** ICAFE - Instituto de Café de Costa Rica

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Zamora, Luis <lzamora@mag.go.cr>	Activity 2014-6 *Partner*.

## Partner #6

**Institution:** CAC - Consejo Agropecuario Centroamericano

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

### Contacts

Type	Contact	Responsibilities and contributions
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Partner	Jimenez, Manuel <manuel.jimenez@iita.int>	BI discontinues its activities in 2016 and therefore CAC is being faced out also.
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**Partner #7****Institution:** CATIE - Centro Agronómico Tropical de Investigación y Enseñanza**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Imbach, Pablo <pimbach@catie.ac.cr>	BI discontinues its activities in 2016 and therefore CATIE is being faced out also.
Partner	Ramirez, Felicia <framirez@catie.ac.cr>	BI discontinues its activities in 2016 and therefore CATIE is being faced out also.

**Partner #8****Institution:** Ministerio del Ambiente**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Morales, Rosa <rmorales@minam.gob.pe>	Activity 2014-28 *Partner*.
Partner	Quijandria, Gabriel <gquijandria@minam.gob.pe>	Activity 2014-30 *Partner*.

**Partner #9****Institution:** UF - University of Florida**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
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Partner	Diana Deere, Carmen <deere@latam.ufl.edu>	Activity 2014-29 *Partner*.
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## Partner #10

**Institution:** Ministerio de Agricultura y Riego

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Sotomayor, Cesar <csotomayor@minagri.gob>	Activity 2014-30 *Partner*.

## Partner #11

**Institution:** INIA - Instituto nacional de innovacion agraria

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Gonzales, Sonia <sgonzales@minam.gob.pe>	Activity 2014-30 *Partner*.
Partner	Quijandria, Benjamin <bquijandria@inia.gob.pe>	Activity 2014-30 *Partner*.

## Partner #12

**Institution:** DNP - Departamento Nacional de Planeación

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Calderon, Silvia <scalderon@dnp.gov.co>	Activity 2014-31 *Partner*. Activity 2014-32 *Partner*.

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**Partner #13****Institution:** MADR - Ministerio de Agricultura y Desarrollo Rural**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Hernandez, Nestor <nestor.hernandez@minagricultura.gov.co>	Activity 2014-31 *Partner*. Activity 2014-32 *Partner*.

**Partner #14****Institution:** ONF-Andina - Office National des Forets-Andina**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Castro, Augusto <acastro@onfandina.com>	ONF Andina has been faced out due to budget cuts in March 2015.

**Partnerships overall performance over the last reporting period:** Ministry of Agriculture in Costa Rica has performed well on the Livestock NAMA but not on the Coffee NAMA. The person in charge supported by the project was too busy with other tasks to fulfill the ToR.

The work in Colombia under Flagship 4 has become increasingly challenging, because of the lack of interest by national institutions.

CATIE, BI and CIP have been implementing their activities according to the plan. The University of Florida has also provided inputs and advised on the activity's strategy. The GGCA has been helpful in facilitating stakeholder engagement and dissemination of knowledge products.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** Strong and constant communications with partners, especially other CG and

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research centers, will be important in order to develop the most relevant and up-to-date knowledge products.

For the Colombia activities we propose to shift the focus and budget of the Colombia Flagship 4 team to Honduras.

In 2016 an additional person placed within MAG for the coffee NAMA will be hired.

Massive cuts in the stream of financial resources are seen by the partners as lack of commitment and institutional strength.

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### 3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	Latin America
Country	Not applicable	Not applicable	Colombia
Country	Not applicable	Not applicable	Costa Rica
Country	Not applicable	Not applicable	Peru
Province	-11.7202	-11.7202	Junin
River Basin	-13.0328	-13.0328	Upper Mantaro
Province	14.5696	14.5696	Chiquimula (Trifinio)

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

Improved decisions towards more resilient food systems including gender issues are taken due to the project contribution to at least 3 NAMAs, 1 NAP and 1 sub-sector NAP.

**Annual progress towards outcome (end of 2015):** Study on opportunities to include 'climate smart agriculture' in UNFCCC's negotiations agenda is prepared and shared with LAM negotiators and Presidencies of COP 20 and 21 (2014-28). Gender and climate change country profiles for Colombia, Peru, Honduras, Nicaragua, Costa Rica, El Salvador, and Guatemala completed and distributed to respective Ministries of Agriculture to inform more gender-equitable policy-making (2014-29). Information on the impact of land use changes on soil carbon stocks and how changes affect women agency capacities documented and discussed within the technical working group on climate change of MINAGRI. INIA incorporates the methods and tools developed by the Project as part of the new Climate Change program (2014-30). Barrier analysis to identify limitations for implementing NAMA conducted that increases knowledge in the respective institutions and policy makers to develop improved NAMA implementation plans (2014-31). Information and recommendation for potential adaptation measures based on climate science are shared and discussed with two regional governments and farmer organizations (2014-32). Government officials and private sector representatives are using methodologies and data acquired through trainings and interactions by CCAFS, which are relevant to NAMA design and implementation plans. Methodologies include MAC curves (Coffee NAMA), climate suitability modeling (Coffee NAMA) and improved pasture management (Livestock NAMA). The Costa Rican government has approved the Livestock and Coffee NAMA (2014-6). Planning processes and related information needs in the Ministry of Agriculture of Guatemala (MAGA) characterized (2014-26). Information services and gaps in government planning and decision-making in Central America characterized (2014-27).

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**Annual progress towards project outcome in the current reporting cycle (2015):** This year the project delivered a total of 5 outcomes; 3 on NAMAs, 1 on adaptation planning and 1 on informing climate financing (latter is externally validated).

CIAT/CCAFS climate science supported in Costa Rica (1) the coffee NAMA proposal application to NAMA facilities, which resulted in successful financing and (2) contributed to the national livestock low emission strategy ratified by the Costa Rican government; in (3) Colombia the submission of a Livestock NAMA to UNFCCC; in (4) Nicaragua the World Bank Agricultural Sector assessment drawing on the CSA country profile; and (5) globally multilateral climate finance organization (IFAD), specifically contributions to 4 ASAP/IFAP projects in Nicaragua, Liberia, Uganda, Comoros.

Beyond the outcomes there are significant advances towards outcomes.

In Colombia participatory workshop to share regional climate impact study resulted in prioritizing for systems, problem areas and relevant actions for the NAP.

MAGA (GTE) has adopted the simulation approach developed for emergency data collection in a second cycle in which MAGA coordinated the exercises and where Bioversity/CATIE acted only as observers to document the process. There is now sufficient capacity among local institutions in Guatemala to continue this process.

MINAM recognizes CIP-CCAFS contribution to inform GHG emissions in Andean agroecosystems. MINAM becomes a platform for the dissemination of the generated information and to inform other key policy makers.

Peru and Colombia gender and climate change policy briefs and brief on Guidelines for integrating gender were disseminated via CIAT/CCAFS networks, including participants from 2014 Lima workshop; they were also disseminated at the 2015 Global Landscapes Forum and at the International Seminar on Rural Development in Bogota, Colombia.

**Communication and engagement activities have contributed to achieving your Project outcomes:** The strategy of joint appointments in the ministry has worked out well. It is important to have dedicated people reporting to both the Ministry and the CG center. In Peru the close coordination and personal interactions with the Directorate of Research and Knowledge Management and the continues follow up have been key for CIP to achieve its outcomes.

Bulletin and listserv (developed from 2014 Lima workshop) for decisionmakers working on gender integration in climate change policy helped to disseminate knowledge products, news, and tools. The work was also presented at the EUROCLIMA-IICA workshop on Gender, Agriculture and Climate Change.

**Evidence documents of progress towards outcomes:** [Gender Evidence.docx](#)

**Annual progress towards outcome (end of 2016):** Policy makers at subnational government level are knowledgeable about the scientific evidence on land use change and soil carbon stocks in the Andean highlands, their relation with GHG emissions, formulation of mitigation actions at local level and about the implications of land use change on gender and its relevance for development policies.(2014-30).

MADR take more informed decisions based on relevant climate information regarding livestock NAMA development on relevant climate information (2014-31).

Information and recommendation for potential adaptation measures based on climate science

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are shared and discussed with one regional government and farmer organizations (2014-32).

1-2 Ministries of Agriculture are taking gender policy briefs and/or publication into consideration in their climate change-related policymaking, particularly for NAPs and NAMAs (2014-29).

NAMA coffee and livestock consortium and CCAFS have jointly developed NAMA implementation plans, developed funding proposals that have been submitted to donors for which initial or total funding has been secured for the NAMA implementation (2014-6).

**Annual progress towards outcome (end of 2017):** Policy makers at subnational government level and key local stakeholders are knowledgeable about the CSA practices for the high Andes to avoid the increase of GHG emissions and the restoration of ecosystem services. Likewise they are aware of the importance to include gender approach in their adaptation and mitigation plans. CIP/UF/INIA convene a workshop on scenario analyses with MINAGRI and MINAM to use the soil carbon dynamics model with collected data to assess the impact of CC on Land use changes and soil carbon economy/fluxes as well as to assess the impact of policies on incentive mechanisms to reduce carbon emission as an instrument to shape policy decisions (2014-30).

CIAT/CCAFS supports the Ministry of Agriculture and LEDS Colombia with evidence based and relevant climate information to take more informed decisions and guide the livestock NAMA development (2014-31).

Information and recommendation for potential adaptation measures based on climate science are shared and discussed with one regional government and farmer organizations (2014-32).

1-2 Ministries of Agriculture are using CIAT/CCAFS Policy Brief on gender and climate change policy recommendations in their climate change-related policy-making, and they engage on a regular basis with CIAT/CCAFS for consultative support to integrate gender into policies. 1 Ministry references the Policy Brief recommendations, gender policy briefs and/or publication in their adaptation plan or NAMA development (2014-29).

NAMA coffee and livestock consortium and CCAFS have jointly developed NAMA implementation plans, developed funding proposals and funding has been secured for the NAMA implementation (2014-6).

**Annual progress towards outcome (end of 2018):** The subnational government has incorporated the scientific evidence on land use change and soil carbon stocks on their mitigation and adaptation plans for the Andean highlands agriculture and are considering validating CIP proposal for mitigation actions, CSA alternatives and gender. INIA soil scientists adopt the conceptual framework of CIP to study soil carbon stocks (2014-30).

CCAFS/CIAT helps in the final development of the livestock NAMA and in the submission of funding proposals to implement a NAMA (2014-31).

By the inclusion of regional recommendations it is assured that the Colombia NAP supports and is relevant for Colombia as a country including its regional perspectives (2014-32).

Partners and key civil society organizations are using CCAFS methodology on influencing gender-inclusive climate change policy-making in their engagement with agricultural sector policymakers (2014-29).

The NAMA consortium (private, public, donors and CCAFS) evaluates carbon sequestration potential and cost of practices being implemented in NAMAs using field data. Sugar cane NAMA is being approved and implemented with the support of CCAFS (2014-6)

**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 FP4 project is part of the RBM Trial and implements a monitoring system to learn along project implementation. Some activities were phased out and other are depending for their results on political stability and interest (MAG in GTE and MARD COL) and government changes. Other challenges include: gender approach can be supported by individuals in the ministries, but that does not necessarily reflect institutional support and therefore influence might be lower; prioritized actions for adaptation might not follow research results but be selected politically. A lessons learned document for IFAD provides main results from out M&E.

## 4.2 Contribution to CCAFS Outcomes

**RP LAM - Outcome 2019:** National governments formulate and implement NAMAS and LEDS based on improved data on smallholder agricultural GHG emissions and implement equitable policies to strengthen linkages among environment and agriculture in order to avoid deforestation from commodity agriculture, promote restoration to increase carbon sequestration and reduce GHG emissions from livestock and commodities. Research organizations generate improved data on smallholder agricultural GHG emissions. Local governments contribute to the development of NAMAS and LEDS action plans at local level.

**Indicator #1:** FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

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2019	
<p><b>Target value:</b> 3 NAMAs approved and for 2 NAMAs benefits and costs being assessed using field data (2014-6). 2-3 policies including gender (2014-28). One Andean Agriculture NAMA which incorporated the effect of land use changes on gender equity approved (2014-30). Fruit and Livestock NAMA approved (2014-31).</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p>
<p><b>Target narrative:</b> Coffee and livestock NAMA are fully designed, fully or partially funded and being implemented. Sugar cane NAMA is designed, approved and funding being secured (2014-6). CCAFS contributes to 2-3 gender inclusive national level policies (NAMA/NAP/other climate risk prevention/response protocols) (2014-28). Andean Agriculture NAMA will be formulated and discussed with and validated by stakeholders at national and subnational level (2014-30). Fruit and Livestock NAMA approved and partially or fully being funded and starting to be implemented (2014-31).</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

2015	
<p><b>Target value:</b> 2 NAMAs approved (2014-6). 1 workshop with the presidency of COP 20 and 1 policy brief (2014-28). 4 ministries of agriculture participate in regional workshop (2014-29). One working paper on land use changes and carbon stocks in collaboration with INIA. One blog on the effect on women agency capacities published. Two training workshops on methods and tools on carbon measurements developed with INIA (2014-30). Two national authorities use CIAT assessment to determine NAMA feasibility in the prioritized regions (2014-31).</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p> <p><b>Target achieved:</b> 3.0</p>

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## 2015

**Target narrative:** Strong commitment (demonstrated by respective actions) of Costa Rican government to implement, fund and secure funding for the implementation of a coffee and livestock NAMA as part of the LEDS strategy (2014-6). Peruvian delegates participate in a workshop to discuss findings from the study on countries' positions in global climate negotiations and a publication based on outputs from discussions is prepared (additionally, a scientific publication is considered). 1 study on opportunities to include "climate smart agriculture" in UNFCCC's negotiation agenda is prepared and brief publications based on study's findings prepared (2014-28). Representatives from 4 ministries of agriculture participate in regional workshop on tools for integrating gender into climate change policy (2014-29). National partners participate in the elaboration of documents and benefit from training workshops (2014-30). Regional analyses of barriers inform relevant stakeholders and policy makers about NAMA readiness and feasibility (2014-31).

**Narrative for your achieved targets, including evidence:** This year the project delivered 3 outcomes on NAMA's, specifically climate science contributions to the already approved NAMA facility proposal to fund the CR Coffee NAMA, to the national livestock low emission strategy ratified by the CR government and to the submission of a Livestock NAMA to UNFCCC. See details in outcome section.

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

**Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:** In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. These were actors participating in CCAFS stakeholder engagement processes (included participants from 2014 Lima workshop). Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes. MAG-Costa Rica, MAGA-Guatemala, MINAGRI-Perú, SERFOR-Perú, and MADS-Colombia contributed inputs to the policy brief on Guidelines for integrating gender. Additionally, although these were not participants from the Lima workshops, SAG Honduras, IDEAM Colombia and MINAM Peru contributed information for the meta-analysis of policies related to CC and agriculture that we carried out over 2015.

## 2016

**Target value:** 3

**Cumulative target to date:** Cannot be Calculated

**Target narrative:** CIP and government at subnational level working closely and reviewing the climate change adaptation and mitigations plans for the Andean highlands agriculture. National partners participate in the elaboration of evidence based documents and benefit from scientific seminar. (2014-30)

Continued stakeholder engagement and climate science support allow policy makers to take decision based on information and recommendation from CIAT and increase the ownership of the livestock NAMA. Registration of the livestock NAMA to the United Nations Framework Convention on Climate Change. (2014-31).

Costa Rican coffee NAMA implementation plan supported by climate evidence and Livestock NAMA

**The expected annual gender and social inclusion contribution to this CCAFS Outcome:** National partners knowledgeable about CIP gender evidence are making more informed decisions. (2014-30). CCAFS contributes input on gender incorporation for one policy (NAMA/NAP/other climate risk prevention/response protocols) draft (2014-29).

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2014		
<b>Target value:</b> 3	<b>Cumulative target to date:</b> 3	<b>Target achieved:</b> <Not defined>
<p><b>Target narrative:</b> 1) The institutions responsible of NAMA planning in Colombia has already requested CIATs support for the development of an comprehensive NAMA base for the transformation of inefficient land uses into agroforestry and improved pastures.</p> <p>2) By providing relevant information, we have contributed with the Peruvian government to facilitate dialogue between parties and indirectly we have contributed with agreements achieved in Lima.</p> <p>3) NAMA early outcomes have been achieved in Costa Rica: Two NAMA facility proposals have been submitted for Costa Rica. The coffee NAMA has been approved and will be executed starting 2015. The livestock NAMA proposal was not approved.</p>		
<b>Narrative for your achieved targets, including evidence:</b> <Not defined>		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> not reported		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> <Not defined>		

**RP LAM - Outcome 2019:** National governments design and enact equitable food systems policies and strategies taking adaptation into consideration to support national and regional policy and global climate change negotiations. Private institutions develop and support implementation of NAPs and equivalent policies with their respective investment plans addressing climate challenges to increase food security and resilience to changes in climate.

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

2019	
<p><b>Target value:</b> 2-3 policies include gender aspects (2014-28). 1 NAP including subnational consideration elaborated and approved (2014-32). 3 climate information systems for policy and decision-making adopted in Central America (2014-26 and 2014-27).</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p>
<p><b>Target narrative:</b> CCAFS contributes to 2-3 gender inclusive national level policies (NAMA/NAP/other climate risk prevention/response protocols) (2014-28). Regional perspectives discussed and agreed in four regions are used as bases for the development of the final version of the Colombia NAP. The processes increased the capacity of national authorities to create NAP with regional perspective (2014-32). In early 2017, Guatemala will fully adopt an information system to support policy decision-making (2014-26). Two other Central American countries will adopt a similar system in late 2017 (2014-27).</p>	

2019	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

2015	
<p><b>Target value:</b> 4 ministries of agriculture participate in regional gender workshop (2014-28). Two Colombian regions validate the policy recommendations made by CIAT (2014-32). Guatemala and CAC will have a validated inventory of gaps and opportunities to support policy-decision making with integrated climate information.</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p> <p><b>Target achieved:</b> 2.0</p>
<p><b>Target narrative:</b> Representatives from 4 ministries of agriculture participate in regional workshop on tools for integrating gender into climate change policy (2014-28). Strong regional stakeholder engagement allows sub-national authorities to increase their skills and knowledge about impacts of climate change and adaptation options 2014-32. In 2015, we will work towards an outcome by making an inventory of information needs and use at national level in Guatemala (2014-26) and Central American subregional level (2014-27) and have them validated by relevant decision makers.</p>	
<p><b>Narrative for your achieved targets, including evidence:</b> One outcome on supporting multilateral climate finance organization, where CIAT contributed climate science to 4 ASAP/IFAP projects in Nicaragua, Liberia, Uganda, Comoros. A validation study of this outcome carried out by an external consultant has shown that CIAT science has been fundamental to prioritize investment in specific areas of the countries and in adaptation practices to be carried out in these areas. Outcome on World Bank Sectorial Strategy building on CSA country profile. Participatory workshop to share regional climate impact study resulted in prioritizing for systems, problem areas and relevant actions for the Colombian NAP.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. These were actors participating in CCAFS stakeholder engagement processes (included participants from 2014 Lima workshop). Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes. MAG-Costa Rica, MAGA-Guatemala, MINAGRI-Perú, SERFOR-Perú, and MADS-Colombia contributed inputs to the policy brief on Guidelines for integrating gender. Additionally, although these were not participants from the Lima workshops, SAG Honduras, IDEAM Colombia and MINAM Peru contributed information for the meta-analysis of policies related to CC and agriculture that we carried out over 2015.</p>	

2016	
<p><b>Target value:</b> 1</p>	<p><b>Cumulative target to date:</b> Cannot be Calculated</p>

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2016		
<b>Target narrative:</b> Strong regional stake-holder engagement allows sub-national authorities to increase their skills and knowledge about impacts of climate change and adaptation options (2014-32).		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> CCAFS contributes input on gender incorporation for one policy (NAMA/NAP/other climate risk prevention/response protocols) draft (2014-29).		

2014		
<b>Target value:</b> 2	<b>Cumulative target to date:</b> 2	<b>Target achieved:</b> <Not defined>
<b>Target narrative:</b> One official NAP outcome (CIAT) and one climate disaster preparedness outcome (BI) are being reported (see Outcome description): COLOMBIA: The sub-sector adaptation strategy is already been discussed between the Ministry of Agriculture and the National Department of Planning. The document includes the necessity of a regional prioritization, that is what the Ministry of Agriculture asked CIAT. Costa Rica: A study contracted under this project on the state of the art of Costa Rica under progressive climate has informed the Costa Rican position for the COP negotiation. The evidence is only oral communications and not very solid.		
<b>Narrative for your achieved targets, including evidence:</b> <Not defined>		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> The IUCN is involved in similar work, as far as supporting national governments to develop gender sensitive climate change action plans; we will watch for opportunities to collaborate with the IUCN on actions concerning agriculture and food security, where possible. COLOMBIA: The work with the National Department of Planning need to be constant and strong this year, present a co-authored (with the technicians of the Ministry) proposal of the methodology will make stronger the process.		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> <Not defined>		

**Indicator #2:** FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs

2019		
<b>Target value:</b> Finalizes in 2015	<b>Cumulative target to date:</b> Cannot be Calculated	
<b>Target narrative:</b> Finalizes in 2015		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		

2015		
<b>Target value:</b> 1 workshop with the presidency of COP 20 and 1 policy brief (2014-28).	<b>Cumulative target to date:</b> Cannot be Calculated	<b>Target achieved:</b> 0.0

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2015	
<b>Target narrative:</b> Peruvian delegates participate in a workshop to discuss findings from the study on countries' positions in global climate negotiations and a publication based on outputs from discussions is prepared (additionally, a scientific publication is considered). 1 study on opportunities to include "climate smart agriculture" in UNFCCC's negotiation agenda is prepared and brief publications based on study's findings prepared (2014-28).	
<b>Narrative for your achieved targets, including evidence:</b> ONF Andina has been phased out end of 2014 because of budget cut.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>	
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> ONF Andina has been phased out end of 2014 because of budget cut.	

2016	
<b>Target value:</b> 0	<b>Cumulative target to date:</b> Cannot be Calculated
<b>Target narrative:</b> The project does not address this outcome anymore, due to Bioversity International discontinuing activities under this FP project.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> The project does not address this outcome anymore, due to Bioversity International discontinuing activities under this FP project.	

2014		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> <Not defined>
<b>Target narrative:</b> The bulletin furthermore presents the experiences of 2 countries/past participants, per month, in gender integration; in this way, it aims to collect and share best practices in gender integration in climate change related policies to decision-makers in Latin America CAC: Through our person in CAC are we feeding constantly information to the CAC. As a first sign that this opens a channel of communication towards policy makers: during the drought crisis of 2014, the drought simulation under Activity 27 was discussed in a ministerial meeting as one of the few responses at that moment.		
<b>Narrative for your achieved targets, including evidence:</b> <Not defined>		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> GENDER: As a result of the workshop, we have developed a monthly bulletin for participants on helpful concepts, tools, and methods for gender integration in public policies and programs related to climate change.		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> <Not defined>		

### 4.3 Other Contributions

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**Contribution to other CCAFS Impact Pathways:** <Not defined>

### **Collaborating with other CRPs**

<b>Forests, Trees and Agroforestry</b>
<b>Description of collaboration:</b> The work on coffee is in close collaboration with FTA. It is a informal collaboration between scientist manly Philippe Vaast at ICRAF/FTA who overseas the coffee and cocoa work. Also, coordination with CIFO and GGCA for Global Landscapes Forum Gender Pavillion, wherein policy briefs were disseminated.
<b>The achieved outcome contributions:</b> <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> CIAT/CCAFS science contributes to programming and implementation of about 100mnUSD IFAD financing for farmers' resilience.</p>
<p><b>Outcome statement:</b> IFAD increasingly adopts CIAT/CCAFS science in project design and implementation.  Comoros:CIAT conducts climate/environmental assessments that directly inform the design of the project (4mnUSD), prioritizing options for future IFAD interventions.  Liberia:CIAT science informed design of ASAP and participates in the design process (4.5mnUSD).  Uganda:PRELNOR project approved by Parliament (71mnUSD) drew on CIAT science for the rural livelihood component.  Data on CC impacts on coffee in Nicaragua and recommendations for adaptation were used in the design and implementation of NICADAPTA (24mnUSD).</p>
<p><b>Research Outputs:</b> Comoros:  Summary report of preliminary recommendations on the measures that are proposed to decrease the vulnerability of livelihoods dependent on the selected value chains.  Liberia:  Schroth, etal 2015. Vulnerability to climate change of cocoa in West Africa: patterns, opportunities and limits to adaptation  Schroth, etal 2015. A regional approach to climate change adaptation for tropical commodities: the example of cocoa in West Africa  Climate vulnerability and adaptation of the smallholder cocoa and coffee value chains in Liberia. Working Paper No. 134  Uganda:  <a href="https://ccafs.cgiar.org/publications/rapid-rural-appraisal-report-northern-uganda">https://ccafs.cgiar.org/publications/rapid-rural-appraisal-report-northern-uganda</a>  <a href="https://ccafs.cgiar.org/publications/social-ecological-assessment-landscapes-uganda">https://ccafs.cgiar.org/publications/social-ecological-assessment-landscapes-uganda</a>  <a href="http://www.ifad.org/climate/asap/stories/nicaragua.htm">http://www.ifad.org/climate/asap/stories/nicaragua.htm</a>  Mwongera, C., K. M. Shikuku, J. Twyman, L. Winowiecki, E. Ampaire, M. Koningstein and S. Twomlow. 2014. Climate Smart Agriculture Rapid Appraisal (CSA-RA) Report for Northern Uganda.  Nicaragua:  Integrated framework for Assessing Vulnerability to Climate Change:  <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0088463">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0088463</a>  Predicted impact of climate change on coffee supply chains:  <a href="http://link.springer.com/chapter/10.1007%2F978-3-642-14776-0_42">http://link.springer.com/chapter/10.1007%2F978-3-642-14776-0_42</a>  Escenarios del Impacto del Clima Futuro en Áreas de Cultivo de Café en Nicaragua:  <a href="http://dapa.ciat.cgiar.org/wp-content/uploads/2012/03/Informe-Nicaragua-final.pdf">http://dapa.ciat.cgiar.org/wp-content/uploads/2012/03/Informe-Nicaragua-final.pdf</a></p>
<p><b>Research Partners:</b> CCAFS</p>
<p><b>Activities that contributed to the outcome:</b> According to the Validation Study, the NICADAPTA project contracted CIAT to 'guide' its design in 2014, as they thought CIAT's climate modeling could support prioritizing specific activities to increase resilience of coffee and cocoa value chains. As a result of this successful collaboration, the same type of contractual relationship was developed for ASAP Liberia, Uganda and Comoros to prioritize investment. According to a key informant for Liberia, CIAT research had been very important for the design in the Latin America region enabling IFAD "to see that there can be an impact of climate change on the value chain and what kind of technical option was feasible".  IFAD and CIAT/CCAFS's collaboration is increasing: a learning event co-hosted at IFAD will be held on 24 February 2016: "How to design value chains programmes that address climate risks".</p>
<p><b>Non-research Partners:</b> Rainforest Alliance (Schroth)  Stephen Twomlow - The International Fund for Agricultural Development (IFAD)</p>

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**Output Users:** The International Fund for Agricultural Development (IFAD)

**How the output was used:** IFAD projects in Nicaragua, Liberia, Uganda and Comoros included CIAT/CCAFS research to prioritize investment. The CC specialist at IFAD reported that IFAD became interested in developing a cocoa and coffee value chain in Western and Central Africa “to ensure that good lessons from “NICADAPTA” can be included to improve and design these two projects”.

**Evidence of the outcome:** Validation report (uploaded): “How CIAT’s climate research informs and influences decision making in IFAD and the cocoa and coffee sector globally. An outcomes validation report”. By Julius Nyangaga Right Track Africa. 2016.

Aide memoire Mission de formulation du 27 septembre au 06 octobre 2015

<http://ifad.org/operations/projects/design/113/esa/uganda.pdf>

[http://operations.ifad.org/web/ifad/operations/country/project/tags/uganda/1681/project\\_overview](http://operations.ifad.org/web/ifad/operations/country/project/tags/uganda/1681/project_overview)

[http://www.ifad.org/climate/asap/factsheets/ASAP\\_factsheet\\_Nicaragua\\_WEB.pdf](http://www.ifad.org/climate/asap/factsheets/ASAP_factsheet_Nicaragua_WEB.pdf)

<http://operations.ifad.org/documents/654016/57b47380-5c1d-46e5-b640-44ea4fd68b75>

<http://www.ifad.org/climate/asap/stories/nicaragua.htm>

**References:** Validation report (uploaded): “How CIAT’s climate research informs and influences decision making in IFAD and the cocoa and coffee sector globally. An outcomes validation report”. By Julius Nyangaga Right Track Africa. 2016.

**The primary 2019 outcome indicator that this case study is contributing to:**

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

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

**Year:** 2015

**Annexes uploaded:** [CIAT outcomes validation study Feb2016.pdf](#)

## Outcome case study #2

**Title:** CIAT science is included in Costa Rican coffee NAMA proposal financed by NAMA facilities.

**Outcome statement:** CIAT coffee climate science helped secure funding for the Costa Rican coffee NAMA. Specifically, the NAMA proposal funded partly leverages on impact assessments on and mitigation options for coffee systems that CIAT shared with the Ministry of Agriculture and Livestock (MAG), the Gesellschaft International Zusammenarbeit (GIZ), the Instituto de Café de Costa Rica (ICAFFE) and the NAMA facility review mission. Moreover, CIAT trained MAG employees on these results, which were used as background information for the NAMA.

Submitted on 2016-03-04 at 12:21 UTC

**Research Outputs:** Results by Rahn et al. included in the proposal to recommend specific activities to be financed:

Rahn E, etal (2014) Climate change adaptation, mitigation and livelihood benefits in coffee production: where are the synergies? *Mitig Adapt Strateg Glob Change* (2014) 19:1119–1137: DOI 10.1007/s11027-013-9467-x  
 Baca etal 2014. An Integrated Framework for Assessing Vulnerability to Climate Change and Developing Adaptation Strategies for Coffee Growing Families in Mesoamerica. *PLoS ONE* 9(2): e88463.

doi:10.1371/journal.pone.0088463

Bunn etal.2014. A bitter cup: climate change profile of global production of Arabica and Robusta coffee.

*Climatic Change* (2015) 129:89–101 DOI 10.1007/s10584-014-1306-x

Ovalle-Rivera etal.2015. Projected Shifts in *Coffea arabica* Suitability among Major Global Producing Regions Due to Climate Change. *PLoS ONE* 10(4): e0124155. DOI:10.1371/journal.pone.0124155

van Rikxoort etal 2014. Carbon footprints and carbon stocks reveal climate-friendly coffee production.

*Agronomy for Sustainable Development*. 34 (4) 887-897: DOI 10.1007/s13593-014-0223-8

Vermeulen etal.2013. Addressing uncertainty in adaptation planning for agriculture. *PNAS*:

Doi/10.1073/pnas.1219441110

[http://ciat.cgiar.org/wpcontent/uploads/2012/12/policy\\_brief2\\_mesoamerican\\_coffee.pdf](http://ciat.cgiar.org/wpcontent/uploads/2012/12/policy_brief2_mesoamerican_coffee.pdf)

[http://ciat.cgiar.org/wp-content/uploads/2013/04/policy\\_brief12\\_shared\\_value.pdf](http://ciat.cgiar.org/wp-content/uploads/2013/04/policy_brief12_shared_value.pdf)

**Research Partners:** CIAT

CCAFS

Instituto del Café de Costa Rica (ICAFFE)

**Activities that contributed to the outcome:** CIAT supports MAG within the MAG-FITTACORI collaboration agreement. During 2014/2015 CIAT had frequent personal/email exchanges with GIZ, who led the NAMA facility proposal, to discuss CIAT climate science on coffee.

Laderach was invited to share CIAT coffee climate science with NAMA facility review mission and continued sharing it over email afterwards.

During 2014 and 2015 CIAT supported the position of Ing.Vargas (MAG) dedicated to the coffee NAMA development. In 10/2014 Vargas and Murillo were trained at CIAT in MAC curves, climate suitability modeling, carbon stock and foot print calculations. Surveyed before the training, on average they rated (1-5 scale) their knowledge of MAC 1, ECOCROP 3, MAXENT 1, while at the end they rated it respectively 4.5, 4 and 4. They said they were highly likely to apply to their NAMA work the methods learned.

CIAT scientist supported MAG in their presentation of the coffee NAMA at COP20 in Lima.

**Non-research Partners:** NA

**Output Users:** Ministry of Agriculture and Livestock (MAG)

Gesellschaft International Zusammenarbeit (GIZ)

NAMA facility review mission

**How the output was used:** CIAT climate science is cited in the proposal to recommend specific activities to be financed by the coffee NAMA (Rahn et al, 2013). The proposal also cites CIAT science on carbon stock/foot print in coffee systems, threats of climate change impacts, co-benefits and carbon in-setting, transformative adaptation, and farmer's vulnerability.

**Evidence of the outcome:** "A recent research paper identified agroforestry systems and planting of boundary trees, both of which will be promoted under Output A....(Rahn etal.2013)"

Potential carbon stock and footprint in coffee systems(Rahnetal2014,vanRikxoortetal2014)

Threats of climate change impacts(Bunnetal2014,Ovalleetal2014)

Co-benefits and carbon insetting(Rahnetal2014)

Vulnerability of farmers(Bacaetal2013)

Transformative adaptation(Vermeulenetal2013)

Approved NAMA

Emails/survey before/after CIAT training.

Submitted on 2016-03-04 at 12:21 UTC

**References:** Results by Rahn et al. included in the proposal to recommend specific activities to be financed: Rahn E, etal (2014) Climate change adaptation, mitigation and livelihood benefits in coffee production: where are the synergies? Mitig Adapt Strateg Glob Change (2014) 19:1119–1137: DOI 10.1007/s11027-013-9467-x Baca etal 2014. An Integrated Framework for Assessing Vulnerability to Climate Change and Developing Adaptation Strategies for Coffee Growing Families in Mesoamerica. PLoS ONE 9(2): e88463. doi:10.1371/journal.pone.0088463

Bunn etal.2014. A bitter cup: climate change profile of global production of Arabica and Robusta coffee. Climatic Change (2015) 129:89–101 DOI 10.1007/s10584-014-1306-x

Ovalle-Rivera etal.2015. Projected Shifts in Coffea arabica Suitability among Major Global Producing Regions Due to Climate Change. PLoS ONE 10(4): e0124155. DOI:10.1371/journal.pone.0124155

van Rikxoort etal 2014. Carbon footprints and carbon stocks reveal climate-friendly coffee production. Agronomy for Sustainable Development. 34 (4) 887-897: DOI 10.1007/s13593-014-0223-8

Vermeulen etal.2013. Addressing uncertainty in adaptation planning for agriculture. PNAS: Doi/10.1073/pnas.1219441110

[http://ciat.cgiar.org/wpcontent/uploads/2012/12/policy\\_brief2\\_mesoamerican\\_coffee.pdf](http://ciat.cgiar.org/wpcontent/uploads/2012/12/policy_brief2_mesoamerican_coffee.pdf)

[http://ciat.cgiar.org/wp-content/uploads/2013/04/policy\\_brief12\\_shared\\_value.pdf](http://ciat.cgiar.org/wp-content/uploads/2013/04/policy_brief12_shared_value.pdf)

**The primary 2019 outcome indicator that this case study is contributing to:**

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

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

**Year:** 2015

**Annexes uploaded:** [1\\_Proposal\\_NSP\\_LowEmissionCoffee\\_2014-10-08\\_FINAL.pdf](#)

### Outcome case study #3

**Title:** CIAT-MAG-CATIE collaboration supported the process leading to Low Emission Livestock Strategy Costa Rica (Joint FP4-LAM/FP3-LivestockPlus)

**Outcome statement:** In 2015, CIAT-MAG-CATIE collaboration supported the final stages of the process of the Low Emission Livestock Strategy (Estrategia Nacional para el Desarrollo de la Ganadería Baja en Carbono, ENDGBC) in Costa Rica, which is the 2015-2034 policy framework for the livestock sector. CIAT-MAG facilitated workshops and supported the development of the Livestock NAMA program support. CIAT-MAG also facilitated regional commissions on livestock, PITTA low carbon livestock research and supported the management of the process.

**Research Outputs:** The outputs from the CIAT-MAG-CATIE collaboration are:

- The First Pasture Congress with sharing of knowledge on pasture management for livestock production (2015), where the National Network of Pastures and Forages was launched.
- Action Plan of Livestock NAMA program support with defined role for actors involved
- Complementarity of supporting organizations and programs to achieve the concrete objectives of the Livestock NAMA program support.
- Summary of actions/lessons learned and systematization of the process
- A scoping report on the current state of Livestock NAMA
- Official Newsletter of the systematization of the National Low Carbon Livestock Plan
- Dissemination in newspapers, blog posts and press conferences.

**Research Partners:** CCAFS

Tropical Agricultural Research and Higher Education Center (CATIE)  
National Institute of Agricultural Innovation and Technology Transfer (INTA)  
World Agroforestry Centre (ICRAF)

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**Activities that contributed to the outcome:** The final stages of the EDGBC were supported by CIAT-MAG collaboration, which facilitated a series of workshops, the implementation of regional livestock commissions, and the implementation of the Low Carbon Livestock PITTA (research body). The project also supported the launch of the National Network of Pastures and Forages; the First Pasture Congress to share knowledge on pasture management practices for sustainable livestock production. The project trained Livestock Scientist, Mr. Diego Tovar from CATIE and two researchers from INTA on GHG quantification for the Livestock NAMA. CIAT has complemented the instrument for the baseline survey (to be applied in 1,000 farms in Costa Rica) with gender focused questions.

**Non-research Partners:** Ministry of Agriculture and Livestock (MAG) of Costa Rica

**Output Users:** Ministry of Agriculture and Livestock (MAG) of Costa Rica  
Mesa Ganadera (Livestock roundtable)  
PITTA Ganadería Baja en Carbono (Research and Agricultural Technology Transfer Programme)  
Comisión Nacional de Ganadería (National livestock committee)  
Comisiones Regionales de Ganadería (Regional livestock committees)  
CAN (Consejo Agropecuario Nacional) (National agriculture and livestock council)

**How the output was used:** The collaboration supported the CAN reach agreement which will support the future process of implementation of the EDGBC. The collaboration also supported a priority line of action in the EDGBC, which is the inception of the National Network of Pastures and Forages.

**Evidence of the outcome:** Final report ENDGBC Costa Rica 2015-2034.  
<http://www.mag.go.cr/bibliotecavirtual/a00366.pdf>  
Summary of the ENDGBC Costa Rica:  
<http://www.mag.go.cr/bibliotecavirtual/a00367.pdf>  
NAMA Livestock Costa Rica 2015.  
<http://www.mag.go.cr/bibliotecavirtual/a00368.pdf>  
Presentation of Dr. Rolando Barahona (Colombian National Program) at the "Congreso lechero" in Costa Rica:  
<https://prezi.com/aijejwvudaz1/livestock-nama-in-costa-rica/>

**References:** Final report ENDGBC Costa Rica 2015-2034.  
<http://www.mag.go.cr/bibliotecavirtual/a00366.pdf>  
Summary of the ENDGBC Costa Rica:  
<http://www.mag.go.cr/bibliotecavirtual/a00367.pdf>  
NAMA Livestock Costa Rica 2015.  
<http://www.mag.go.cr/bibliotecavirtual/a00368.pdf>  
Presentation of Dr. Rolando Barahona (Colombian National Program) at the " Congreso lechero" in Costa Rica:  
<https://prezi.com/aijejwvudaz1/livestock-nama-in-costa-rica/>  
Project to Support the Implementation of NAMAs in Costa Rica: This is a project funded by the CIAT- CCAFS, managed by FITTACORI and implemented by MAG, in order to develop activities contributing to the mitigation and adaptation of the agricultural sector to climate change. (<http://namanews.org/news/2015/03/12/costa-ricaleads-the-way-towards-sustainable-livestock-management/>)

**The primary 2019 outcome indicator that this case study is contributing to:**

FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

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

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

**Year:** 2015

Submitted on 2016-03-04 at 12:21 UTC

Annexes uploaded: &lt;Not defined&gt;

## Outcome case study #4

**Title:** Colombian government registers in the UNFCCC a NAMA Information Note developed with LivestockPlus (Joint LivestockPlus).

**Outcome statement:** A NAMA Information Note (NINO) for Livestock sector in Colombia was submitted to the UNFCCC in September 2015. The NINO was developed by Colombian Ministry of Agriculture and Rural Development (MADR) and Ministry of Environment and Sustainable Development (MADS) in collaboration with partners including CIAT, CIPAV and FEDEGAN. The document aims to identify mitigation actions feasible under specific conditions of livestock production areas in Colombia, estimating physical and financial requirements for design and implementation of the NAMA.

**Research Outputs:** Determinación del potencial de reducciones de gases de efecto invernadero en sistemas silvopastoriles en el proyecto Análisis de Sistemas Productivos en Colombia”). Annex I of the NINO MADR-CIAT-GASA. (2014). Potencial de mitigación de 4 cultivos frutales. Bogotá: MADR-CIAT. MADR-CIPAV-CIAT. (2014). Carbono-eficiencia de sistemas silvopastoriles y pasturas mejoradas. Bogotá: MADR  
 Fisher et al. 1994. Nature 371: 236-238.  
 Rao et al. 2015. Tropical Grasslands–Forrajes Tropicales 3: 59-82.  
 Rao et al. 2014. Rural21 4: 12-15.  
 Rudel et al. 2015. Ambio 44: 685-693.  
 Subbarao et al. 2009. Proceedings of the National Academy of Sciences (USA) 106: 17302-17307.  
 Jarvis, et al. 2010. Journal for Nature Conservation 18:180–188.

**Research Partners:** Center for Research in Sustainable Farming Systems (CIPAV)  
 CCAFS

**Activities that contributed to the outcome:** CIAT co-authored the NINO, with major contributions to the section on improved pastures (eco-efficient practices).  
 The LivestockPlus team supported the Colombian ministry of agriculture and rural development by providing estimates on the mitigation potential of technical alternatives related to pasture based production systems in different agroecosystems. CIAT and partners provided data on carbons stocks and emissions from intensive silvopastoral systems.  
 The team participated in the event on exchanging experiences from Colombia and Costa Rica organized by the Colombian LEDS, UNDP and FEDEGAN in June 2015.  
 Interaction among multistakeholders in several meetings contributed to the design of NINO.

**Non-research Partners:** Ministry of Agriculture and Rural Development (MADR)  
 Ministry of Environment and Sustainable Development (MADS)  
 Center for Research in Sustainable Farming Systems (CIPAV)  
 Federación Colombiana de Ganaderos (FEDEGAN)

**Output Users:** Ministry of Agriculture and Rural Development, Colombia  
 Ministry of Environment and Sustainable Development, Colombia  
 Center for Research in Sustainable Farming Systems (CIPAV)

**How the output was used:** CIAT co-authored the NINO.  
 Based also on CIAT science, the NINO proposes the implementation of silvopastoral systems, intensive silvopastoral systems and eco-efficient practices (improved pastures) in conventional pastoral systems; identifies financing mechanisms for the project and outlines an MRV system.  
 Annex I of NINO is based on CIAT science.

Submitted on 2016-03-04 at 12:21 UTC

**Evidence of the outcome:** NINO -section H on UNFCCC website:

[http://www4.unfccc.int/sites/nama/\\_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1](http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1)

CIAT is one of the authors of the NINO; Annex I of the NINO is a full study by CIAT

## Citations:

MADR-CIAT-GASA. 2014

MADR-CIPAV-CIAT. 2014

Fisher, etal 1994

Rao etal 2015

Jarvis, etal 2010

Livestock roundtable Colombia: <http://mesaganaderiasoste.wix.com/principal>

**References:** NINO: NINO -section H on UNFCCC website:

[http://www4.unfccc.int/sites/nama/\\_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1](http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1)

MADR-CIAT-GASA. (2014). Potencial de mitigación de 4 cultivos frutales. Bogotá: MADR-CIAT.

MADR-CIPAV-CIAT. (2014). Carbono-eficiencia de sistemas silvopastoriles y pasturas mejoradas. Bogotá: MADR

Fisher, M. J., I. M. Rao, M. A. Ayarza, C. E. Lascano, J. I. Sanz, R. J. Thomas and R. R. Vera 1994 Carbon storage by introduced deep-rooted grasses in the south American savannas. *Nature* 371: 236-238.

Rao, I., Peters, M., .....Rudel, T. Castro, A., Shultze, R., White, D., Fisher, M., Hyman, G. (2015).

LivestockPlus: The sustainable intensification of forage-based agricultural systems to improve livelihoods and ecosystem services in the tropics. *Tropical Grasslands*, 3: 59-82.

Jarvis, A., Touval, J. L., Castro, M., Sotomayor, L. and Graham, G. 2010. Assessment of threats to ecosystems in South America. *Journal for Nature Conservation* 18:180–188.

Livestock roundtable Colombia: <http://mesaganaderiasoste.wix.com/principal>

**The primary 2019 outcome indicator that this case study is contributing to:**

FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

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

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

**Year:** 2015

**Annexes uploaded:** <Not defined>

## Outcome case study #5

**Title:** A WB high level report to support Nicaraguan Government investment is informed by CIAT/CCAFS science

Submitted on 2016-03-04 at 12:21 UTC

**Outcome statement:** The WB published an advisory report for policy makers in Nicaragua, which provides the basis for operationalizing the policy dialogue between the Government of Nicaragua, WB and other development partners and supports the prioritization of government investment and strategies. A CIAT/CCAFS CSA Country Profile for Nicaragua was developed as a supporting document to the report, which also includes other CIAT/CCAFS scientific inputs on agricultural sector, climate projections and GHG emissions are included in the report. This outcome also supports FP1 outcomes.

**Research Outputs:** World Bank; CIAT. 2015. Climate-Smart Agriculture in Nicaragua. CSA Country Profiles for Africa, Asia, and Latin America and the Caribbean Series. Washington D.C.: The World Bank Group.  
 Baca et al. 2011. "Vulnerabilidad y estrategias de Adaptacion al cambio climático en los medios de vida de las familias de Nicaragua." CIAT, Nicaragua.  
 CCAFS. 2013. "State of the art in climate change, agriculture and food security in Nicaragua." (CCAFS). Mimeograph.  
 CIAT. 2015. Climate Smart Agriculture Profile for Nicaragua. Background Paper to: "Agriculture in Nicaragua: Performance, Duality and Challenges". CIAT. Nicaragua.  
 Gourджи, et al. 2015. "Historical climate trends, deforestation, and maize and bean yields in Nicaragua." Agricultural and Forest Meteorology 200: 270-281.  
 Läderach, et al. 2012. "Predicting the impact of climate change on areas of cacao cultivation in Nicaragua." CIAT. Nicaragua  
 Martínez Valle. 2015. "Profile of Nicaragua with respect to Climate-smart Agriculture." Background Paper to: "Agriculture in Nicaragua: Performance, Duality and Challenges". World Bank. Nicaragua.

**Research Partners:** CCAFS

**Activities that contributed to the outcome:** In 2014, the Central Bank of Nicaragua (BCN) asked WB to conduct a "study of the agricultural sector in Nicaragua". The WB team sought CIAT's support as a scientific partner. CIAT scientists participated in meetings and accompanied the WB in its liaison function with the Cooperation board. The board is a communication mechanism for WB, IFAD, SDC; IICA, WFP, Canadian Cooperation, EU, FAO, CATIE and CIAT. CIAT scientists also presented the CSA country profile in meetings with national stakeholders (BCN, MHCP, MAG, MEFCCA, MARENA, MIFIC, INETER, INTA, INIDE and BFP) and international donors/cooperation. After a series of meetings, a final document consolidating different inputs was prepared by the WB. CIAT/CCAFS contributed with analysis of climate risks for agriculture and a CSA Country Profile. Results were presented at regional level at meetings of Technical Group on Integrated Risk Management and Climate Change (GTGIRCC) of the Agricultural Council in El Salvador.

**Non-research Partners:** World Bank

**Output Users:** WB

Central bank Nicaragua  
 Sistema Nacional Producción, Consumo y Comercio  
 Ministerio Hacienda y Crédito Público  
 Ministerio Agricultura y Ganadería  
 Ministerio Economía (MEFCCA)  
 Ministerio Ambiente y Recursos Naturales  
 Ministerio Fomento, Industria y Comercio  
 Instituto Nicaragüense Estudios Territoriales  
 Instituto Nicaragüense Tecnología Agropecuaria  
 Instituto Nicaragüense Información de Desarrollo  
 Banco de Fomento Produzcamos  
 SDC

**How the output was used:** The WB report uses results of the CSA Country Profile for Nicaragua and from several studies including Baca et al. 2011; Läderach et al. 2012, Martínez Valle, 2015; Gourджи et al. 2015; and CCAFS. 2013. The report is the first step for negotiation between WB and Government to prioritize investments and definition of government strategies and plans.

Submitted on 2016-03-04 at 12:21 UTC

**Evidence of the outcome:** World Bank. 2015. Agriculture in Nicaragua: Performance, Challenges, and Options:

- p.IV
- p.9: Figure 2.1
- p.22: Figure 3.2
- p.24: Figure 3.4
- p.62: ..CGIAR...CIAT...have...developed conceptual frameworks.
- P.68: Figure 6.7
- p.64, 66: Gourджи et al.2015
- p.66: Läderach et al.2012
- p.37: Table 4.6

WB; CIAT. 2015: <https://cgspace.cgiar.org/rest/bitstreams/64623/retrieve>

**References:** World Bank. 2015. Agriculture in Nicaragua: Performance, Challenges, and Options. World Bank, Managua, Nicaragua.

World Bank; CIAT. 2015. Climate-Smart Agriculture in Nicaragua. CSA Country Profiles for Africa, Asia, and Latin America and the Caribbean Series. The World Bank Group.

<https://cgspace.cgiar.org/rest/bitstreams/64623/retrieve>

Baca, M., et al. 2011. "Vulnerabilidad y estrategias de Adaptation al cambio climático en los medios de vida de las familias de Nicaragua." (CIAT), Nicaragua.

CCAFS. 2013. "State of the art in climate change, agriculture and food security in Nicaragua." (CCAFS). Mimeograph.

CIAT. 2015. Climate Smart Agriculture Profile for Nicaragua. (CIAT).

Gourджи, S., P. et al. 2015. Agricultural and Forest Meteorology 200: 270-281.

Läderach, P., et al. 2012. "Predicting the impact of climate change on areas of cacao cultivation in Nicaragua." (CIAT)

Martínez Valle, A. 2015. "Profile of Nicaragua with respect to Climate-smart Agriculture." Background Paper to: "Agriculture in Nicaragua: Performance, Duality and Challenges". World Bank

**The primary 2019 outcome indicator that this case study is contributing to:**

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

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

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

**Year:** 2015

**Annexes uploaded:** [Final Output - P152101 2016-01-11 17 20.pdf](#)

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<p><b>FP4 - MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP4 - MOG # 3:</b> Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP4 - MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP3 - MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
Major Output groups - 2014

Submitted on 2016-03-04 at 12:21 UTC

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

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

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

**FP4 - MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

Submitted on 2016-03-04 at 12:21 UTC

**FP3 - MOG # 2:** Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

### Major Output groups - 2015

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

The WB published an advisory report for policy makers in Nicaragua, which provides the basis for operationalizing the policy dialogue between the Government of Nicaragua, WB and other development partners and supports the prioritization of government investment and strategies. The report is based on CIAT/CCAFS CSA Country Profile for Nicaragua.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes.

Submitted on 2016-03-04 at 12:21 UTC

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

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

IFAD increasingly adopts CIAT/CCAFS science in project design and implementation in Comoros (climate/environmental assessments), Liberia (supply chain assessment), Uganda (CSA Rapid Appraisal) and in Nicaragua (Climate change impact assessment on coffee and cocoa supply chains). The IFAD/ASAP project using CCAFS/CIAT climate science are worth >100 MIO USD.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes (see outcome reported)

**FP4 - MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

The WB published an advisory report for policy makers in Nicaragua, which provides the basis for operationalizing the policy dialogue between the Government of Nicaragua, WB and other development partners and supports the prioritization of government investment and strategies. The report is based on CIAT/CCAFS CSA Country Profile for Nicaragua.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes (see outcome reported)

Submitted on 2016-03-04 at 12:21 UTC

**FP3 - MOG # 2:** Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

A NAMA Information Note (NINO) for Livestock sector in Colombia was submitted to the UNFCCC in September 2015, developed in collaboration with CCAFS/CIAT. CIAT-MAG-FITTACORI collaboration led to the approval of the Low Emission Livestock Strategy (Estrategia Nacional para el Desarrollo de la Ganadería Baja en Carbono, ENDGBC) in Costa Rica.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

In 2015 decision makers contributed to knowledge products on gender integration in climate change policies in the agricultural sector. Contributions demonstrate application of new knowledge learned and gender sensitivity in policymaking processes (see outcome reported)

### Major Output groups - 2016

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

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

Project addresses a wide range of NAMAs and NAP's across three countries that are at different stages of implementation and benefit from the learning of each other. Livestock NAMA in Colombia benefits from Costa Rica, Coffee NAMA in Peru benefits from Costa Rica, etc. Scenario analysis is planned for Coffee NAMA.

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

CCAFS contributes input on gender incorporation for one policy (NAMA/NAP/other climate risk prevention/response protocols) draft .

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

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

This MOG has been discontinued due to the facing out of BI and their activities.

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

This MOG has been discontinued due to the facing out of BI and their activities.

Submitted on 2016-03-04 at 12:21 UTC

**FP4 - MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

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

Priority setting of NAMA and NAP sectors and subsequently interventions within NAMA and NAP are being conducted in participatory manner promoting evidence based decision making. Approach include MAC curves, trade-off and scenario analysis.

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

CCAFS contributes input on gender incorporation for one policy (NAMA/NAP/other climate risk prevention/response protocols) draft.

**FP3 - MOG # 2:** Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

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

Identification of most promising NAMA and subsequent identification of activities are conducted using MAC curves, scenario analysis and trade-off analysis.

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

CCAFS contributes input on gender incorporation for one policy (NAMA/NAP/other climate risk prevention/response protocols) draft.

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: ..**

Submitted on 2016-03-04 at 12:21 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> NAMA Livestock proposal submitted to NAMA facilities	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Discussion paper
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Proposal has been rejected

Next-user
Livestock NAMA stakeholders such as government and private sector
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Government, private sector, research institutions and NGO's will agree on common goals of increasing efficiency of the production of unit produce in the livestock sector. The change in KAS to be observed will be:
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Shared position with MAG to facilitate dialogue and stakeholder involvement. Invitation of experts on selected topics. Evidence driven discussion based on CIAT and CCAFS science.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

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

Submitted on 2016-03-04 at 12:21 UTC

<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #2

Main Information	
<b>Title:</b> Final approval of NAMA implementation plan funded by NAMA facilities	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Complete	

Next-user
Coffee NAMA stockholders Public sector (ICAFE, MAG) and Private sector
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> All stakeholders have agreed on a pilot implementation plan for selected areas.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Guide with climate change coffee data the design of the implementation NAMA coffee implementation plan.

Submitted on 2016-03-04 at 12:21 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

## Deliverable Ranking

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

## Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** other

**Dissemination URL:** <http://www.nama-facility.org/projects/costa-rica.html>

## Deliverable Metadata

**Description:** Coffee NAMA has been approved for funding. Details in outcome story 2015

**Creator / Authors:** .

**Author Identifier:** .

**Publication / Creation date:** .

**Language:** .

**Coverage:** .

## Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #3

## Main Information

**Title:** NAMA Livestock Implementation Plan

**MOG # 2:** Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives

Submitted on 2016-03-04 at 12:21 UTC

<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> In 2015, CIAT-MAG-FITTACORI collaboration led to the approval of the Low Emission Livestock Strategy (Estrategia Nacional para el Desarrollo de la Ganadería Baja en Carbono, ENDGBC) in Costa Rica, which is the 2015-2034 policy framework for the livestock sector (see outcome reported). The specific data is not yet available to upload.

#### Next-user

Livestock NAMA stakeholders such as government and private sector

**Knowledge, attitude, skills and practice changes expected in next-user:** All stakeholders have agreed on a pilot implementation plan for selected areas. The changes to be observed will be:

1. Using latest climate information to guide and facilitate development of NAMAs in Costa Rica.
2. Counting on a network of partners that can help provide and facilitate relevant climate information

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Continuous facilitation of NAMA development through the jointly appointed person based in MAG.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> Study on factors explaining countries' positions in topics related to LULUCF, REDD+ and agricultural NAMAS.	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Faced out due to budget cuts.

Next-user
UNFCCC negotiators and Presidencies of COP20 (Peru) and COP 21 (France).
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Understanding of underlying factors influencing countries' positions.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> We expect the Peruvian negotiation team to prepare negotiation strategy based on key contextual factors influencing countries positions on all topics related to the AFOLU sector. To achieve our goal, we will provide the Peruvian government with key information regarding countries' positions and the role of agriculture in CC mitigation.

Partners contributing to this deliverable
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Submitted on 2016-03-04 at 12:21 UTC

**Partner #1 (Responsible):** Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #5

#### Main Information

<b>Title:</b> Study on opportunities to include “climate smart agriculture” in UNFCCC’s negotiation agenda.
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

Submitted on 2016-03-04 at 12:21 UTC

<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> ONF Andina has been faced out due to budget cuts.

#### Next-user

LAM negotiators, including Peru

**Knowledge, attitude, skills and practice changes expected in next-user:** LAM negotiators will acknowledge the role of agricultural production systems and CSA in reducing deforestation. In that regard, it is important to increase the negotiators' understanding on what CSA is and what are the connections and similarities with other sustainable practices previously promoted.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** We will provide the LAM negotiators with key information regarding the role of agriculture and CSA in CC mitigation. Particularly, in reducing pressure on Forests ecosystems.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

Submitted on 2016-03-04 at 12:21 UTC

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

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #6

#### Main Information

<b>Title:</b> Workshops with Peruvian negotiation team for strengthening its negotiation capacity on REDD+, LULUCF and CSA	
<b>MOG # 3:</b> Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Faced out due to budget cuts

#### Next-user

Peruvian negotiation team
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> A workshop with Peruvian negotiators to present a discuss studies mentioned above will be held in October 2014.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> It is expected that the workshop above mentioned will be complemented with a seminar with the "Latino American group of Forest and Climate Change" in 2015 to present CSA and CCAFS research outputs. This last will be supported by CCAFS LAM

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina

#### Deliverable Ranking

<b>Address gender and social inclusion aspect</b>	<Not defined>
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Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable dissemination	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	-1
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #7

Main Information	
<b>Title:</b> Analysis of pre agreements achieved at COP 20	
<b>MOG # 3:</b> Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Other non-peer reviewed articles
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Faced out due to budget cuts

Submitted on 2016-03-04 at 12:21 UTC

#### Next-user

LAM Key stakeholders (including government officials, NGOs, others) interested in CC, agricultural frontiers and deforestation

**Knowledge, attitude, skills and practice changes expected in next-user:** Improved understanding on the implications of COP 20 outputs on a future global climate change agreement.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** We will publish in the bimonthly bulletin "Bosques y Cambio Climatico" a brief article analysing agreements related to the AFOLU sector achieved at COP 20.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

Submitted on 2016-03-04 at 12:21 UTC

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #8

### Main Information

**Title:** Course for ministries of agriculture / COP delegates on the role of agriculture in UNFCCC

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

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

**Sub Type:** Seminar paper

**Year of expected completion:** 2014

**Status:** Cancelled

**Justification for cancelling the deliverable:** Due to budget cuts

### Next-user

Ministries of agriculture

**Knowledge, attitude, skills and practice changes expected in next-user:** Course participants from ministries increase their knowledge about the UNFCCC process and the role of agriculture.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** We will follow up with electronic communications to detect emerging needs for information and to share experiences

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina

### Deliverable Ranking

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

### Deliverable dissemination

**Open access restriction:** <Not defined>

Submitted on 2016-03-04 at 12:21 UTC

<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #9

Main Information	
<b>Title:</b> Diagnosis of information offer and demand	
<b>MOG # 3:</b> Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
CAC and individual member countries
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge of gaps in climate information in each country and experiences in other countries in the region (inventory) Attitude and practice: intensified knowledge sharing among countries

Submitted on 2016-03-04 at 12:21 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Sharing the information in the technical group and inviting individual countries to share case studies based on manifested interest. Identification of opportunities for exchange between countries.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

#### Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	3

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

[TechnicalReport\\_EGiron\\_CBouroncle.pdf](#)

## Deliverable #10

Submitted on 2016-03-04 at 12:21 UTC

Main Information	
<b>Title:</b> Diagnosis of climate response information management	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Due to budget cuts

Next-user
Ministry of Agriculture (MAGA) of Guatemala
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge about the implementation of the drought response protocol as a case study Receptiveness to a more scientific approach to data collection on the effect of climate events Incorporation of insights from the study in planning and preparation practice
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Stakeholder meetings to identify major bottlenecks in climate response and annual planning vis-a-vis climate events Constant engagement with MAGA climate change coordinator

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #11

Main Information	
<b>Title:</b> Evaluation of preliminary data products responding to needs of Ministry	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
Ministry of Agriculture (MAGA) of Guatemala
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Increased awareness of potential uses of climate data for decision making / policy implementation
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Iterative, user-centred design of new information products

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

Submitted on 2016-03-04 at 12:21 UTC

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<a href="#">Informe de Ejercicio de Simulacro Sequía Chiquimula 2015.pdf</a>
<a href="#">informe LMA diciembre 2015 v2_MAGA.docx</a>

## Deliverable #12

Main Information	
<b>Title:</b> Meta-analysis of current level of gender inclusion across countries	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper

Submitted on 2016-03-04 at 12:21 UTC

**Year of expected completion:** 2015**Status:** Complete**Next-user**

Policymakers: MADR, DNP (Colombia); MINAM (Peru); MAG (Costa Rica)

**Knowledge, attitude, skills and practice changes expected in next-user:** Increased awareness of the importance of gender to climate change policies and willingness to make efforts to incorporate gender into policy**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Workshop on gender and climate change policy targeting key Latin American policymakers that motivates participants to reflect on possible approaches to developing more gender-inclusive policies**Partners contributing to this deliverable****Partner #1 (Responsible):** Twyman, Jennifer <j.twyman@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical**Deliverable Ranking**

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

**Deliverable dissemination****Open access restriction:** Yes**License adopted:** <Not defined>**Dissemination Channel:** other**Dissemination URL:** <http://agrigender.net/uploads/JGAFS-122015-3.pdf>**Deliverable Metadata****Description:** This paper provides an overview of the state of gender inclusion in national policies related to climate change in seven target countries of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) in Latin America. A rubric for evaluating policies' levels of gender integration was developed based on guidelines and methods for gender inclusion. Preliminary findings suggest that gender-sensitive consultation processes and increased efforts at cross-sectoral coordination can lead to successful gender integration in climate change planning.**Creator / Authors:** Tatiana Gumucio

Submitted on 2016-03-04 at 12:21 UTC

<b>Author Identifier:</b> 0000-0001-9389-2703
<b>Publication / Creation date:</b> 2015
<b>Language:</b> English
<b>Coverage:</b> LAM

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #13

#### Main Information

<b>Title:</b> Guidelines/recommendations for gender inclusive climate change policies and institutions	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

#### Next-user

<b>Policyholders:</b> MADR, DNP (Colombia); MINAM (Peru); MAG (Costa Rica); UNAG (Nicaragua)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Increased capacity to incorporate gender into climate change-related policies
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Policy learning platform; regular meetings with key policymakers and workshops that teach and build upon recommendations

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Twyman, Jennifer <j.twyman@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #14

Main Information	
<b>Title:</b> Methodology to develop recommendations and provide CB on gender inclusion in CC policies and institutions	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Tools
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Submitted on 2016-03-04 at 12:21 UTC

Next-user	
CCAFS and other CGIAR; CARE; Global Gender Climate Alliance	
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> increased capacity to influence policymakers to incorporate gender in climate change policies, specifically NAPs and NAMAs	
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Policy learning platform; co-facilitation of knowledge sharing events with next users	

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Twyman, Jennifer <j.twyman@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	

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

Deliverable dissemination	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	<Not defined>
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

Submitted on 2016-03-04 at 12:21 UTC

**Deliverable #15**

Main Information	
<b>Title:</b> Tested methods for soil carbon sampling and data analysis on carbon storage in the Andes	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
Peruvian National Research Institute (INIA) and National Agrarian University (UNALM)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> INIA implements the protocols and methods developed and validated into their standard procedure to scale the present work to all the regions where soil carbon stocks are of relevance. UNALM Professors incorporate sampling techniques and rapid assessments into their regular courses to have a multiplying effect on future professionals.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> CIP will assist INIA in the implementation of the WB-funded National Agricultural Innovation Program (PNIA). CIP DG is a member of PNIAs advisory board. Professors from UNALM soil science department will participate in a comparative assessment between spectroscopic and conventional methods to assess soil carbon.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	1
<b>Potential for/ actual contribution to outcomes</b>	4
<b>Level of shared ownership (partnerships across org.)</b>	4
<b>What is your personal perspective of the importance of this product</b>	3

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

Submitted on 2016-03-04 at 12:21 UTC

<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
<b>Description:</b> Description of the methodology used to define the soil sampling framework for carbon evaluation.
<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #16

Main Information	
<b>Title:</b> Portfolio of CSA alternatives for preserving soil carbon stocks and mitigating carbon emissions	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Reference material
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Farmers, NGOs and extension agents
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> NGOs and extension agents include CSA technology options in their extension programs. Ministry of agriculture uses the information on CSA alternatives in their policies. Farmers enhance their knowledge on CSA alternatives and incorporate them into their practices.

Submitted on 2016-03-04 at 12:21 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** CIP and local institutions will develop a prototype program to implement joint learning with farmers. CIP will seek funding to further develop 3-D virtual landscapes to communicate findings and promote the implementation of CSA alternatives.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #17

Submitted on 2016-03-04 at 12:21 UTC

Main Information	
<b>Title:</b> Data on carbon storage and emissions from High Andean wetlands and natural grasslands	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Carbon data of soil samplings and complementary analysis. Data is under revision by the soil lab due to some inconsistencies in the results. New date of delivery will be May 2016.

Next-user
MINAM, MINAGRI, INIA
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Scientific evidence incorporated into NAMAs and other policy formulations
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Permanent consultation and interactions with high officials of MINAM and MINAGRI. Regular participation in technical discussions led by MINAGRI's technical committee

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #18

Main Information	
<b>Title:</b> Methodology for regional policy engagement process and workshops	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Canceled due to budget cuts

Next-user #1
DNP
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Changes in KAS and P will be: K: Better knowledge about local needs A: recognize importance of including local needs to NAP S: Can include local needs to NAP P: Use and apply this information about local needs in NAP formulation processes
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Through direct engagement in key meetings, constant feedbacks and mutual learning. DNP the leading national organization in climate change adaptation will discuss the methodology in its creation process, this will lead to the approval of the methodology and a sense of ownership.

Next-user #2
Ministry of Agriculture
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Changes in KAS and P will be: K: Better knowledge about local needs A: recognize importance of including local needs to NAP S: Can include local needs to NAP P: Use and apply this information about local needs in NAP formulation processes
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Through direct engagement in key meetings, constant feedbacks and mutual learning. MADR the national leading organization in climate change adaptation will approve the methodology and apply to the agriculture sector due to the correct selection of variables. These will lead to cascading effects, allowing a regional process of adaptation planning.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Submitted on 2016-03-04 at 12:21 UTC

Coverage: &lt;Not defined&gt;

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #19

### Main Information

**Title:** Regional policy recommendations for NAP Regions I & II

**MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

**Main Type:** Workshops

**Sub Type:** Workshop

**Year of expected completion:** 2015

**Status:** Complete

### Next-user #1

Sub-National Authorities

**Knowledge, attitude, skills and practice changes expected in next-user:** Changes in KAS and P will be:

K: Better knowledge about local needs

A: recognize importance of including local needs to NAP

S: Can include local needs to NAP

P: Use and apply this information about local needs in NAP formulation processes

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through direct engagement, regional workshops, facilitation of the data and mutual learning. The regional stakeholders will know what the local agro-climatic risks are in their region and will get tailored information responding to farmers concerns. This will create a administrative enabling environment.

### Next-user #2

Regional Producers

**Knowledge, attitude, skills and practice changes expected in next-user:** The user will know what are the local agroclimatic risk that his region will experience, will have tailored information created alongside of the farmers concerns. This will create a social enabling environment.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through direct engagement, regional workshops, facilitation of the data and mutual learning.

Submitted on 2016-03-04 at 12:21 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

## Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	4

## Deliverable dissemination

**Open access restriction:** Limited Exclusivity Agreements

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

## Deliverable Metadata

**Description:** Adaptation strategy socialization report.

**Creator / Authors:** Fanny Holland

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2015\09\24

**Language:** Spanish

**Coverage:** Colombia (Montería)

## Deliverable Data sharing

[informe taller Monteria.docx](#)

## Deliverable #20

## Main Information

**Title:** Regional policy recommendations for NAP Regions III & IV

Submitted on 2016-03-04 at 12:21 UTC

<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

#### Next-user #1

Sub-National Authorities
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Changes in KAS and P will be: K: Better knowledge about local needs A: recognize importance of including local needs to NAP S: Can include local needs to NAP P: Use and apply this information about local needs in NAP formulation processes
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Through direct engagement, regional workshops, facilitation of the data and mutual learning. The regional stakeholders will know what the local agro-climatic risks are in their region and will get tailored information responding to farmers concerns. This will create a administrative enabling environment.

#### Next-user #2

Regional Producers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The user will know what are the local agroclimatic risk that his region will experience, will have tailored information created alongside of the farmers concerns. This will create a social enabling environment.e.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Through direct engagement, regional workshops, facilitation of the data and mutual learning.

#### Partners contributing to this deliverable

<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
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#### Deliverable Ranking

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

Submitted on 2016-03-04 at 12:21 UTC

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #21

Main Information	
<b>Title:</b> Data about land tenure, organizational status, infrastructure and security issues by region	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Activity faced out.

Next-user #1
Secretary of Innovation in the Agriculture Ministry

Submitted on 2016-03-04 at 12:21 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** This key-stake holder would have information about the socio-political context in which the NAMA is being plan, this will make them secure about the decision of supporting further research of the NAMA and will incentive them to take inform decisions.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through direct engagement in which constant feedback will be the rule, also there will be meetings with stake holders in which they will constructed a enabling environment. The confidence construct by the agreement CIAT-MADR will be a primary channel of communication.

#### Next-user #2

Secretary of Climate Change in the Environment Ministry

**Knowledge, attitude, skills and practice changes expected in next-user:** This key-stake holder would have information about the socio-political context in which the NAMA is being plan, this will make them secure about the decision of supporting further research of the NAMA and will incentive them to take inform decisions.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through direct engagement in which constant feedback will be the rule, also there will be meetings with stake holders in which they will constructed a enabling environment.

#### Next-user #3

Agriculture section of LEDS Colombia.

**Knowledge, attitude, skills and practice changes expected in next-user:** This key-stake holder would have information about the socio-political context in which the NAMA is being plan, this will make them secure about the decision of supporting further research of the NAMA and will incentive them to take inform decisions.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through direct engagement in which constant feedback will be the rule, also there will be meetings with stake holders in which they will constructed a enabling environment.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

Submitted on 2016-03-04 at 12:21 UTC

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #22

Main Information	
<b>Title:</b> Regional barriers analysis	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	
Next-user #1	
Secretary of Innovation in the Agriculture Ministry	

Submitted on 2016-03-04 at 12:21 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** This user and stake-holder will know what are the barriers to the public policy in which the NAMA will be embedded, this would lead to an attitude of deep planning and to recognize the local realities of the focal region of the NAMA.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through the facilitation of the analysis and the direct engagement an enabling environment will be reinforced. We will made especial emphasis in the benefits of the measure for rural development.

#### Next-user #2

Secretary of Climate Change in the Environment Ministry

**Knowledge, attitude, skills and practice changes expected in next-user:** This user and stake-holder will know what are the barriers to the public policy in which the NAMA will be embedded, this would lead to an attitude of deep planning and to recognize the local realities of the focal region of the NAMA.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through the facilitation of the analysis and the direct engagement an enabling environment will be reinforced. We will made especial emphasis in the benefits of the measure for climate change mitigation potential.

#### Next-user #3

LEDS Colombia

**Knowledge, attitude, skills and practice changes expected in next-user:** This user and stake-holder will know what are the barriers to the public policy in which the NAMA will be embedded, this would lead to an attitude of deep planning and to recognize the local realities of the focal region of the NAMA.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through the facilitation of the analysis and the direct engagement an enabling environment will be reinforced. We will made especial emphasis in the benefits of the measure for climate change mitigation potential.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	4

#### Deliverable dissemination

Open access restriction: Yes

Submitted on 2016-03-04 at 12:21 UTC

<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<a href="#">Livestock NAMA Colombia.pdf</a>
<a href="#">NINO Ganadería Bovina Vfinal (1).pdf</a>

## Deliverable #23

Main Information	
<b>Title:</b> Policy recommendations to second NAMA	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user #1
Ministry of Agriculture
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The MADR will get a policy recommendation that was constructed taking into account what they found esencial during the proces. Due to the involvement of multiple and relevant stake-holders the Ministry will know exactly the support of other stake-holder to the measure.

Submitted on 2016-03-04 at 12:21 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Direct engagement, facilitation, knowledge sharing, capacity building, regular meetings and enabling environment

#### Next-user #2

Ministry of Environment

**Knowledge, attitude, skills and practice changes expected in next-user:** The MADS will get a policy recommendation that was constructed taking into account what they found esencial during the proces. Due to the involvement of multiple and relevant stake-holders the Ministry will know exactly the support of other stake-holder to the measure.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Direct engagement, facilitation, knowledge sharing, capacity building, regular meetings and enabling environment

#### Next-user #3

LEDS Colombia

**Knowledge, attitude, skills and practice changes expected in next-user:** The LEDS will get a policy recommendation that was constructed taking into account what they found esencial during the proces. Due to the involvement of multiple and relevant stake-holders the Ministry will know exactly the support of other stake-holder to the measure.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Direct engagement, facilitation, knowledge sharing, capacity building, regular meetings and enabling environment

#### Next-user #4

Union of cattle raisers (Fedegan)

**Knowledge, attitude, skills and practice changes expected in next-user:** Fedegan will get a policy recommendation that was constructed taking into account what they found esencial during the proces. Due to the involvement of multiple and relevant stake-holders the Ministry will know exactly the support of other stake-holder to the measure.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Direct engagement, facilitation, knowledge sharing, capacity building, regular meetings and enabling environment

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #24

Main Information	
<b>Title:</b> Collaborative plan to include scientific evidence in the mitigation actions for the Peruvian highlands.	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
MINAM and subnational government

Submitted on 2016-03-04 at 12:21 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Awareness of importance of high land peat soils and the use of climate evidence for an action plan.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Continues Engagement, joint method development and capacity building.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

Submitted on 2016-03-04 at 12:21 UTC

**Deliverable #25**

Main Information	
<b>Title:</b> Women empowerment and gender differentiated development opportunities in the Peruvian central high Andes.	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
NARS, policy makers and researchers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge generated for next users.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
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Submitted on 2016-03-04 at 12:21 UTC

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

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #26

#### Main Information

<b>Title:</b> Decision making for turning grasslands into maca crops in the Peruvian central high Andes	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

#### Next-user

NARS, academia and national and sub-national policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publication

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

<b>Address gender and social inclusion aspect</b>	<Not defined>
<b>Potential for/ actual contribution to outcomes</b>	<Not defined>
<b>Level of shared ownership (partnerships across org.)</b>	<Not defined>

Submitted on 2016-03-04 at 12:21 UTC

<b>What is your personal perspective of the importance of this product</b>	<Not defined>
<b>Deliverable dissemination</b>	
<b>Open access restriction:</b>	<Not defined>
<b>License adopted:</b>	<Not defined>
<b>Dissemination Channel:</b>	<Not defined>
<b>Dissemination URL:</b>	<a href="#">&lt;Not defined&gt;</a>
<b>Deliverable Metadata</b>	
<b>Description:</b>	<Not defined>
<b>Creator / Authors:</b>	<Not defined>
<b>Author Identifier:</b>	<Not defined>
<b>Publication / Creation date:</b>	<Not defined>
<b>Language:</b>	<Not defined>
<b>Coverage:</b>	<Not defined>
<b>Deliverable Data sharing</b>	
<b>Deliverable files</b>	<Not defined>

**Deliverable #27**

<b>Main Information</b>	
<b>Title:</b> Specific and generic adaptive capacities of small holder farmers of the Peruvian Central high Andes	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	
<b>Next-user</b>	
NARS, academia and national and sub-national policy makers	
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge	

Submitted on 2016-03-04 at 12:21 UTC

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

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #28

#### Main Information

**Title:** Soil carbon stocks at different land uses in the Peruvian Central high Andes

Submitted on 2016-03-04 at 12:21 UTC

<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
NARS, academia and national and sub-national policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Submitted on 2016-03-04 at 12:21 UTC

Coverage: &lt;Not defined&gt;

**Deliverable Data sharing**

**Deliverable files**  
<Not defined>

**Deliverable #29****Main Information**

**Title:** Impact of land use change from grasslands to maca crop on soil carbon stocks

**MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

**Main Type:** Peer reviewed Publications

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

**Year of expected completion:** 2016

**Status:** <Not defined>

**Next-user**

NARS, academia and national and sub-national policy makers

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

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

**Partners contributing to this deliverable**

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

**Deliverable Ranking**

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

**Deliverable dissemination**

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

Submitted on 2016-03-04 at 12:21 UTC

<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #30

Main Information	
<b>Title:</b> Soil carbon dynamics model (joint with WLE)	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Models
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
NARS, academia and national and sub-national policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New model to illustrate soil dynamics
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Engagement and co-development

Partners contributing to this deliverable
---

Submitted on 2016-03-04 at 12:21 UTC

**Partner #1 (Responsible):** Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #31

#### Main Information

<b>Title:</b> Description of soil carbon dynamic model (joint with WLE)	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles

Submitted on 2016-03-04 at 12:21 UTC

**Year of expected completion:** 2017**Status:** <Not defined>**Next-user**

NARS, academia and national and sub-national policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** New knowledge**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Publications**Partners contributing to this deliverable****Partner #1 (Responsible):** Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa**Deliverable Ranking****Address gender and social inclusion aspect** <Not defined>**Potential for/ actual contribution to outcomes** <Not defined>**Level of shared ownership (partnerships across org.)** <Not defined>**What is your personal perspective of the importance of this product** <Not defined>**Deliverable dissemination****Open access restriction:** <Not defined>**License adopted:** <Not defined>**Dissemination Channel:** <Not defined>**Dissemination URL:** [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing**

Submitted on 2016-03-04 at 12:21 UTC

**Deliverable files**

&lt;Not defined&gt;

**Deliverable #32**

Main Information	
<b>Title:</b> Scientific evidence generated by CIP in the formulation of management plans by subnational government	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Discussion paper
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
NARS, academia and national and sub-national policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge generated
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

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

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

Submitted on 2016-03-04 at 12:21 UTC

Dissemination URL: [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**  
<Not defined>**Deliverable #33****Main Information****Title:** Final synthesis of recommendations in NAP**MOG # 1:** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Policy briefs - Briefing paper**Year of expected completion:** 2017**Status:** <Not defined>**Next-user**

NARS, academia and national and sub-national policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** Awareness of importance of regional climatic evidence for decision making.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Continuous engagement and joint development of evidence.**Partners contributing to this deliverable**

Submitted on 2016-03-04 at 12:21 UTC

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #34

#### Main Information

<b>Title:</b> Climate Smart Livestock Systems	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles

Submitted on 2016-03-04 at 12:21 UTC

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

Next-user
NARS, academia and national and sub-national policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New knowledge
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Submitted on 2016-03-04 at 12:21 UTC

### Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #35

### Main Information

**Title:** Climate evidence for NAMA coffee development

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

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

**Sub Type:** Research report

**Year of expected completion:** 2016

**Status:** <Not defined>

### Next-user

NARS, academia and national and sub-national policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** Awareness of science to guide implementation and readiness to use it.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Science will be developed involving all the stakeholder.

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

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

### Deliverable dissemination

**Open access restriction:** <Not defined>

Submitted on 2016-03-04 at 12:21 UTC

<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #36

Main Information	
<b>Title:</b> Gender disaggregated data on land use change, decision making and climate change perceptions	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Gender disaggregated data on empowerment, land use change, decision making and climate change perceptions. Still need to work in some variables.

Next-user
MINAM and subnational government
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Scientific evidence incorporated into the mitigations plans at national and subnational level and used in the formulation of development policies.

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Permanent consultation and interactions with high officials of MINAM and MINAGRI.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Intellectual Property Rights (confidential information)

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### Deliverable #37

Submitted on 2016-03-04 at 12:21 UTC

Main Information	
<b>Title:</b> Key Ecosystem Services and Ecological Intensification of Agriculture in the high Tropical Andes	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Discussion paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Discussion paper about the Ecological Intensification and key Ecosystem Services for Agriculture in the Peruvian Puna in times of land use change and climate change.

Next-user
Local stakeholders, subnational government, MINAM and MINAGRI
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Stakeholders and policy makers interested in the CSA alternatives presented in the discussion paper.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Active participation of CIP in MINAM and MINAGRI meetings to present scientific evidence and create a reflective environment.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

### Deliverable #38

Main Information	
<b>Title:</b> Geospatial analysis of land use change in the Peruvian Central high Andes	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
Local stakeholders, subnational government, MINAM and MINAGRI
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Policy makers at national and subnational level including the land use change data in the mitigation plans.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Publish extension material in collaboration with MINAM to inform civil society about the dramatic changes in land use change in the tropical high Andes.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Turin, Cecilia <c.turin@cgiar.org>, CIP - Centro Internacional de la Papa

Deliverable Ranking
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Submitted on 2016-03-04 at 12:21 UTC

<b>Address gender and social inclusion aspect</b>	1
<b>Potential for/ actual contribution to outcomes</b>	4
<b>Level of shared ownership (partnerships across org.)</b>	3
<b>What is your personal perspective of the importance of this product</b>	5

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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### Deliverable #39

#### Main Information

<b>Title:</b> The coffee rust crises in Colombia and Central America (2008–2013)	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Submitted on 2016-03-04 at 12:21 UTC

### Next-user

Scientists and practitioners

**Knowledge, attitude, skills and practice changes expected in next-user:** .

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

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

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

### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** other

**Dissemination URL:** <http://link.springer.com/article/10.1007%2Fs12571-015-0446-9>

### Deliverable Metadata

**Description:** .

**Creator / Authors:** .

**Author Identifier:** .

**Publication / Creation date:** .

**Language:** .

**Coverage:** .

### Deliverable Data sharing

Submitted on 2016-03-04 at 12:21 UTC

**Deliverable files**

&lt;Not defined&gt;

**Deliverable #40**

Main Information	
<b>Title:</b> Multiclass Classification of Agro-Ecological Zones for Arabica Coffee	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

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

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other
<b>Dissemination URL:</b> <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0140490</a>

Submitted on 2016-03-04 at 12:21 UTC

Deliverable Metadata	
<b>Description:</b>	.
<b>Creator / Authors:</b>	.
<b>Author Identifier:</b>	.
<b>Publication / Creation date:</b>	.
<b>Language:</b>	.
<b>Coverage:</b>	.

Deliverable Data sharing	
<b>Deliverable files</b>	<Not defined>

## Deliverable #41

Main Information	
<b>Title:</b> A bitter cup: climate change profile of global production of Arabica and Robusta coffee	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

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

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	1

Submitted on 2016-03-04 at 12:21 UTC

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

Deliverable dissemination	
<b>Open access restriction:</b> Yes	
<b>License adopted:</b> <Not defined>	
<b>Dissemination Channel:</b> other	
<b>Dissemination URL:</b> <a href="http://link.springer.com/article/10.1007%2Fs10584-014-1306-x">http://link.springer.com/article/10.1007%2Fs10584-014-1306-x</a>	

Deliverable Metadata	
<b>Description:</b> .	
<b>Creator / Authors:</b> .	
<b>Author Identifier:</b> .	
<b>Publication / Creation date:</b> .	
<b>Language:</b> .	
<b>Coverage:</b> .	

Deliverable Data sharing	
<b>Deliverable files</b>	
<Not defined>	

## Deliverable #42

Main Information	
<b>Title:</b> Projected Shifts in Coffea arabica Suitability among Major Global Producing Regions Due to Climate Change	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Submitted on 2016-03-04 at 12:21 UTC

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

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other
<b>Dissemination URL:</b> <a href="http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155">http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155</a>

Deliverable Metadata
<b>Description:</b> .
<b>Creator / Authors:</b> .
<b>Author Identifier:</b> .
<b>Publication / Creation date:</b> .
<b>Language:</b> .
<b>Coverage:</b> .

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

Submitted on 2016-03-04 at 12:21 UTC

**Deliverable #43**

Main Information	
<b>Title:</b> Prioridades para la adaptación al cambio Climático en Costa Rica	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
MAG
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> knowledge of where the opportunities for the adaptation planning and implementation should be led towards.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Sharing the information in the technical group.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other
<b>Dissemination URL:</b> <a href="https://ccafs.cgiar.org/node/47617#.Vtdao6Mo59B">https://ccafs.cgiar.org/node/47617#.Vtdao6Mo59B</a>

Submitted on 2016-03-04 at 12:21 UTC

Deliverable Metadata
<b>Description:</b> Costa Rica leads the efforts in Central America for Climate Change mitigation in the environmental and agricultural sector. On the other hand, the adaptation aspect is less developed ((MAG & CCAFS, 2013). A proposal for prioritization actions at the local and national level for the Agricultural sector's adaptation and the opportunities and barriers for implementation are stated in this document.
<b>Creator / Authors:</b> Claudia Bouroncle, Pablo Imbach, Peter Läderach, Beatriz Rodríguez, Claudia Medellín, Emily Fung, M Ruth Martínez-Rodríguez, Camila I. Donatti
<b>Author Identifier:</b> 0000-0001-8708-6318
<b>Publication / Creation date:</b> 2015
<b>Language:</b> spanish
<b>Coverage:</b> Costa Rica

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #44

Main Information	
<b>Title:</b> Guidelines/Priorities for Climate Change Adapation for Agriculture in Guatemala	
<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
MAGA (Ministerio de Agricultura, Ganadería y Alimentación)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge regarding the opportunities for the implementation of adaptation strategies for Guatemala's agricultural sector. Attitude and Skills: Communities strengthen human capacity and knowledge management.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Sharing technical information with decision makers as well as with stakeholders

Submitted on 2016-03-04 at 12:21 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

## Deliverable Ranking

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

## Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** cgspace

**Dissemination URL:** <https://cgspace.cgiar.org/rest/bitstreams/58440/retrieve>

## Deliverable Metadata

**Description:** <Not defined>

**Creator / Authors:** Claudia Bouroncle, Pablo Imbach, Peter Läderach, Beatriz Rodríguez, Claudia Medellín, Emily Fung, M Ruth Martínez-Rodríguez, Camila I. Donatti

**Author Identifier:** 0000-0001-8708-6318

**Publication / Creation date:** 2015

**Language:** Spanish

**Coverage:** Guatemala

## Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #45

## Main Information

**Title:** Guidelines/Priorities for Climate Change Adapatation for Honduras' Agricultural Sector

Submitted on 2016-03-04 at 12:21 UTC

<b>MOG # 1:</b> Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
SAG (Secretaria de Agricultura y Ganadería de Honduras)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge regarding the opportunities for the implementation of adaptation strategies for Honduras' agricultural sector.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> knowledge sharing with stakeholders and decision makers

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> cgspace
<b>Dissemination URL:</b> <a href="https://cgspace.cgiar.org/rest/bitstreams/48962/retrieve">https://cgspace.cgiar.org/rest/bitstreams/48962/retrieve</a>

Deliverable Metadata
<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> Claudia Bouroncle, Pablo Imbach, Peter Läderach, Beatriz Rodríguez, Claudia Medellín, Emily Fung, M Ruth Martínez-Rodríguez, Camila I. Donatti

Submitted on 2016-03-04 at 12:21 UTC

**Author Identifier:** 0000-0001-8708-6318

**Publication / Creation date:** 2015

**Language:** Spanish

**Coverage:** Honduras

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Our key next users were Ministries and Secretaries of agriculture, the environment and rural development organizations and climate finance institutes. These were key game changers because they represent actors particularly involved and/or interested in gender integration in agriculture, climate change, and rural development projects and programs within their institutions. They have shown continued interest and applied new knowledge and skills acquired on gender aspects and climate change in the rural sector. A validation study on the use of CIAT/CCAFS research in IFAD's Adaptation for Smallholder Agriculture Programme (ASAP) in Nicaragua, Uganda, Liberia and Comoros, shows that ASAP is increasingly using CIAT research to guide programs aimed at strengthening climate resilience in targeted countries.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Solicited input on knowledge products through listserve; facilitated knowledge sharing and dissemination of knowledge products through gender and climate change policy bulletin; engaged users in evaluation of gender activities; published blogs in Spanish on each knowledge product. But also shared positions within ministries and frequent exchange and contacts with ministry technicians and also higher level representatives, such as ministers and vice-ministers is key. Changes in knowledge and practice were supported by demand-driven research combined with "eye-opening" research, which is proving successful for maintaining the interest of next users and provide them with actionable research.</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> SAG Honduras, MINAM Peru and IDEAM Colombia contributed information for meta-analysis of policies related to climate change and agriculture in Latin American countries (article published in 2015). The validation study conducted on the outcome story related to IFAD/ASAP shows how CIAT/CCAFS climate research informs and influences decision making in IFAD. Moreover, a lessons learned document generated from our M&amp;R activities shows our learning on how we can improve our policy influence and changes in knowledge, attitude, skills and practice.</p>
<p><b>Lessons and implications for the next planning cycle:</b> Decision makers have recommended stakeholder engagement and knowledge exchange based on more direct communication, for example through forums and additional workshops. Due to limited resources in the next planning cycle we will explore webinar options. The validation study found that our next users think that learning should continue beyond provision of information: understanding how it is applied by next-user programs and what needs to be done to make such use more effective. In this respect, our M&amp;E activities are an important instrument to monitor, document and evaluate how next users apply our science.</p>

Submitted on 2016-03-04 at 12:21 UTC

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> Food Security Portal for Latin America and the Caribbean	
<b>Author:</b> Florencia Paz	<b>Subject:</b> platform, gender, food security, climate change
<b>Publisher:</b> El portal de seguridad alimentaria (IFPRI)	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Policy engagement	<b>Start date:</b> 2016-02-24
<b>End date:</b> 2016-02-24	<b>Is global:</b> No
<b>Country:</b> Colombia	<b>Keywords:</b> platform, gender, food security, climate change
<b>Highlight description:</b> The various CCAFS FS4 Gender products developed in 2015 were showcased on the IFPRI Portal de Seguridad Alimentaria para América Central y el Caribe. These products included the Peru and Colombia policy briefs, the policy brief on Guidelines for integrating gender, and the Bogotá workshop with rural women's organizations	
<b>Introduction / Objectives:</b> A key element of the impact pathway for the FS4 LAM gender activity has been the development and dissemination of useful research products and tools for gender integration in policies related to CC in the agricultural sector for LAM decision-makers. In 2015 we developed 3 policy briefs geared to helping decision-makers take gender considerations into account and disseminated these through our partner network and also via a stakeholder engagement strategy which included a bimonthly bulletin and blogs. A workshop in Bogotá with grassroots organizations in Colombia, including rural women's organizations, to help engage local gender-sensitive processes in policymaking on CC.	
<b>Results:</b> Our research products and Bogotá workshop developments were recognized and publicized on the IFPRI Platform for Seguridad Alimentaria para América Central y el Caribe towards the end of 2015, as useful knowledge products on integrating a gender perspective in climate change.	
<b>Partners:</b> IFPRI, CIP, CATIE	
<b>Links / Sources for further information:</b> <a href="http://cac.foodsecurityportal.org/regional-sub-portal-blog-entry/latin-america/588/disponibilidad-de-alimentos">http://cac.foodsecurityportal.org/regional-sub-portal-blog-entry/latin-america/588/disponibilidad-de-alimentos</a>	

Submitted on 2016-03-04 at 12:21 UTC

Project highlight Information #1	
<b>Title:</b> Top Downloaded CCAFS Publication	
<b>Author:</b> Mariana Tafur; Tatiana Gumucio	<b>Subject:</b> Colombia, gender, climate change, post-conflict
<b>Publisher:</b> CCAFS	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion Policy engagement	<b>Start date:</b> 2016-02-24
<b>End date:</b> 2016-02-24	<b>Is global:</b> No
<b>Country:</b> Colombia	<b>Keywords:</b> Colombia, gender, climate change, post-conflict
<b>Highlight description:</b> One of the policy briefs we developed in 2015 “Avances en la inclusión de intereses y necesidades de mujeres rurales en políticas públicas agropecuarias y de cambio climático: el caso de Colombia” was the top downloaded CCAFS publication in 2015 (email and communications reports attached.)	
<b>Introduction / Objectives:</b> A key element of the impact pathway for the FS4 LAM gender activity has been the development and dissemination of useful research products and tools for gender integration in policies related to climate change in the agricultural sector for Latin American decision-makers. To this end, in 2015 we developed 3 policy briefs geared to helping decision-makers take gender considerations into account and disseminated these through our partner network and also via a stakeholder engagement strategy which included a bimonthly bulletin and blogs. <a href="https://ccafs.cgiar.org/es/blog/mujeres-rurales-y-cambio-clim%C3%A1tico-construyendo-alanzas-y-sinergias-en-procesos-de-incidencia#.VsyZzKMo6Un">https://ccafs.cgiar.org/es/blog/mujeres-rurales-y-cambio-clim%C3%A1tico-construyendo-alanzas-y-sinergias-en-procesos-de-incidencia#.VsyZzKMo6Un</a> .	
<b>Results:</b> Our communications and dissemination strategy, and the timeliness of the knowledge product, contributed to the Colombia policy brief being the most downloaded CCAFS publication in 2015.	
<b>Partners:</b> Ecohabitats	
<b>Links / Sources for further information:</b> <a href="https://ccafs.cgiar.org/es/blog/%C2%BFqu%C3%A9-es-lo-que-las-mujeres-rurales-colombianas-realmente-necesitan#.VstGcqMo6UI">https://ccafs.cgiar.org/es/blog/%C2%BFqu%C3%A9-es-lo-que-las-mujeres-rurales-colombianas-realmente-necesitan#.VstGcqMo6UI</a>	

Submitted on 2016-03-04 at 12:21 UTC

Project highlight Information #1	
<b>Title:</b> Mesa Nacional de Adaptación	
<b>Author:</b> Mariana Tafur; Tatiana Gumucio	<b>Subject:</b> Colombia, climate change adaptation, gender
<b>Publisher:</b> CCAFS	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Gender and social inclusion Policy engagement	<b>Start date:</b> 2016-02-24
<b>End date:</b> 2016-02-24	<b>Is global:</b> No
<b>Country:</b> Colombia	<b>Keywords:</b> Colombia, climate change adaptation, gender
<b>Highlight description:</b> CCAFS/CIAT-Gender helped facilitate Colombia's first Mesa Nacional de Adaptación of 2015 at CIAT headquarters in Cali in March, with a focus on gender-inclusive climate change policy. The Mesa was coordinated through MINAM and ANDESCO	
<b>Introduction / Objectives:</b> A key element of the impact pathway for the FS4 LAM gender activity has been a stakeholder engagement strategy that includes state and civil society actors. To this end, we were able to broaden our engagement strategy in Colombia in 2015 through our co-facilitation of the Mesa Nacional in 2015; this included our presentation and facilitation of discussion on gender inclusion in climate change policy in the agricultural and environmental sectors	
<b>Results:</b> Over 60 individuals attended, representing various state and civil society organizations working in the agricultural and environmental sectors.	
<b>Partners:</b> MINAM-Colombia, ANDESCO	
<b>Links / Sources for further information:</b> <a href="https://ccafs.cgiar.org/node/48832#.VsyXNfnhCUk">https://ccafs.cgiar.org/node/48832#.VsyXNfnhCUk</a>	

Submitted on 2016-03-04 at 12:21 UTC

Project highlight Information #1	
<b>Title:</b> Lessons learned on research uptake by next users	
<b>Author:</b> Genowefa Blundo	<b>Subject:</b> Lesosns learned from M&E of the RBM Trial and validation studies
<b>Publisher:</b> CIAT	<b>Year:</b> 2015
<b>Project highlights types</b> Innovative non-research partnerships Policy engagement	<b>Start date:</b> 2016-02-24
<b>End date:</b> 2016-02-24	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> M&E, policy influence, lesson learned, RBM, IFAD
<p><b>Highlight description:</b> Agriculture's growing prominence in climate priorities is a major opportunity to enhance IFAD's positive impact on smallholders' engagement in value chains. IFAD has taken advantage of a learning alliance with the CGIAR's Climate Change Agriculture and Food Security Program (CCAFS) to improve project design and learning. The strength of CIAT's climate change research is in fact its focus on disseminating solid research results through partnerships. A lessons learned document was presented at a high level event at IFAD's headquarters on February 24th, 2016.</p>	
<p><b>Introduction / Objectives:</b> In order to understand the key elements of success of this participatory and user-oriented approach, CIAT is implementing a simple but effective monitoring and evaluation (M&amp;E) system. This includes two methods in particular:</p> <ol style="list-style-type: none"> <li>1. Monitoring results, commitments and challenges that arise when engaging with next users, through a Meeting Monitoring Template.</li> <li>2. Conducting external validation studies that evaluate the extent to which CIAT/CCAFS research determines knowledge, attitude, skills and practice changes (outcomes) in its next users.</li> </ol> <p>Based on this M&amp;E system, 3 main lessons have been learned during the past year and a half, which are relevant to policy makers and investors.</p>	

Submitted on 2016-03-04 at 12:21 UTC

**Results:** Research-for-development institutions provide sound research that is relevant for decision making at different levels to achieve sustainable and equitable development.

In engaging with next-users such as policy makers, rural development agency and climate finance investors it is key to:

- Understand and address knowledge demands in order to provide relevant and actionable science. This also involves the adequate packaging the information and dissemination of results beyond targeted users.
- Maintain and engage the curiosity of next users by providing “eye-opening” knowledge that changes the way they were thinking about specific issues.
- Successful use of information by nextusers combines demand-driven and “eyeopening” science.
- Reconcile the slower pace of sound research with the urgency of the decision-making cycle of different next users, in particular policy makers.
- Build relationships of trust through direct engagement and updates.
- Systematically understand how research is being applied by next users and what needs to be done to make this use more effective.

**Partners:** CIAT  
CCAFS

**Links / Sources for further information:** The Lessons Learned publication for IFAD is now available on CGSpace at:  
<https://cgspace.cgiar.org/handle/10568/71132>

Submitted on 2016-03-04 at 12:21 UTC

Project highlight Information #1	
<b>Title:</b> Successful communications on the Projected Shifts in Coffea arabica Suitability among Major Global Producing Regions Due to Climate Change	
<b>Author:</b> Ovalle-Rivera O, Läderach P, Bunn C, Obersteiner M, Schroth G	<b>Subject:</b> Coffea arabica, climate change, productivity
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications	<b>Start date:</b> 2015-01-01
<b>End date:</b> 2015-12-31	<b>Is global:</b> Yes
<b>Country:</b>	<b>Keywords:</b> Coffee, climate change, Coffee productivity
<b>Highlight description:</b> The news posted by national and international media shows that coffee, which ranks just after oil in its value among traded commodities and is grown in more than 60 tropical countries – with around 400 million cups sipped at each year – will be significantly hit by temperatures above two degrees Celsius and rainfall changes.	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> <Not defined>	
<b>Partners:</b> <Not defined>	
<b>Links / Sources for further information:</b> <a href="https://storify.com/mafermc85/media-spread-the-news-of-study-alerting-coffee-gro">https://storify.com/mafermc85/media-spread-the-news-of-study-alerting-coffee-gro</a>	

Submitted on 2016-03-04 at 12:21 UTC

Project highlight Information #1	
<b>Title:</b> Guidelines on gender integration in climate change policy	
<b>Author:</b> Tatiana Gumucio	<b>Subject:</b> <Not defined>
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Gender and social inclusion	<b>Start date:</b> 2016-03-03
<b>End date:</b> 2016-03-03	<b>Is global:</b> No
<b>Country:</b> Colombia El Salvador Guatemala	<b>Keywords:</b> gender, policy, instrument
<b>Highlight description:</b> Decision-makers from rural development organizations and a ministry of agriculture have used our “Guía para la integración del enfoque de género en políticas agropecuarias y de cambio climático en América Latina” as a reference tool in their work in their institutions.	
<b>Introduction / Objectives:</b> The “Guía” was one of three knowledge products that we developed in 2015, to support decision-makers to integrate gender in policy related to climate change. The Guía aims to provide next users a clear list of steps for including gender considerations in climate change policymaking. A dissemination strategy was developed for the Guía, which consisted of soliciting inputs and feedback from next users on a draft version, then incorporating these into the final product. We also disseminated the Guía via our gender and climate change policy listserve, bulletin, and a blog.	
<b>Results:</b> The NGO Ecohabitats, Gender Unit of the Guatemalan Ministry of Agriculture, and TRIFINIO report having taken the Guía into account as a reference tool in their stakeholder engagement work and institutional policymaking processes.	
<b>Partners:</b> CATIE, IUCN	
<b>Links / Sources for further information:</b> <a href="https://ccafs.cgiar.org/es/como-integrar-enfoque-genero-politicas-publicas#.VstGTqMo6Uk">https://ccafs.cgiar.org/es/como-integrar-enfoque-genero-politicas-publicas#.VstGTqMo6Uk</a>	

## 6. Activities

Activity #1	
<b>Title:</b> Support development and implementation of the coffee and livestock NAMA in Costa Rica	
<b>Description:</b> Costa Rica is currently working on 2 NAMAs of which the coffee NAMA is the most advanced, the livestock NAMA under conceptualization. Costa Rica is probably the most advanced country in terms of agricultural NAMA in LAM, and also globally. Furthermore is Costa Rica part of the Latin American Platform on Climate Change, which mission is to generate answers, from and for Latin America, for the global problem of climate change. Costa Rica is the ideal platform to showcase and share the NAMA experiences to the LAPC members and for LAPC to showcase and inform advances on NAMA globally.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 30-12-2017
<b>Leader:</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> Coffee NAMA is financed (see outcome statement) and support for the implementation stage is now required. For Livestock NAMA national strategy has been approved and funding is now required.

Activity #2	
<b>Title:</b> Preparation training of Latin American agricultural COP delegates	
<b>Description:</b> ACTIVITY COMPLETED in 2014: COP delegates from developing countries are often relatively unprepared when they attend the main event about the content and the negotiation dynamics. This weakens the delegates' influence on the outcome of events as well as their capacity to adequately represent the position of their country and address the particular challenges it faces. To achieve more influence on outcomes, delegates need (1) more knowledge about the complex relationship between climate, agriculture and food security, including issues of gender and social differentiation, relations with poverty, potential of low-carbon ag development, (2) insights in the negotiation dynamics at COPs and certain negotiation skills and (3) knowledge about positions of other countries regarding critical topics. In this course, we will inform delegates about the state of the art on climate and agriculture drawing on CCAFS and related science.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2014
<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> Complete	

Activity #3
<b>Title:</b> Improving climate decision-making in regional context in Central America through a social learning approach

Submitted on 2016-03-04 at 12:21 UTC

<b>Description:</b> ACTIVITY COMPLETED in 2015 DUE TO FACE OUT OF BI: The Central American Agricultural Council (CAC) has recently begun a process to improve technical coordination between ministries through the establishment of technical committees on food security, climate change and the Dry Corridor. In the relatively small countries of Central America, climate expertise is often thinly spread. The CAC offers a mechanism to build capacity in a coordinated way as well as to inform regional level decision-making. Also, CAC countries are planning to work towards a regional climate policy.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> Cancelled	<b>Justification:</b> This activity ended in 2015 due to lack of funding.

#### Activity #4

<b>Title:</b> Improving climate decision-making at national to local levels in Central America	
<b>Description:</b> ACTIVITY COMPLETED in 2015 DUE TO FACE OUT OF BI. This activity complements the previous activity by piloting an innovative approach to institutionalization of climate risk management, focusing on Guatemala as a pilot. Climate change has led to inter-ministerial planning and coordination and has revealed many new needs for new information to guide this process and enhance impact. We will focus on multi-level decision-making around climate management in the context of policy making on family agriculture initiatives. Social learning approaches will involve multistakeholder meetings to define objectives, derived from an information needs analysis, followed by a series of meetings to redesign strategies and protocols, using climate event response simulations to evaluate and internalize the procedures.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> Cancelled	<b>Justification:</b> This activity ended in 2015 due to lack of funding.

#### Activity #5

<b>Title:</b> Assistance to the COP-20 on UNFCCC negotiations related to the AFOLU sector	
<b>Description:</b> ACTIVITY DISCONTINUED IN 2015 DUE TO BUDGET CUTS. Peru will host COP 20 in 2014. Agreements to be reached at this COP will be determinant to achieve a Global Agreement on CC at COP 21 in Paris. Hence, the Government of Peru will benefit from knowing in depth the different positions of key countries involved in the climate, agriculture and forests negotiations (i.e. REDD+, LULUCF, AFOLU). Knowing how close or how far these positions are will help Peru to facilitate dialogue between parties. Additionally, the process offers opportunities to understand the perception of key countries' negotiators and key institutions on the role of "climate smart agriculture" to reduce GHG emissions and propose options for its inclusion in policy climate discussions. This activity will identify synergies and coordinate activities with CIFOR, ICRAF and CR	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Castro, Augusto <acastro@onfandina.com>, ONF-Andina - Office National des Forets-Andina	

Submitted on 2016-03-04 at 12:21 UTC

<b>Status:</b> Cancelled	<b>Justification:</b> This activity ended in 2014 due to lack of funding.
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#### Activity #6

<b>Title:</b> Influencing gender-inclusive climate change policies for Latin American countries.	
<b>Description:</b> Gender blind policies (i.e. those that do not explicitly consider gender issues) can often have unintended negative consequences for women. Thus, this activity will evaluate the current status of gender in climate change-related policies of several Latin American countries and provide recommendations for how to include gender	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Twyman, Jennifer <j.twyman@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> Peru and Colombia gender and climate change policy briefs and brief on Guidelines for integrating gender were disseminated via CIAT/CCAFS networks, including participants from 2014 Lima workshop; they were also disseminated at the 2015 Global Landscapes Forum and at the International Seminar on Rural Development in Bogota, Colombia. The Peru Policy brief has also been shared with contacts at Peru's Ministry of Environment and Ministry of Agriculture.

#### Activity #7

<b>Title:</b> Promoting the development of a High Andes-oriented agricultural NAMA in Peru	
<b>Description:</b> Peru has not even initiated the formulation of an agricultural NAMA. Current work on NAMAS is focused on the energy sector but agriculture is an important source on carbon emissions and could be an important contributor to mitigation efforts. On the other hands, prospects on land use related NAMAS are focused on the forestal sector with some consideration being paid to agriculture in the Amazon region. However, significant agro-ecosystems are located in the Highlands, where wetlands and natural rangelands soils hold enormous carbon stocks which are released to the atmosphere as a consequence of land use changes towards cultivation. There is evidence that climate change is promoting the encroachment of agriculture in these undisturbed soils. Measures are needed to preserve carbon stocks in these soils.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa	

Submitted on 2016-03-04 at 12:21 UTC

<p><b>Status:</b> On-going</p>	<p><b>Justification:</b> The close interaction with Directorate of Research and Knowledge Management of MINAM is very efficient. MINAM has been very supportive and has facilitated a platform for diffusion of CIP-CCAFS work. Although INIA has been under a restructure process during project's life, we were able to develop strong ties with the directorate and scientists that ensure the continuation of research afterwards. Although MINAGRI has not performed as expected is willing to collaborate and participate in events organized by MINAM. CIP becomes a catalyzer among these government offices that often do not work together.</p>
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### Activity #8

<p><b>Title:</b> Analysis of barriers to implement two NAMAs in Colombia</p>	
<p><b>Description:</b> Within a bilateral project (convenio) with the Colombian Ministry of Agriculture and Rural Development, CIAT is conducting the baseline study for two NAMAs that focus on carbon balance and economic evaluation of alternative low carbon developments. As a part of this project, CIAT/CCAFS will complement the baseline study with identifying barriers to implementation of the two NAMAs at the regional level. Barriers related to land tenure, organizational status, infrastructure and security issues will be considered, and policy recomendations to overcome these barriers will be proposed.</p>	
<p><b>Start date (dd-MM-yyyy):</b> 01-03-2014</p>	<p><b>End date (dd-MM-yyyy):</b> 31-12-2017</p>
<p><b>Leader:</b> Tapasco, Jeimar &lt;j.tapasco@cgiar.org&gt;, CIAT - Centro Internacional de Agricultura Tropical</p>	
<p><b>Status:</b> Cancelled</p>	<p><b>Justification:</b> The barrier analysis use in the NAMA application for the UNFCCC was done by the CIAT team. For the coming years the team will be refocusing on Honduras as in Colombia there is currently not much interest in the propose activities and there are not funds for the implementation of the related interventions.</p>

### Activity #9

<p><b>Title:</b> Taking an active role on NAP formulation in Colombia</p>	
<p><b>Description:</b> This activity aims to support Colombia with their NAP development and specifically to inform the government on regional adaptation needs. We will analyze the working documents on the Colombia NAP, participate in the planning meetings and contribute to the NAP formulation. CIAT/CCAFS then will support the prioritization of four (4) regions to carry out workshops with producers, technicians and local governments for participatory policy engagement, presenting and discussing the regional Ag. NAP. Finally we will feed back the outcomes of the regional meetings to the national level for inclusion in the formulation of the national Ag NAP.</p>	
<p><b>Start date (dd-MM-yyyy):</b> 01-03-2014</p>	<p><b>End date (dd-MM-yyyy):</b> 31-12-2017</p>
<p><b>Leader:</b> Tapasco, Jeimar &lt;j.tapasco@cgiar.org&gt;, CIAT - Centro Internacional de Agricultura Tropical</p>	

Submitted on 2016-03-04 at 12:21 UTC

<b>Status:</b> Cancelled	<b>Justification:</b> It was possible to prioritize strategic productive systems, problem areas and relevant actions. For the coming years the team will be refocusing on Honduras as in Colombia there is currently not much interest in the propose activities and there are not funds for the implementation of the related interventions.
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#### Activity #10

<b>Title:</b> (BILATERAL) Project with the Colombian Ministry of Agriculture (MADR) on Climate Change and Agriculture	
<b>Description:</b> The detailed activities of the project will only be defined in January each year but the bilateral aligned to this project will contribute to the field work and measurement that support the development of the NAMA's and the NAP.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Complete	

#### Activity #11

<b>Title:</b> (BILATERAL) Remote Sensing as a Monitoring Tool for Smallholder's Cropping Area Determination	
<b>Description:</b> This activity develops low-cost user-friendly platforms, equipment, software, tools, and methods for data register on cropping areas related to smallholding agriculture. Important results included the design and validation of an innovative unmanned aerial vehicle (UAV)-based on the technology. Air and space-borne remote sensing images at an appropriate spatial, spectral, and time resolutions, allows identifying cropping areas, species, plot sizes, and cropping systems. Problems in the application of remote sensing technology to smallholder agriculture require higher spatial, temporal and radiometric resolutions for crop discrimination are being addressed. CIP develops a UAV-based remote sensing platform that consists of: 1) the vehicle (e.g. multi-rotors, model planes, fixed wings, etc.); 2) sensors (includes digital red-green-blue bands, multispectral or thermal cameras; micro-radiometers; fluorescence sensors); and 3) the support interface frame containing the frame, microcomputer, power supply unit, and electronic cards allowing communication with both the radio control and the telemetry from the UAV's control unit.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Quiroz, Roberto <r.quiroz@cgiar.org>, CIP - Centro Internacional de la Papa	
<b>Status:</b> Complete	

<b>Title:</b> (BILATERAL) Crowdsourcing Crop Improvement: Evidence Base and Outscaling Model
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Submitted on 2016-03-04 at 12:21 UTC

<b>Description:</b> This activity complements the previous activity by piloting an innovative approach to institutionalization of climate risk management, focusing on Guatemala as a pilot. Climate change has led to inter-ministerial planning and coordination and has revealed many new needs for new information to guide this process and enhance impact. We will focus on multi-level decision-making around climate management in the context of policy making on family agriculture initiatives. Social learning approaches will involve multistakeholder meetings to define objectives, derived from an information needs analysis, followed by a series of meetings to redesign strategies and protocols, using climate event response simulations to evaluate and internalize the procedures.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
<b>Status:</b> Complete	

### Activity #13

<b>Title:</b> (BILATERAL): Crop Vulnerability Analysis across LAM	
<b>Description:</b> The proposed technical cooperation between CIAT and BID aims to contribute to a better understanding of the general effect of climate change on production and productivity of key crops in the region to guide decision makers and the Bank in the identification, design and execution of alternatives to adapt to these impacts and minimize vulnerability. Specifically this project will use climate change projections to analyze impacts on key crops, perform field experiments to determine the effect of soil temperature on crop production and disseminate findings as well as the methodology employed.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> Complete	

### Activity #14

<b>Title:</b> (BILATERAL): Sustainable development and land use-based alternatives to enhance mitigation and adaptation capacities in Amazon.	
<b>Description:</b> Project assists national environmental authorities and farmers in Colombia and Peru through a multi-scale approach for enhancing their adaptive and mitigation capacity in the Amazon by: i) providing to national authorities validated land use options designed jointly with rural communities that contribute to the design of low carbon development, and climate change mitigation and adaptation strategies ii) enhancing country capacity to assess cost-efficiency of the adoption of these options in terms of improving adaptive capacity while providing other co-benefits (carbon sinks enhancement, protection of natural forests and water ecosystem services important for local livelihoods); iii) improving the capacity to monitor land cover changes in order to assist monitoring of effectiveness of land-use based mitigation and adaptation national plans in Peru, and iv) identifying the likely pathways the countries may take towards sustainability in terms of ambitious climate protection and on which the mitigation-adaptation land use options might be framed.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Laderach, Peter <p.laderach@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> Project provides biophysical data for NAMA developments.

Submitted on 2016-03-04 at 12:21 UTC

**Lessons regarding your project activities and possible implications for the coming planning cycle:** ONF Andina faced out in 2014 and BI in 2015. The activities of CIAT in Colombia will refocus in Honduras in the coming years due to the lack of interest from the public sector and funds for implementation of related interventions. CIAT's work on gender, NAMAs in Costa Rica and CIP's work will continue.

Submitted on 2016-03-04 at 12:21 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-03 at 20:58 UTC

**Title:** LivestockPlus: Supporting low emissions development planning in the Latin American cattle sector

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2018
<b>Management liaison</b>	RP LAM - Latin America Region	<b>Mgmt. liaison contact</b>	Loboguerrero, Ana Maria <a.m.loboguerrero@cgiar.org>
<b>Lead organization</b>	CIAT - Centro Internacional de Agricultura Tropical - Colombia	<b>Project leader</b>	Rao, Idupulapati <i.rao@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

### Project is working on

Flaship(s)	Region(s)
FP3: Low Emissions Agricultural Development	RP LAM: Latin America

Bilateral project(s) contributing to this project
194 - MAFF(Japan) Environmental Protection using Traits Associated with Biological Nitrification Inhibition
195 - JIRCAS - Quantifying the BNI-residual effect from <i>B. humidicola</i> on N-recovery and N-use efficiency of the subsequent annual crops
206 - (CORPOICA) - Biological Nitrification Nnhibition (BNI) in pastures to help agriculture intensification and climate change mitigation
211 - (UNI-CAUCA) - Plan Nacional de Regalias
213 - (Cross CRP 3.7) - Quantifying enteric methane emissions from cattle grazing on improved forages

### Summary

The LivestockPlus consortium will enable development and implementation of Nationally Appropriate Mitigation Actions (NAMAs) for low emissions pasture development in the cattle sector in Costa Rica and Colombia by providing technical support and critical information and guidelines necessary to identify the best available mitigation options and support planning and policies for the scaling up of NAMAs. The target countries, are at intermediate and beginning stages of developing NAMAs for the cattle sector, respectively and provide sites representative of larger areas of pasture systems in the region. LivestockPlus will use these two countries as pilots to provide information while at the same time developing research products applicable to the NAMA discussions regionally and globally. By 2018, policy makers will use the information generated by LivestockPlus to support low emission development

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(LED) policy and its implementation in the cattle sector.

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## 2. Partners

### Partner #1

**Institution:** ICRAF - World Agroforestry Centre

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Rosenstock, Todd <t.rosenstock@cgiar.org>	Consistent implementation of the SAMPLES approach; developing new methods of GHG measurement and MRV systems Activity 2014-17 *Partner*.
Partner	Ordoñez, Jenny <j.ordonez@cgiar.org>	Activity 2014-19 *Partner*. Activity 2014-20 *Partner*.

### Partner #2 (Leader)

**Institution:** CIAT - Centro Internacional de Agricultura Tropical

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Rao, Idupulapati <i.rao@cgiar.org>	Principal investigator and advisor
Partner	Tapasco, Jeimar <j.tapasco@cgiar.org>	Activity 2014-19 *Partner*. Activity 2014-20 *Leader*.
Partner	Chirinda, Ngonidzashe <n.chirinda@cgiar.org>	Activity 2014-17 *Leader*.
Project Coordinator	Arango, Jacobo <j.arango@cgiar.org>	Jacobo is the project coordinator.

### Partner #3

**Institution:** CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

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

#### Contacts

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Type	Contact	Responsibilities and contributions
Partner	Chacon , Adriana <achacon@catie.ac.cr>	Activity 2014-17 *Partner*. Activity 2014-20 *Partner*. Activity 2014-19 *Leader*.

**Partner #4****Institution:** MAG - Ministerio de Agricultura**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Chacon, Mauricio <mchacon@mag.go.cr>	Activity 2014-17 *Partner*. Activity 2014-19 *Partner*. Activity 2014-20 *Partner*.

**Partner #5****Institution:** UNICAUCA - Universidad del Cauca**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Vivas, Nelson <nvivas@gmail.com>	Activity 2014-17 *Partner*. Activity 2014-19 *Partner*.

**Partner #6****Institution:** UNAL - Universidad nacional de Colombia - sede Medellin**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
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Partner	Barahona Rosales, Rolando <rbarahonar@unal.edu.co>	Activity 2014-17 *Partner*. Activity 2014-19 *Partner*. Activity 2014-20 *Partner*.
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## Partner #7

**Institution:** Unillanos - Universidad de los Llanos

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

### Contacts

Type	Contact	Responsibilities and contributions
Partner	Plazas, Camilo <cplazas1@hotmail.com>	Activity 2014-17 *Partner*. Activity 2014-19 *Partner*. Activity 2014-20 *Partner*.

## Partner #8

**Institution:** INTA - Instituto Nacional de Innovación y Transferencia en Tecnología Agropecuaria

**CCAFS Partner(s) allocating budget**

ICRAF - World Agroforestry Centre - Kenya
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### Contacts

Type	Contact	Responsibilities and contributions
Partner	Abarca, Sergio <sabarca@inta.go.cr>	GHG measurements and calculation of emission factors

**Partnerships overall performance over the last reporting period:** The partnership in Colombia has been strengthened and has been very successful operationally. Links with FP4-LAM in both Colombia and Costa Rica have made significant contributions towards the development of NINO and the NAMA concept, respectively.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** The link with FP4-LAM will be further strengthened to better position the LivestockPlus project in Costa Rica and to improve communication with partners. This will

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increase the role of all partners as key contributors to the outcomes.

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### 3. Locations

Project level	Latitude	Longitude	Name
Province	4.0471	4.0471	Meta-Piedmonte
Province	4.1209	4.1209	Meta-Altiplanura
Province	1.9982	1.9982	Cauca-Patia
Province	10.3979	10.3979	Chorotega
Province	10.3642	10.3642	Huetar Norte

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

Stakeholders in Costa Rica and Colombia have requested that the LivestockPlus consortium supports ongoing objectives related to the mitigation of GHG emissions. However, there are many obstacles that impede the development of programs that will actually achieve robust, verifiable and equitable mitigation actions. To overcome these obstacles and support the transition to more efficient and low emitting cattle systems, LivestockPlus will engage national ministries and agencies, donors, the private sector and local research institutions to jointly develop a research agenda and generate research outputs providing the critical information required for NAMAs. Research results from LivestockPlus are relevant to pasture areas of up to 350 million ha in Savanna and Hillsides agro-ecosystems (i.e. excluding the Amazon). Nonetheless, in this project our aim is to influence a total area of 1.1 million hectares that is 0.6 million hectares in Colombia and 0.5 million hectares in Costa Rica.

**Annual progress towards outcome (end of 2015):** • Scoping meetings conducted to set the research agenda and outline project engagement strategies with partners in the two focus countries (Colombia and Costa Rica).

- Multi-stakeholder platforms strengthened in Colombia and Costa Rica.
- Data on cattle production systems (type, state, management and distribution) compiled and collected by conducting baseline surveys in the two focal countries.
- In the two focal countries data collected on socioeconomic and biophysical components of cattle systems (including gender-disaggregated data).
- Feasibility and robustness of methodological options for monitoring, reporting and verification of enteric methane emission reductions in cattle production systems assessed through a review study.
- Two multi-stakeholder workshops (one in each of the target countries) conducted to take stock of variables that are routinely collected by cattle related enterprises of agencies and evaluate their relevance for emissions monitoring.
- LivestockPlus consortium contributes scientific information related to pasture management and measurements on greenhouse gas emissions that will be used in the NAMA application on cattle production in Costa Rica which will be submitted to a NAMA funding agency.

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**Annual progress towards project outcome in the current reporting cycle (2015):** Institutional links with principal Colombian livestock stakeholders (MADR, MADS, CIPAV, FEDEGAN) were strengthened, baseline socioeconomic and biophysical studies were conducted in Colombia, and a NAMA Information Note (NINO) on Livestock sector for Colombia was registered in the UNFCCC and the project supported the development of the new NAMA concept for Livestock sector in Costa Rica, which was presented at COP21. A scoping report on current status of NAMA for livestock sector in Costa Rica is being published by CCAFS. Results show that components of NAMA development are on-track to operationalize the NAMA in 2017.

The policy brief published on gender from LivestockPlus project shows that nonremunerated work and the role of women in livestock systems need to be considered explicitly.

All research products have been shared with key stakeholders (MADR, MADS, CIPAV, FEDEGAN, MAG, INTA, CORFOGA) and are available on the internet for open access.

LivestockPlus project team members are leading the technical component of the Livestock roundtables in Costa Rica. In Colombia, CIAT is co-leading the National Roundtable for Sustainable Cattle (MGS) Production, which consists of national/international public and private sector institutions and serves as a forum for planning and aligning research, development and policy efforts, and for exchanging results related to sustainable cattle production. Four workshops were also organized by the MGS to provide space for discussing issues related to sustainable cattle production. Baseline household surveys on socio-economic and biophysical aspects of the farms in three regions of Colombia were completed (300 farms per each region). A draft version of the manuscript on feasibility and robustness of methodological options for MRV of enteric methane emission reductions in cattle production systems is available. Four multi-stakeholder workshops/meetings were held in Colombia and Costa Rica to plan the activities and discuss relevant methodologies for the estimation of GHG emissions.

**Communication and engagement activities have contributed to achieving your Project outcomes:** Links to our research products have been shared with key stakeholders and are available on the internet with open access. Stakeholder workshops organized through the livestock roundtables were attended by the LivestockPlus project team. Key stakeholders of livestock sector (MADR, MADS, CIPAV, FEDEGAN) participated in a one-week long summer school course organized by CLIFF-LAMNET of CCAFS where climate change mitigation in livestock systems was discussed prominently and knowledge on recent tools, technologies and methods was shared. The project team members participated in national and international congresses, such as the CSA conference in Montpellier and the Colombian Congress on Silvopastoral systems.

**Evidence documents of progress towards outcomes:** [LivestockPlus Links to evidence of progress towards outcomes.docx](#)

**Annual progress towards outcome (end of 2016):** • Documentation of strengthened multiple stakeholder platforms and collected socioeconomic and biophysical baseline data.

- Initial data on GHG emissions will be available to inform NAMAs.
- Differences between GHG balances among different pasture production systems evaluated through LCAs in Colombia.
- Challenges and opportunities for developing livestock-based NAMAs in the selected countries identified.

**Annual progress towards outcome (end of 2017):** • Identification and testing of proxies for enteric methane emission

- Mitigation options for cattle systems in Colombia identified (field measurements, modelling).
- Article on LCA of cattle systems in Costa Rica and Colombia
- MAC curves.

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- Methods for MRV in pasture NAMAs documented and guidelines of SAMPLES for cattle production systems extended.
- Implementation of livestock NAMA is expected to start in Costa Rica.
- Information generated from action areas will inform mitigation opportunities and Colombia's NAMA formulation.

**Annual progress towards outcome (end of 2018):** • Opportunities and challenges in use of MRV on cattle sector evaluated.

- Low cost MRV system in place for Livestock NAMA in the two target countries.
- NAMA application from Colombia.
- Training program materials developed to strengthen capacities in GHG research.
- Paper prepared on lessons learnt during the development of NAMAs from a policy perspective.
- Policy brief prepared to suggest instruments to increase adoption and upscaling of improved cattle production systems contributing to LED.

**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 theory of change is that the engagement of key stakeholders (i.e., policy makers and livestock producer associations) and the provision of critical technical information will inform institutions, technology, management and policy innovations, which collectively contribute to catalyze the transformational changes needed to reduce GHG emissions and increase productivity in the livestock sector. In 2015, we learnt that wide stakeholder engagement provides us with opportunities to synergize our efforts with the efforts of others allowing for more efficient use of limited resources. Therefore, there is stronger evidence on the necessity and benefits of stakeholder engagement to catalyze change.

## 4.2 Contribution to CCAFS Outcomes

**RP LAM - Outcome 2019:** National governments formulate and implement NAMAS and LEDS based on improved data on smallholder agricultural GHG emissions and implement equitable policies to strengthen linkages among environment and agriculture in order to avoid deforestation from commodity agriculture, promote restoration to increase carbon sequestration and reduce GHG emissions from livestock and commodities. Research organizations generate improved data on smallholder agricultural GHG emissions. Local governments contribute to the development of NAMAS and LEDS action plans at local level.

**Indicator #1:** FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

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2019	
<b>Target value:</b> 2 NAMAs	<b>Cumulative target to date:</b> Cannot be Calculated
<p><b>Target narrative:</b> Governmental organizations and the private sector will be using - in their Low Emission Development (LED) strategies -best-fit mitigation options identified by the LivestockPlus consortium. In addition, variables that are routinely collected by cattle related enterprises (milk quality, animal productivity, etc) will be evaluated for their relevance to act as proxies for emissions monitoring, reporting and verification in the developed NAMAs. The inclusive approach adopted in this project will enable exploration and/or development of feasible upscaling packages. Therefore, in 2015, a cattle NAMA for Costa Rica will be submitted to a NAMA funding agency and by 2019, if the NAMA is accepted, a NAMA implementation plan will be developed and subsequently implemented. On the other hand, in Colombia, by 2019, a NAMA on improved pastures for the cattle sector will be registered with UNFCCC.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>	

2015		
<b>Target value:</b> 1 NAMA	<b>Cumulative target to date:</b> Cannot be Calculated	<b>Target achieved:</b> 1.0
<p><b>Target narrative:</b> In 2015 a Livestock NAMA for Costa Rica will be submitted to a NAMA financing agency. LivestockPlus consortium will contribute scientific information related to pasture management and measurements on greenhouse gas emissions that will inform implementation of the cattle NAMA in Costa Rica. This livestock NAMA will be a joint outcome with the CCAFS-FP4.</p>		
<p><b>Narrative for your achieved targets, including evidence:</b> Progress towards the development of NAMAs has been made as evidenced by the NINO (in Colombia) that was submitted to the UNFCCC and the Livestock NAMA concept presented at COP21 by MAG of Costa Rica. In Costa Rica project team members have collaborated in specific topics in the Livestock NAMA concept presented at COP21 by MAG. Project team members have provided technical support in advancing the NAMA development process and are co-authors of the NINO for Colombia.</p>		
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> &lt;Not defined&gt;</p>		
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Costa Rica's NAMA concept included a description of the activities included into the NAMA that are performed by women and in which women have a role in the decision-making.</p>		

2016	
<b>Target value:</b> 1	<b>Cumulative target to date:</b> Cannot be Calculated
<p><b>Target narrative:</b> By 2016 the project will contribute towards creation of stakeholder platforms and the needed technical information for developing an outline of a NAMA application on improved pastures for the cattle sector of Colombia. Mitigation potential of different cattle production systems estimated in Costa Rica.</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> The project will influence the NAMA to include aspects that promote equality at farm and across the livestock value chain.</p>	

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

**Indicator #2:** FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

2019		
<b>Target value:</b> 0.5 million hectares in Costa Rica 0.6 million hectares in Colombia	<b>Cumulative target to date:</b> Cannot be Calculated	
<b>Target narrative:</b> By 2019, policy makers in Colombia and Costa Rica will be using the information generated by the LivestockPlus consortium to support low emission development (LED) policy and its implementation in the cattle sector. If successfully adopted, scaled up practices are estimated to reduce emissions by 10% and improve cattle productivity by 20% thus contributing towards both food security and climate change mitigation.		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		

2015		
<b>Target value:</b> 0.2 million hectares in Chorotega region in Costa Rica	<b>Cumulative target to date:</b> Cannot be Calculated	<b>Target achieved:</b> 0.02
<b>Target narrative:</b> Research informed initiatives during NAMA implementation will lead to scaling up of low emission cattle systems in Chorotega region of Costa Rica.		
<b>Narrative for your achieved targets, including evidence:</b> While it is still too early to demonstrate the influence of the project on the expected target value, the project team envisage that implementation of the Livestock NAMA will lead to pasture improvement, increased livestock productivity and reduced GHG emissions in Chorotega region and in other regions as the NAMA is countrywide. We estimate that the target area may have benefited through technology and knowledge sharing using twenty pilot farms in the Chorotega region.		

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2015	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>	
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Costa Rica's NAMA concept included a description of the activities included into the NAMA that are performed by women and in which women have a role in the decision-making. A consultant for CCAFS-FP3 generated a report with recommendations for priority actions for gender research in Costa Rica.	

2016	
<b>Target value:</b> 0.3	<b>Cumulative target to date:</b> Cannot be Calculated
<b>Target narrative:</b> Research informed initiatives during NAMA implementation will lead to scaling up of low emission cattle systems in Huetar Norte region of Costa Rica.	
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> The project will influence the NAMA to include aspects that promote equality at farm and across the livestock value chain.	

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

### 4.3 Other Contributions

#### Contribution to other CCAFS Impact Pathways

Activity 2014-19: Consultative processes with the cattle sector actors (e.g. Chamber of Commerce, Meat Commission, Cooperatives, and Association of producers) through the roundtables (in Costa Rica PITTA and Mesa Ganadera) will contribute towards the identification of opportunities and barriers for upscaling mitigation actions and the related MRV systems. Within this result capacity building for technicians will contribute to the impact of the other activities.

## Collaborating with other CRPs

Livestock and Fish
<b>Description of collaboration:</b> A polytunnel was constructed; a Fourier transform infrared spectroscopy (FTIR)-gasmeter-DX4040 gas analyzer purchased through collaboration with Livestock & Fish CRP and this recent tool provides reliable GHG measurements with high precision and true multi-compound analysis capability. This combination of tools will enable us to test low-emission options and MRV techniques.
<b>The achieved outcome contributions:</b> <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> Colombian government registers in UNFCCC a NAMA Information Note (NINO) developed with LivestockPlus (Joint FP4-LAM).</p>
<p><b>Outcome statement:</b> A NAMA Information Note (NINO) for Livestock sector in Colombia was submitted to the UNFCCC in September 2015. The NINO was developed by Colombian Ministry of Agriculture and Rural Development (MADR) and Ministry of Environment and Sustainable Development (MADS) in collaboration with partners including CIAT, CIPAV and FEDEGAN. The document aims to identify mitigation actions feasible under specific conditions of livestock production areas in Colombia, estimating physical and financial requirements for design and implementation of the NAMA.</p>
<p><b>Research Outputs:</b> Determinación del potencial de reducciones de gases de efecto invernadero en sistemas silvopastoriles en el proyecto “Análisis de Sistemas Productivos en Colombia”). Annex I of the NINO MADR-CIAT-GASA. (2014). Potencial de mitigación de 4 cultivos frutales. Bogotá: MADR-CIAT. MADR-CIPAV-CIAT. (2014). Carbono-eficiencia de sistemas silvopastoriles y pasturas mejoradas. Bogotá: MADR  Fisher et al. 1994. Nature 371: 236-238.  Rao et al. 2015. Tropical Grasslands–Forrajes Tropicales 3: 59-82.  Rao et al. 2014. Rural21 4: 12-15.  Rudel et al. 2015. Ambio 44: 685-693.  Subbarao et al. 2009. Proceedings of the National Academy of Sciences (USA) 106: 17302-17307.  Jarvis et al. 2010. Journal for Nature Conservation 18:180–188.</p>
<p><b>Research Partners:</b> Center for Research in Sustainable Farming Systems (CIPAV)  CCAFS</p>
<p><b>Activities that contributed to the outcome:</b> CIAT co-authored the NINO, with major contributions to the section on improved pastures (eco-efficient practices).  The LivestockPlus team supported the Colombian Ministry of Agriculture and Rural Development by providing estimates on the mitigation potential of technical alternatives related to pasture based production systems in different agroecosystems. CIAT and partners provided data on carbons stocks and emissions from intensive silvopastoral systems.  The team participated in the event on exchanging experiences from Colombia and Costa Rica organized by the Colombian LEADS, UNDP and FEDEGAN in June 2015.  Interaction among multistakeholders in several meetings contributed to the design of NINO.</p>
<p><b>Non-research Partners:</b> Ministry of Agriculture and Rural Development (MADR)  Ministry of Environment and Sustainable Development (MADS)  Center for Research in Sustainable Farming Systems (CIPAV)  Federación Colombiana de Ganaderos (FEDEGAN)</p>
<p><b>Output Users:</b> Ministry of Agriculture and Rural Development (MADR), Colombia  Ministry of Environment and Sustainable Development (MADS), Colombia  Center for Research in Sustainable Farming Systems (CIPAV)</p>
<p><b>How the output was used:</b> CIAT co-authored the NINO.  Based also on CIAT science, the NINO proposes the implementation of silvopastoral systems, intensive silvopastoral systems and eco-efficient practices (improved pastures) in conventional pastoral systems; identifies financing mechanisms for the project and outlines an MRV system.  Annex I of NINO is based on CIAT science.</p>

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**Evidence of the outcome:** NINO -section H on UNFCCC website:

[CIAT is one of the authors of the NINO; Annex I of the NINO is a full study by CIAT](http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1</a></p>
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## Citations:

MADR-CIAT-GASA. 2014

MADR-CIPAV-CIAT. 2014

Fisher et al. 1994

Rao et al. 2015

Jarvis et al. 2010

**References:** NINO: NINO -section H on UNFCCC website:

[MADR-CIAT-GASA. \(2014\). Potencial de mitigación de 4 cultivos frutales. Bogotá: MADR-CIAT.](http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama>NamaSeekingSupportForPreparation.aspx?ID=150&viewOnly=1</a></p>
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MADR-CIPAV-CIAT. (2014). Carbono-eficiencia de sistemas silvopastoriles y pasturas mejoradas. Bogotá: MADR

Fisher, M. J., I. M. Rao, M. A. Ayarza, C. E. Lascano, J. I. Sanz, R. J. Thomas and R. R. Vera 1994 Carbon storage by introduced deep-rooted grasses in the south American savannas. *Nature* 371: 236-238.

Rao, I., Peters, M., .....Rudel, T. (2015). LivestockPlus: The sustainable intensification of forage-based agricultural systems to improve livelihoods and ecosystem services in the tropics. *Tropical Grasslands* 3: 59-82.

Jarvis, A., Touval, J. L., Castro, M., Sotomayor, L. and Graham, G. 2010. Assessment of threats to ecosystems in South America. *Journal for Nature Conservation* 18:180–188.

Livestock roundtable Colombia: <http://mesaganaderiasoste.wix.com/principal>

**The primary 2019 outcome indicator that this case study is contributing to:**

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

FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

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

**Year:** 2015

**Annexes uploaded:** <Not defined>

### Outcome case study #2

**Title:** CIAT-MAG-CATIE collaboration supported the process leading to Low Emission Livestock Strategy Costa Rica (Joint FP4-LAM/FP3-LivestockPlus)

**Outcome statement:** In 2015, CIAT-MAG-CATIE collaboration supported the final stages of the process of the Low Emission Livestock Strategy (Estrategia Nacional para el Desarrollo de la Ganadería Baja en Carbono, ENDGBC) in Costa Rica, which is the 2015-2034 policy framework for the livestock sector. CIAT-MAG facilitated workshops and supported the development of the Livestock NAMA program support. CIAT-MAG also facilitated regional commissions on livestock, PITTA low carbon livestock research and supported the management of the process.

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**Research Outputs:** The outputs from the CIAT-MAG-CATIE collaboration are:

- The First Pasture Congress with sharing of knowledge on pasture management for livestock production (2015), where the National Network of Pastures and Forages was launched.
- Action Plan of Livestock NAMA program support with defined role for actors involved
- Complementarity of supporting organizations and programs to achieve the concrete objectives of the Livestock NAMA program support.
- Summary of actions/lessons learned and systematization of the process
- A scoping report on the current state of Livestock NAMA
- Official Newsletter of the systematization of the National Low Carbon Livestock Plan
- Dissemination in newspapers, blog posts and press conferences.

**Research Partners:** CCAFS

Tropical Agricultural Research and Higher Education Center (CATIE)  
National Institute of Agricultural Innovation and Technology Transfer (INTA)  
World Agroforestry Centre (ICRAF)

**Activities that contributed to the outcome:** The final stages of the EDGBC were supported by CIAT-MAG collaboration, which facilitated a series of workshops, the implementation of regional livestock commissions, and the implementation of the Low Carbon Livestock PITTA (research body). The project also supported the launch of the National Network of Pastures and Forages; the First Pasture Congress to share knowledge on pasture management practices for sustainable livestock production. The project trained Livestock Scientist, Mr. Diego Tovar from CATIE and two researchers from INTA on GHG quantification for the Livestock NAMA. CIAT has complemented the instrument for the baseline survey (to be applied in 1,000 farms in Costa Rica) with gender focused questions.

**Non-research Partners:** Ministry of Agriculture and Livestock (MAG) of Costa Rica

**Output Users:** Ministry of Agriculture and Livestock (MAG) of Costa Rica

Mesa Ganadera (Livestock roundtable)  
PITTA Ganadería Baja en Carbono (Research and Agricultural Technology Transfer Programme)  
Comisión Nacional de Ganadería (National livestock committee)  
Comisiones Regionales de Ganadería (Regional livestock committees)  
CAN (Consejo Agropecuario Nacional) (National agriculture and livestock council)

**How the output was used:** The collaboration supported the CAN reach agreement which will support the future process of implementation of the EDGBC. The collaboration also supported a priority line of action in the EDGBC, which is the inception of the National Network of Pastures and Forages.

**Evidence of the outcome:** Final report ENDGBC Costa Rica 2015-2034.

<http://www.mag.go.cr/bibliotecavirtual/a00366.pdf>

Summary of the ENDGBC Costa Rica:

<http://www.mag.go.cr/bibliotecavirtual/a00367.pdf>

NAMA Livestock Costa Rica 2015.

<http://www.mag.go.cr/bibliotecavirtual/a00368.pdf>

Presentation of Dr. Rolando Barahona (Colombian National Program) at the "Congreso lechero" in Costa Rica:

<https://prezi.com/aijejwvudaz1/livestock-nama-in-costa-rica/>

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**References:** Final report ENDGBC Costa Rica 2015-2034.

<http://www.mag.go.cr/bibliotecavirtual/a00366.pdf>

Summary of the ENDGBC Costa Rica:

<http://www.mag.go.cr/bibliotecavirtual/a00367.pdf>

NAMA Livestock Costa Rica 2015.

<http://www.mag.go.cr/bibliotecavirtual/a00368.pdf>

Presentation of Dr. Rolando Barahona (Colombian National Program) at the " Congreso lechero" in Costa Rica:

<https://prezi.com/aijejwvudaz1/livestock-nama-in-costa-rica/>

Project to Support the Implementation of NAMAs in Costa Rica: This is a project funded by the CIAT- CCAFS, managed by FITTACORI and implemented by MAG, in order to develop activities contributing to the mitigation and adaptation of the agricultural sector to climate change. (<http://namanews.org/news/2015/03/12/costa-rica-leads-the-way-towards-sustainable-livestock-management/>)

**The primary 2019 outcome indicator that this case study is contributing to:**

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

FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

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

**Year:** 2015

**Annexes uploaded:** <Not defined>

Submitted on 2016-03-03 at 20:58 UTC

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

**FP3 - MOG # 1:** Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

<Not defined>

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

<Not defined>

#### Major Output groups - 2014

**FP3 - MOG # 1:** Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

**Brief bullet points of your expected annual 2014 contribution towards the selected MOG**

<Not defined>

**Brief summary of your actual 2014 contribution towards the selected MOG:**

<Not defined>

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2014 outputs:**

<Not defined>

#### Major Output groups - 2015

Submitted on 2016-03-03 at 20:58 UTC

**FP3 - MOG # 1:** Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

<Not defined>

**Brief summary of your actual 2015 contribution towards the selected MOG:**

A polytunnel was constructed and Fourier-transform-infrared-spectroscopy-(FTIR)-Gaset-DX4040 gas analyzer purchased (through collaboration with Livestock&Fish-CRP) that provides reliable GHG measurements with high precision and true multi-compound analysis capability. In Costa Rica, the project contributed funds to increase the coverage of INTA-CATIE-FONTAGRO project to measure GHG through SF6 methods.

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

<Not defined>

**Summary of the gender and social inclusion dimension of the 2015 outputs:**

Colombia: baseline surveys conducted with some questions on gender that accounted for remunerated work. The aim is to complement available gender data with qualitative data in pilot farms from different regions in 2016. Costa Rica: a consultant for CCAFS-FP3 generated a report with recommendations for priority actions for gender research.

### Major Output groups - 2016

**FP3 - MOG # 1:** Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

Collecting data on GHG balances including enteric fermentation, soil C stocks, and soil emissions will be done using low cost methods proposed through the SAMPLES programme; with modifications where necessary.

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

The GHG balances will be related to livestock productivity and will be reported as emission intensities. The aim is to identify options that reduce GHG emissions without increasing gender and social inequalities.

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

Submitted on 2016-03-03 at 20:58 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Data on cattle production systems (type, state, management and distribution): baselines (CATIE and CIAT)	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
Governmental organizations of Costa Rica (MAG) and Colombia (MADR)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge from baseline information on type, state, management and distribution of different pasture-based cattle production systems in the target regions/sub-regions in both countries. This knowledge will contribute towards defining indicators for the MRV (monitoring, reporting and verification) system that is needed to implement NAMA on cattle production for each country.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Chacon , Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza
<b>Partner #2:</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> Effective Date Restriction - Embargoed period

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<b>Restricted embargoed date:</b>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #2

#### Main Information

<b>Title:</b> Data on GHG emissions and soil carbon stocks in cattle production systems	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

#### Next-user

Governmental organizations in Costa Rica (MAG) and Colombia (MADR) and private sector partners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge from baseline information on GHG emissions and soil carbon accumulation from different pasture-based cattle production systems in the target regions/sub-regions in both countries will contribute towards defining indicators for the MRV (monitoring, reporting and verification) system that is needed to implement NAMA on cattle production for each country.

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Arango, Jacobo <j.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #3:** Barahona Rosales, Rolando <rbarahonar@unal.edu.co>, UNAL - Universidad nacional de Colombia - sede Medellin

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** <Not defined>

**License adopted:** <Not defined>

**Dissemination Channel:** <Not defined>

**Dissemination URL:** [<Not defined>](#)

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

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**Deliverable #3**

Main Information	
<b>Title:</b> Policy brief on differences between GHG balance among improved pasture or silvopastoral (including LCA)	
<b>MOG # 2:</b> Decision support for identifying and prioritizing low-emissions CSA options, including synergies and tradeoffs with development objectives	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Governmental organizations in Costa Rica (MAG) and Colombia (MADR) and private sector partners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Information contained in the policy brief contributes towards implementing NAMA on cattle production in Costa Rica and in preparing and submitting the NAMA application on cattle production based on improved pastures in Colombia
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interactions in meetings and workshops will be used as a strategy for engagement and knowledge sharing

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Barahona Rosales, Rolando <rbarahonar@unal.edu.co>, UNAL - Universidad nacional de Colombia - sede Medellin
<b>Partner #2:</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

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

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<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> Peer reviewed publication on mitigation options for cattle systems in target countries (CATIE and CIAT)	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
Scientific community, policy makers, livestock farmer associations
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> All users mentioned above will benefit from new knowledge on mitigation options for the cattle sector within the regions
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Wider dissemination of publications through web, national, regional and international conferences and workshops.

Submitted on 2016-03-03 at 20:58 UTC

### Partners contributing to this deliverable

**Partner #1 (Responsible):** Chacon , Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

**Partner #2:** Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre

**Partner #3:** Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

### Deliverable Ranking

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

### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

### Deliverable Metadata

<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> <Not defined>
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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #5

Submitted on 2016-03-03 at 20:58 UTC

Main Information	
<b>Title:</b> Methods for pasture NAMA documented (GHG quantification lessons) and extended guidelines for SAMPLES	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
Government organizations and universities
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Skills of young researchers in making measurements on GHG balance including soil carbon accumulation improved at national and regional level
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Training workshops targeting younger researchers in the region to build capacity on quantifying emissions for NAMAs on cattle production

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre
<b>Partner #2:</b> Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
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<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #6

Main Information	
<b>Title:</b> Review of opportunities and challenges in use of MRV systems for NAMA on cattle production	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Tools and Computer Software	<b>Sub Type:</b> Tools
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
Government institutions in Costa Rica and Colombia
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Change in practice of use of tier 2 factors in the place of tier 1 factors for MRV system to report on emissions at national level
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Facilitation, engagement and knowledge sharing strategies will be used.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre

Submitted on 2016-03-03 at 20:58 UTC

**Partner #2:** Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #7

#### Main Information

<b>Title:</b> Data on socioeconomic and biophysical components of cattle systems including gender-disaggregated data
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

Submitted on 2016-03-03 at 20:58 UTC

<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Survey data for Llanos and Cauca in Colombia We designed and implemented 300 surveys each in three sub-regions: Patía (Cauca department) in sub-humid hillsides agroecosystem, and Altillanura and Piedemont (Meta department) in humid savannas agroecosystem. Then we applied a cluster algorithm to identify different types of farms in these three regions. In addition, we collected geographic data about landscape, biophysical factors and social information in these three sub-regions.

#### Next-user

Governmental organizations of Costa Rica (MAG) and Colombia (MADR)

**Knowledge, attitude, skills and practice changes expected in next-user:** Knowledge from baseline information on socioeconomic conditions including gender analysis in the target regions/sub-regions in both countries. This knowledge will help the government organizations to improve the understanding of socioeconomic factors restricting adoption of best-fit mitigation options.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Arango, Jacobo <j.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #3:** Chacon, Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

Submitted on 2016-03-03 at 20:58 UTC

<b>Restricted embargoed date:</b>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> -1
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #8

#### Main Information

<b>Title:</b> MAC curves integrating biophysical and socioeconomic data based on secondary data (CATIE)	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

#### Next-user

Governmental organizations of Costa Rica (MAG) and Colombia (MADR)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Analysis of secondary data from the target regions/sub-regions in both countries will contribute towards trade-off analysis and creation of MAC curves.

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**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b>
<Not defined>

## Deliverable #9

Submitted on 2016-03-03 at 20:58 UTC

Main Information	
<b>Title:</b> Policy brief on the potential gender impacts of cattle based NAMAs in Latin America (ICRAF)	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Governmental organizations of Costa Rica (MAG) and Colombia (MADR)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Implications of gender analysis considered by policy makers in implementing NAMA on cattle production systems
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

Deliverable Metadata
<b>Description:</b> <Not defined>

Submitted on 2016-03-03 at 20:58 UTC

<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> <Not defined>
<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

#### Deliverable Data sharing

**Deliverable files**  
<Not defined>

### Deliverable #10

Main Information	
<b>Title:</b> Journal article on LCA of cattle systems in Costa Rica and Colombia	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user
Researchers, extensionists and policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Implications of LCA of cattle systems are considered by policy makers in implementing NAMA in Costa Rica and Colombia. Wider dissemination of publication through web, national, regional and international conferences and workshops.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Barahona Rosales, Rolando <rbarahonar@unal.edu.co>, UNAL - Universidad nacional de Colombia - sede Medellin
<b>Partner #3:</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

Submitted on 2016-03-03 at 20:58 UTC

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

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: <Not defined>
Dissemination URL: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #11

Main Information	
<b>Title:</b> MAC curves and evaluations of technical efficiency obtained by integrating biophysical and socioeconomic data collected	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data

Submitted on 2016-03-03 at 20:58 UTC

<b>Year of expected completion:</b> 2018
<b>Status:</b> <Not defined>

Next-user
Governmental organizations of Costa Rica (MAG) and Colombia (MADR)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Analysis of primary data from the target regions/sub-regions in both countries will contribute towards trade-off analysis and creation of MAC curves.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Barahona Rosales, Rolando <rbarahonar@unal.edu.co>, UNAL - Universidad nacional de Colombia - sede Medellin

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

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<b>Language:</b> <Not defined>
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<b>Deliverable files</b> <Not defined>

## Deliverable #12

Main Information	
<b>Title:</b> Scoping report to set the research agenda and outlining project engagement/training strategy co-written with partners	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Minor revisions are being undertaken by the Costa Rica communications team. The deliverable should be published open access in April 2016.

Next-user
Governmental organizations of Costa Rica (MAG) and Colombia (MADR) and other partners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Common understanding of the LivestockPlus project among the major actors involved in development and implementation of .....
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Scoping meetings with government organizations and other partners

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Ordoñez, Jenny <j.ordonez@cgiar.org>, ICRAF - World Agroforestry Centre
<b>Partner #2:</b> Arango, Jacobo <j.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #3:</b> Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	5

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

Deliverable dissemination	
<b>Open access restriction:</b> Yes	
<b>License adopted:</b> <Not defined>	
<b>Dissemination Channel:</b> -1	
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>	

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

Deliverable Data sharing	
<b>Deliverable files</b>	
<Not defined>	

## Deliverable #13

Main Information	
<b>Title:</b> Policy brief outlining challenges and opportunities for developing livestock-based NAMAs in the target countries	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

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Next-user
Governmental organizations of Costa Rica (MAG) and Colombia (MADR)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Awareness of policy implications among wide range of partners
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Co-development of the policy brief with the government representatives

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

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

Deliverable dissemination
<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
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**Deliverable files**

&lt;Not defined&gt;

**Deliverable #14**

Main Information	
<b>Title:</b> Training program materials/curriculum to strengthen regional capacities in GHG research for NAMA development	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Data
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	
Next-user	
National and regional researchers	
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Improved knowledge and skills in measurements of GHG emissions needed to develop and implement NAMAs for the cattle	
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Facilitation in the training workshops	
Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Partner #2:</b> Rosenstock, Todd <t.rosenstock@cgiar.org>, ICRAF - World Agroforestry Centre	
Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	<Not defined>
<b>Potential for/ actual contribution to outcomes</b>	<Not defined>
<b>Level of shared ownership (partnerships across org.)</b>	<Not defined>
<b>What is your personal perspective of the importance of this product</b>	<Not defined>
Deliverable dissemination	
<b>Open access restriction:</b> <Not defined>	

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<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #15

#### Main Information

<b>Title:</b> Paper on lessons learned on developing NAMAs from a policy perspective (CIAT)	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

#### Next-user

Scientific community, policy makers, livestock farmer associations
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> All users mentioned above will benefit from new knowledge on developing NAMAs for the cattle sector within the regions
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Wider dissemination of publications through web, national, regional and international conferences and workshops.

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## Partners contributing to this deliverable

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Chacon , Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

## Deliverable Ranking

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

## Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

## Deliverable Metadata

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

## Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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**Deliverable #16**

Submitted on 2016-03-03 at 20:58 UTC

Main Information	
<b>Title:</b> Journal article on mitigation potential of improved management practices for cattle production	
<b>MOG # 1:</b> Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

Next-user
Researchers, extensionists and policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Wider dissemination of publications through web, national, regional and international conferences and workshops. The paper will increase the knowledge on trade-offs of different mitigation options and policy makers will have options to select for implementation of NAMA.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Arango, Jacobo <j.arango@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #2:</b> Chacon, Mauricio <mchacon@mag.go.cr>, MAG - Ministerio de Agricultura
<b>Partner #3:</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
<b>Partner #4:</b> Barahona Rosales, Rolando <rbarahonar@unal.edu.co>, UNAL - Universidad nacional de Colombia - sede Medellin

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

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

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Dissemination URL: [<Not defined>](#)**Deliverable Metadata****Description:** <Not defined>**Creator / Authors:** <Not defined>**Author Identifier:** <Not defined>**Publication / Creation date:** <Not defined>**Language:** <Not defined>**Coverage:** <Not defined>**Deliverable Data sharing****Deliverable files**

&lt;Not defined&gt;

**Deliverable #17****Main Information****Title:** Policy brief suggesting instruments to increase adoption of improved cattle production systems contributing to LED**MOG # 3:** Incentives and innovations for scale-up of low-emissions practices and avoided deforestation by agricultural commodities**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Policy briefs - Briefing paper**Year of expected completion:** 2018**Status:** <Not defined>**Next-user**

Researchers, extensionists and policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** Practice changes by cattle producers and improved resource use efficiency**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Regular email exchanges and interaction in meetings and workshops will be used as a strategy for engagement and knowledge sharing.**Partners contributing to this deliverable**

Submitted on 2016-03-03 at 20:58 UTC

**Partner #1 (Responsible):** Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical

**Partner #2:** Chacon , Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

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

#### Deliverable Data sharing

<b>Deliverable files</b> <Not defined>
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## Deliverable #18

#### Main Information

**Title:** NAMA proposal on cattle production submitted from Colombia to NAMA facility or UNFCCC (2018) (CIAT)

Submitted on 2016-03-03 at 20:58 UTC

<b>MOG # 3:</b> Incentives and innovations for scale-up of low-emissions practices and avoided deforestation by agricultural commodities	
<b>Main Type:</b> Communication Products and Multimedia	<b>Sub Type:</b> Articles for media or news
<b>Year of expected completion:</b> 2018	
<b>Status:</b> <Not defined>	

#### Next-user

UNFCCC, NAMA facility or any other financial agency
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Positive outcome from feasibility analysis and financial and other support for NAMA implementation.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Facilitation, knowledge sharing and engagement strategies will be used to get NAMA proposal accepted and potential financing and incentives for implementation and scaling-up explored.

#### Partners contributing to this deliverable

<b>Partner #1 (Responsible):</b> Tapasco, Jeimar <j.tapasco@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical
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#### Deliverable Ranking

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

#### Deliverable dissemination

<b>Open access restriction:</b> <Not defined>
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> <Not defined>
<b>Dissemination URL:</b> <a href="#">&lt;Not defined&gt;</a>

#### Deliverable Metadata

<b>Description:</b> <Not defined>
<b>Creator / Authors:</b> <Not defined>
<b>Author Identifier:</b> <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

### 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> The key next users for 2015 were agricultural and environmental ministries in Colombia and Costa Rica (MADS, MADR, MAG, MINAE). The project supported the development of policies for low emissions agriculture, therefore the ministries are the key game changers. Functionaries in the ministries involved in policy development have acquired new knowledge on low emission technologies and practices relevant to the livestock sector. The major practice change was the awareness of improved mitigation options and practices for managing introduced pastures for the low emission strategies of both countries.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> The LivestockPlus team supported the design of the NINO in Colombia and the NAMA Concept in Costa Rica; functionaries from the ministries participated in the LAMNET course; the team members participated in several multi-stakeholder workshops/meetings and presented results at several congresses.</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> The NINO Colombia which is co-authored by CIAT has significant evidence of the use of LivestockPlus science.</p>
<p><b>Lessons and implications for the next planning cycle:</b> Since the NAMA process in Costa Rica started before the LivestockPlus project it has been more challenging for the team to become a key player. Unexpected reduction in resources during the course of the year weakened the partnership, and slowed the achievement of expected deliverables and the progress towards the outcomes. The project team is coping with the budgetary restrictions to improve the planning of deliverables for 2016.</p>

Submitted on 2016-03-03 at 20:58 UTC

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> LAMNET course organized by CCAFS LAM in Colombia a success	
<b>Author:</b> CCAFS LAM-CIAT	<b>Subject:</b> Capacity building for research and non-research partners
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Capacity enhancement	<b>Start date:</b> 2015-08-24
<b>End date:</b> 2015-08-28	<b>Is global:</b> No
<b>Country:</b> Colombia	<b>Keywords:</b> <Not defined>
<p><b>Highlight description:</b> Members of the LivestockPlus team (including Ngonidzashe Chirinda as a leader), have actively organized and participated in the LAMNET 5-day course held at CIAT during the last week of August, where different stakeholders, including projectour partners from Colombia and Costa Rica actively participated and shared their experiences with an enthusiastic group which included PhD students and experienced professionals. The PhD students are conducting a Latin America wide experiment on N2O emissions from urine and dung patches with similar design that will feed into LivestockPlus.</p>	
<p><b>Introduction / Objectives:</b> The course, organized jointly by CCAFS and CIAT, aimed to ensure that participants understand the process responsible for the production of greenhouse gas (GHG) emissions in agricultural systems; know about the methodologies used to quantify gas emissions in agricultural systems; understand the application of different models and tools for amplification of GHGs; and gain a better understanding in the design and contribution of low carbon development strategies.</p>	
<p><b>Results:</b> The network (CLIFF-LAMNET) has been built and a summer school course was held that included PhD students, representatives from key Ministries and farmer organizations and research organizations.</p> <p>It is highly recommended to find the equilibrium in production systems through comprehensive approaches such as LivestockPlus, where the focus is not only livestock production, but to make this a sustainable activity in terms of the use of natural resources such as soil and through the adoption of practices such as silvopastoral systems.</p> <p>After analyzing the advantages and limitations of different methods for quantifying GHG, it became clear that the decision to use a given methodone depends on the objective of the study to be performed. Economic development must be closely linked with a strategy for climate change mitigation emphasizing the reduction of GHG emissions and water and carbon footprints of different production systems.</p>	
<p><b>Partners:</b> Corporación Colombiana de Investigación Agropecuaria (Corpoica)            Instituto de Hidrología, Meteorología y Estudios Ambientales de Colombia (Ideam)            Ministerio de Agricultura y Desarrollo Rural (MADR)            Ministerio de Ambiente y Desarrollo Sostenible (MADS) de Colombia            Ministerio de Agricultura y Ganadería (MAG) de Costa Rica.            Federación de productores de arroz (Fedearroz),            Fundación Centro para la Investigación en Sistemas Sostenibles de Producción Agropecuaria (CIPAV)            Universidad Nacional            Universidad de Antioquia.            INTA-Costa Rica            INTA-Argentina            UNAL-Medellin</p>	

*Submitted on 2016-03-03 at 20:58 UTC*

**Links / Sources for further information:** <http://ciatblogs.cgiar.org/suelos/2015/09/24/cambio-climatico-sistemas-productivos-y-suelos-temas-trat>

Submitted on 2016-03-03 at 20:58 UTC

Project highlight Information #1	
<b>Title:</b> Including Gender in Nationally Appropriate Mitigation Actions (NAMAs) in the Cattle Sector in Latin American Countries	
<b>Author:</b> CIAT	<b>Subject:</b> Gender Research to support NAMAs
<b>Publisher:</b> CCAFS	<b>Year:</b> 2015
<b>Project highlights types</b> Gender and social inclusion	<b>Start date:</b> 2015-01-01
<b>End date:</b> 2015-12-31	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> NAMAs, gender inequalities, silvopastoral systems, Latin America
<p><b>Highlight description:</b> The brief is a product of the CIAT-led LivestockPlus project in Colombia and Costa Rica, which seeks to support the development of cattle sector NAMAs in these countries. Silvopastoral systems (SPS) are a type of livestock production practice that incorporates the use of trees in plantedon pastures. Their implementation can create significant benefits in terms of improved productivity and mitigation of greenhouse gas emissions fromin the cattle sector. Mitigation actions related to SPS are prioritized as principal technologies in both Colombia and Costa Rica. For this reason, the policy brief focuses on gender considerations for SPS.</p>	
<p><b>Introduction / Objectives:</b> NAMAs that address gender inequalities have better potential to harness producers' innovative capacities and create long-term positive mitigation effects. In Latin America, the inclusion of gender perspectives in public policies is a relatively new phenomenon: the solutions proposed tend to focus on technical and market mechanisms that disregard social aspects, like gender; those that do address gender often do so only discursively (Gumucio and Tafur, 2015).</p>	
<p><b>Results:</b> Strong and effective planning for mitigation options in the cattle sector will take into account gender relations as they structure household production. Mitigation actions related to silvopastoral systems have the potential to impact gender relations in their capacity to: impose new labor demands on the household; and alter differentials in access to technical information and to monetary income. The brief published highlights that both men and women in Latin American countries contribute significantly to beef and dairy value chains. For example, in Nicaragua, women participate in 14 out of 24 dairy value chain activities. However, women's work tends to be disregarded because it takes place simultaneously with home care and is usually non-paid. When women's non-paid labor has been taken into account in some cases in Colombia, women's participation in livestock activities has been registered as twice that of men'.</p>	
<p><b>Partners:</b> CIAT CCAFS FTA LF</p>	
<p><b>Links / Sources for further information:</b>  <a href="https://cgspace.cgiar.org/bitstream/handle/10568/69151/CIAT_Silvopastoralsystems_mk_12-7.pdf?sequence=1&amp;isAllowed=y">https://cgspace.cgiar.org/bitstream/handle/10568/69151/CIAT_Silvopastoralsystems_mk_12-7.pdf?sequence=1&amp;isAllowed=y</a>  <a href="https://gender.cgiar.org/8704/entry-points-for-change/">https://gender.cgiar.org/8704/entry-points-for-change/</a>            The brief is also listed in the Portal de Seguridad Alimentaria de IFPRI (towards the end):  <a href="http://cac.foodsecurityportal.org/regional-sub-portal-blog-entry/latin-america/588/disponibilidad-de-alimentos">http://cac.foodsecurityportal.org/regional-sub-portal-blog-entry/latin-america/588/disponibilidad-de-alimentos</a>  <a href="http://dapa.ciat.cgiar.org/including-gender-in-nationally-appropriate-mitigation-actions-namas-in-the-cattle-sector-in-latin-american-countries/">http://dapa.ciat.cgiar.org/including-gender-in-nationally-appropriate-mitigation-actions-namas-in-the-cattle-sector-in-latin-american-countries/</a></p>	

## 6. Activities

Activity #1	
<b>Title:</b> Identification of mitigation options and low cost GHG quantification methods to support NAMA implementation	
<b>Description:</b> We will identify best-fit mitigation options by quantifying changes in GHG fluxes, soil carbon stocks, and productivity from different cattle-based systems in alignment with government priorities (e.g., improved pastures in Colombia and whole-farm management in Costa Rica). LivestockPlus will evaluate low-cost approaches (milk quality, animal productivity and feed surveys) for MRVs. Promising outcomes will be integrated into the SAMPLES guidelines and will be written up as an addendum (e.g., MRV) to increase the scope of the guidelines.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-01-2018
<b>Leader:</b> Chirinda, Ngonidzashe <n.chirinda@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
<b>Status:</b> On-going	<b>Justification:</b> GHG measurements were performed on urine and dung patches on improved and degraded pastures through a project funded by MADR-Colombia and also via PhD students of LAMNET. Soil carbon stocks were also quantified through these projects. Through a cross CRP project with Livestock and Fish CRP a portable gas analyzer and two polytunnels were purchased. With this infrastructure data on methane emissions from cattle are being collected.

Activity #2	
<b>Title:</b> Engagement and capacity building for NAMA implementation in Costa Rica and Colombia	
<b>Description:</b> LivestockPlus will engage in existing and convene new platforms to share experiences and scientific outputs and respond to stakeholder requests using the information generated in this project. We will reinforce existing relationships with government actors (e.g., Roundtables) and also engage with new partners in the policy making and scientific support processes through capacity building workshops involving multiple stakeholders (including farmers and the private sector), one-on-one engagement and participatory field day exercises. Engaging the farmers and farmer associations (e.g., cooperatives, meat commissions, and chambers) in scenario building and developing sustainability roadmaps is a crucial step for ensuring ownership of proposed NAMAs by cattle producers.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-01-2018
<b>Leader:</b> Chacon , Adriana <achacon@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza	

Submitted on 2016-03-03 at 20:58 UTC

<p><b>Status:</b> On-going</p>	<p><b>Justification:</b> Livestock round tables have been strengthened through active participation of the project team by providing technical expertise. The project team contributed actively to the development of NINO document in Colombia and to the NAMA concept in Costa Rica (e.g. MAG, CATIE and others). LivestockPlus team and its stakeholders have actively participated in the LAMNET summer school course as organizers/ facilitators/ lecturers. In addition some team members have also participated in different international/regional/natoinal conferences and workshops. The partnerships have been extended to bring in new partners from advanced institutions (Aarhus University, Denmark) and national programs (INTA Argentina).</p>
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### Activity #3

<p><b>Title:</b> Quantification of socioeconomic impacts of low emissions pasture management in cattle production systems</p>	
<p><b>Description:</b> The consortium will compare socioeconomic and biophysical data for conventional and improved low emissions pasture management in target regions to enable selection of best-fit mitigation options and determine their costs. Socioeconomic and trade-off analysis will be used to assess farm level costs (e.g., labor and inputs), benefits, and barriers to decision making. Farm-level data will be collected using quantitative and qualitative methods and disaggregated by gender, social class, age and ethnicity. Data on the economic context and market linkages for cattle production will also be collected. Network and policy analysis will be conducted to assess access to information and inputs and determine the policy instruments required to support low carbon development. Finance modalities will be assessed and financial needs for NAMAs will be estimated.</p>	
<p><b>Start date (dd-MM-yyyy):</b> 01-01-2015</p>	<p><b>End date (dd-MM-yyyy):</b> 31-12-2018</p>
<p><b>Leader:</b> Tapasco, Jeimar &lt;j.tapasco@cgiar.org&gt;, CIAT - Centro Internacional de Agricultura Tropical</p>	
<p><b>Status:</b> On-going</p>	<p><b>Justification:</b> Surveys to collect baseline on socioeconomic, biophysical and some gender data were conducted in 300 farms in each of the project target regions in Colombia. This data plus secondary data contributed towards developing the NINO in Colombia.</p>

**Lessons regarding your project activities and possible implications for the coming planning cycle:** During 2015 the team has learned that active engagement with key stakeholders (CORFOGA, FEDEGAN, CIPAV, UNDP, livestock round tables) enables the project to make rapid progress towards the outcomes. This implies the need for active communication with stakeholders.

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## 7. Leverages

<Not defined>