

Submitted on 2016-03-03 at 12:14 UTC

# CCAFS CORE W1\_W2 ONLY

**Title:** Developing climate-smart village models through integrated participatory action research at site in West Africa

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	RP WA - West Africa Region	<b>Mgmt. liaison contact</b>	Zougmore, Robert <R.Zougmore@cgiar.org>
<b>Lead organization</b>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India	<b>Project leader</b>	Ouedraogo, Mathieu <m.ouedraogo@cgiar.org>
<b>Project type</b>	CCAFS CORE	<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 WA: West Africa
FP1: Climate-smart practices	
FP3: Low Emissions Agricultural Development	
FP4: Policies and Institutions for Climate-Resilient Food Systems	

## Bilateral project(s) contributing to this project

This project does not have Bilateral projects

## Summary

In WA, CCAFS has been working since 2011 with various local partners to develop CSV models through participatory action research in the pilot sites. It is an approach where CCAFS in partnership with rural communities and other stakeholders, tests & validates in an integrated manner, several agricultural interventions.

With the emerging portfolio of flagship projects for the region, we need to insure that all projects are implemented in an integrated manner to achieve the simultaneous triple wins of CSA in the models of CSVs that will be developed. This also includes specific activities to address gender related issues within these integrated action research in the CSVs. With some technologies and practices emerging now from the CSVs as promising CSA options, it is necessary to conduct in-depth research to provide evidence of their climate-smartness, which will also be useful in guiding the prioritization of investments as well as local adaptation planning.

Submitted on 2016-03-03 at 12:14 UTC

## 2. Partners

### Partner #1

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

#### CCAFS Partner(s) allocating budget

RPL WA - RPL West Africa

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Bationo Babou, André <babou.bationo@gmail.com>	Activity 2014-237 *Partner*. Helped with the integrative planning of ground activities at site (common site, common partners, etc.); backstopping existing partnership; backstopping existing and emerging CSA options at site; assessing/ analyzing current status of CSVs models (components, gaps, etc.); and using evidence based information to simulate successful CSV for scaling up.

### Partner #2

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

#### CCAFS Partner(s) allocating budget

RPL WA - RPL West Africa

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Abasse, Tougiana <abasse.tougiani@gmail.com>	Activity 2014-237 *Partner*. INRAN played a key role in the integrative planning of ground activities at site (common site, common partners, etc.); backstopping existing partnership; backstopping existing and emerging CSA options at site; gender empowerment with Cassia tora and cowpea in Kampa Zarma- Niger; assessing/ analyzing current status of CSVs models (components, gaps, etc.) and using evidence based information to simulate successful CSV for scaling up.

### Partner #3

Submitted on 2016-03-03 at 12:14 UTC

**Institution:** ISRA - Institut Senegalais de Recherche Agricole**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Diaminatou, Sanogo <sdiامي@yahoo.fr>	Activity 2014-237 *Partner*. ISRA was involved in the integrative planning of ground activities at site (common site, common partners, etc.); backstopping existing partnership; backstopping existing and emerging CSA options at site; gender empowerment with non timber forest products in Senegal, assessing/ analyzing current status of CSVs models (components, gaps, etc.); and using evidence based information to simulate successful CSV for scaling up.

**Partner #4****Institution:** IER - Institut d'Economie Rural**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Traore, Kalifa <ibosimon_1@yahoo.fr>	Activity 2014-237 *Partner*. IER was involved in backstopping existing partnership, backstopping existing and emerging CSA options at site, assessing/ analyzing current status of CSVs models (components, gaps, etc.), and using evidence based information to simulate successful CSV for scaling up

**Partner #5****Institution:** CSIR - The Council for Scientific and Industrial Research**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

Submitted on 2016-03-03 at 12:14 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Buah, Saaka <ssbuah@yahoo.com>	Activity 2014-237 *Partner*. CSIR-SARI helped with the integrative planning of ground activities at site (common site, common partners, etc.), backstopping existing partnership, backstopping existing and emerging CSA options at site, gender empowerment with climate information in Ghana, assessing/ analyzing current status of CSVs models (components, gaps, etc.), and using evidence based information to simulate successful CSV for scaling up

**Partner #6****Institution:** AEDD - Agence de l'Environnement et du Développement Durable (Mali)**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Keita, Aissata <bijou842002@yahoo.com>	Activity 2014-241 *Partner*. Developed CSA prioritization options for agricultural investment plans in Mali

**Partner #7****Institution:** CONEDD - Conseil national de l'environnement et du développement durable**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Semde, Idrissa <idsemde@yahoo.fr>	Activity 2014-241 *Partner*. CONEDD contributed to the scenario-guided policy formulation for PNSR in Burkina

Submitted on 2016-03-03 at 12:14 UTC

**Partner #8**

**Institution:** CNEDD - Conseil National de l'Environnement pour un Développement Durable (Niger)

**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Safi Solange, Bako <safimod07@yahoo.fr>	Activity 2014-241 *Partner*. CNEDD collaborated with CCAFS to promoting CSA options and approaches that can be brought to scale in projects and programs in Niger

**Partner #9**

**Institution:** CIFOR - Center for International Forestry Research

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Rufino, Mariana <m.rufino@cgiar.org>	Activity 2014-239 *Leader*. CSA profiling: FMNR Niger

**Partner #10**

**Institution:** RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Zougmore, Robert <R.Zougmore@cgiar.org>	Activity leader 2014-239 Project coordination and facilitation.

**Partner #11 (Leader)**

Submitted on 2016-03-03 at 12:14 UTC

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

Type	Contact	Responsibilities and contributions
Project Leader	Ouedraogo, Mathieu <m.ouedraogo@cgiar.org>	Activity 2014-239 *Partner*. The CCAFS regional program for West Africa hosted by ICRISAT Bamako, is leading the integrated development of climate-smart village models in the pilot countries. The Regional Program coordinates interventions from various CCAFS projects and actors in the climate-smart villages.
Partner	Sommer, Rolf <r.sommer@cgiar.org>	Activity 2014-237 *Leader*. Activity 2014-241 *Leader*.

**Partnerships overall performance over the last reporting period:** The partners played pivotal roles in the establishment of the climate-smart villages in the CCAFS sites. They contributed to collecting and analyzing data. NARS partners helped with the integrative planning of ground activities at site (common site, common partners, etc.); backstopping existing partnership; backstopping existing and emerging CSA options at site,; assessing/analyzing current status of CSVs models (components, gaps, etc.); and using evidence based information to simulate successful CSV for scaling up. CIFOR developed a comprehensive report on CSA profiling using FMNR as a case study.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** We have seen the need to improve communication among partners to improve the synergistic effects on expected results and project outputs.

Submitted on 2016-03-03 at 12:14 UTC

### 3. Locations

Project level	Latitude	Longitude	Name
CCAFS Site	13.828	13.828	Yatenga
CCAFS Site	10.735	10.735	Lawra-Jirapa
CCAFS Site	13.509	13.509	Segou
CCAFS Site	13.654	13.654	Kollo
CCAFS Site	14.242	14.242	Kaffrine

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

The learning agenda issued from the monitoring of five CSVs models is used to inform the design of major regional and country projects and programs on climate-smart agriculture in West Africa.

**Annual progress towards outcome (end of 2015):** CCAFS WA is monitoring and documenting the development of participatory climate-smart village models. In collaboration with various partners (research institutions, government and NGOs extension, farmers' communities, local administrative, political and traditional authorities, etc.), baskets of participatory-defined options to increase agricultural productivity, improve the adaptive capacity and where possible, reduce greenhouse gas emissions, are tested in an integrated manner in each selected village. CCAFS will collect data and information to assess the ongoing climate smart models and provide evidenced-based CSA options. The data and information collected along the piloting process will be used to simulate larger scale adoption of successful and evidenced-based CSA options while also being used to informing the planning of investments for climate-smart agriculture at national and regional levels. We expect one to two CSVs models to be documented enough to provide evidence for their success and their potential for effective climate-smart investment in agriculture, either through country projects or ECOWAS-level initiatives.

**Annual progress towards project outcome in the current reporting cycle (2015):** 1. In Ghana, CSV development has achieved the following: (a) appropriate drought tolerant maize varieties, best fit indigenous water conservation practices and a sustainable agroforestry system (Jatropha + cowpea) have been identified, tested and validated. These were used to capacitate farmers; (b) Gender Climate Smart Groups created and its members capacitated in soybeans production and post-harvest losses reduction; (c) Technical staff capacitated in participatory monitoring and Evaluation tools.

2. In Burkina Faso, the CSV model development contributed to: (a) strengthening social cohesion; (b) building farmers' capacity (in soil water conservation techniques, farmer managed natural regeneration, planting tree, use of improved varieties and climate information, etc.)

3. In Mali, (1) a solid partnership established at district and communal levels between stakeholders working on climate change issue; (2) Farmers, NGO, extension agents capacitated in water and soil conservation techniques; (3) New improved crop varieties introduced in the CSVs sites; (4) A wide sensitization on climate change and adaptation/mitigation strategies was realized through several broadcasting on local and national radio; (5) Farmers behavior change toward climate change is noted.

4. In Niger and Senegal, new CSA technologies have been tested and validated, including FMNR, soil and water conservation techniques, improved crop varieties, etc.). Crop diversification was a focus area in Niger while in Senegal, the diversification was related to income generation activities (Poultry, vegetable gardening, tree planting). Also, an innovation platform was put in place as a driving force of the CSV development.



Submitted on 2016-03-03 at 12:14 UTC

**Communication and engagement activities have contributed to achieving your Project outcomes:** The CCAFS team have been working assiduously to collect up-to-date information from project partners using reporting schedules as part of our monitoring and evaluation process. Technical reports from partners are critically reviewed and feedback information provided for effective and efficient project delivery. Together with partners, CCAFS scientists wrote blogs, working papers and journal articles to improve visibility of work.

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

**Annual progress towards outcome (end of 2016):** CCAFS in partnership with Public (MoAgr, MoLiv, MoEnv, MoRuD, MoPla, NARS) institutions and stakeholders, NGOs will test and validate CSV models at district or national level. We expect to validate at least 2 CSVs models and developed at least two CSA investment plan.

**Annual progress towards outcome (end of 2017):** CCAFS in partnership with Public (MoAgr, MoLiv, MoEnv, MoRuD, MoPla, NARS) institutions and stakeholders, NGOs will test and validate CSV models at district or national level. We expect to validate at least 3 CSVs models and developed at least two CSA investment plan.

**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:** Project outputs have so far been consistent with our theory of change. Activities completed and results obtained so far demonstrate that the project is on track to achieve its expected outcomes.

## 4.2 Contribution to CCAFS Outcomes

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

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

2019	
Target value: 3	Cumulative target to date: 4

Submitted on 2016-03-03 at 12:14 UTC

2019		
<b>Target narrative:</b> By 2019, we expect that at least 3 development initiatives at national level and one initiative at regional level are developed by public (MoAgr, MoLiv, MoEnv, MoRuD, MoPla, NARS) institutions and stakeholders, NGOs) using CCAFS decision support tools, to strengthen smallholder farmers adaptive capacity.		
<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> 1.0
<b>Target narrative:</b> We expect at least 2 CSV models to be documented enough to provide evidence for their success and their potential for effective climate-smart investment in agriculture.		
<b>Narrative for your achieved targets, including evidence:</b> A synthesis report of current status of CSV models development in West Africa is produced.		
<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> In a bid to improve the gender research strategies of CCAFS West Africa partners, CCFAS developed and implemented with NARS partners three gender research activities to fill the gaps of knowledge in terms of gender and climate change in West Africa. These research activities include (1) gender empowerment with climate information in Ghana, (2) gender empowerment with cacia tora in Niger and (3) gender empowerment with non timber forest products in Senegal.		

2016		
<b>Target value:</b> 1	<b>Cumulative target to date:</b> 1	
<b>Target narrative:</b> We expect at least 1 CSV model to be simulated, tested and validated; and 2 CSA investment plans to be developed. These results will be used by at least one country to guide CSA investment.		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Gender-sensitive technologies developed within the CSV		

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>		

Submitted on 2016-03-03 at 12:14 UTC

2014

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

### 4.3 Other Contributions

#### Contribution to other CCAFS Impact Pathways

RP WA. National meteorological services and regional (e.g. AGRHYMET, ACMAD) and international organizations (e.g. WMO) cogenerate scalable climate services to improve farm-related climate risk management decision making. National agricultural research systems and meteorological services partner to deliver and communicate tailored agro-climatic advisories and services. Farmers and farmers organizations access and use climate information and weather-related insurance schemes to improve agriculture and climate risk management strategies.

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

Submitted on 2016-03-03 at 12:14 UTC

## 4.4 Outcome case studies

Outcome case study #1
<b>Title:</b> High Level stakeholders engaged in prioritizing CSA portfolios and guiding investments in Mali
<b>Outcome statement:</b> Through the collaboration and leadership since 2014 of national stakeholders (AEDD and the NGO AMEDD on behalf of the CCASA National platform) and the CCAFS Program, i.e. CIAT, CCAFS FP1 and CCAFS-WA Program, outputs developed from the CSA prioritization process (CSA-PF) in Mali were used to guiding CSA investment planning.
<b>Research Outputs:</b> Cf. outcome case also reported by CIAT
<b>Research Partners:</b> Cf. outcome case also reported by CIAT
<b>Activities that contributed to the outcome:</b> Cf. outcome case also reported by CIAT
<b>Non-research Partners:</b> Cf. outcome case also reported by CIAT
<b>Output Users:</b> Cf. outcome case also reported by CIAT
<b>How the output was used:</b> Cf. outcome case also reported by CIAT
<b>Evidence of the outcome:</b> Cf. outcome case also reported by CIAT
<b>References:</b> Cf. outcome case also reported by CIAT
<b>The primary 2019 outcome indicator that this case study is contributing to:</b> FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools
<b>Explanation of the link between your outcome story and the CCAFS indicators:</b>
<b>Year:</b> 2015
<b>Annexes uploaded:</b> <Not defined>

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<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 # 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)</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
----------------------------

Submitted on 2016-03-03 at 12:14 UTC

**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 # 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

Submitted on 2016-03-03 at 12:14 UTC

**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:**

Organization of workshops, training programs and field testing of a set of climate smart technologies including: crop rotation, water conservation techniques (tied-ridging, bunding, zai), conservation agriculture and agroforestry.

**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:**

Three gender-sensitive projects were implemented:

- (1) understanding male and female farmers' access and use of climate information in Ghana;
- (2) valorizing non-timber forest products for increased resilience and food security in Sénégal;
- (3) assessing the performance of Cassia tora and cowpea under improved zai techniques for increased resilience in Niger

**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:**

Field testing and validation of a set of climate smart technologies including: crop rotation, water conservation techniques (tied-ridging, bunding, zai), conservation agriculture and agroforestry in the target 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:**

CSA options specific to women have been experimented including non timber forest product processing (baobab fruit transformation into powder) by women small enterprise put in place in the Senegal CSV and casia tora growing in the Niger CSV.

Submitted on 2016-03-03 at 12:14 UTC

**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:**

Two CSA portfolios were developed for CSA investment plan in Mali. One major agricultural investment from Helvetas swiss (NGO) already planned, based on the prioritized portfolios. The analysis of the climate-smartness of the Farmer-Managed Natural-Tree-Regeneration in Niger provides evidence of the carbon sequestration potential and its contribution to food security

**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 Mali, one of CSA portfolio is focusing on technologies integration (synergies) at landscape level including contour bunds, improved varieties, diversification of income with fish ponds and development of rice cultivation valleys. The diversification of income with fish ponds component aims at empowering women involved in fish marketing activities.

### Major Output groups - 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 2016 contribution towards the selected MOG**

Not applicable

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

Not applicable

**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**

- best-bet CSA option

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

Gender-sensitive options



Submitted on 2016-03-03 at 12:14 UTC

**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**

- CSA portfolio for CSA investment plan

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

Gender-sensitive options will be mainstreamed in the CSA portfolio proposal

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

Submitted on 2016-03-03 at 12:14 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Climate-smart village models as defined by communities from pilot sites in West Africa	
<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> Case Study
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> The CSV models are being assessed to identify gaps and make propositions for their completion/improvement. For instance in most current CSVs, climate-smart livestock technologies and practices haven't been sufficiently tested.

Next-user
Agricultural department institutions, National planning institutions, NGOs, policy advisory and decision making bodies
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users well-informed about evidenced-based models of CSVs that could guide national to local investment planning
<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 knowledge sharing through communication outreach and campaigns towards key country next users

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Zougmore, Robert <R.Zougmore@cgiar.org>, RPL WA - RPL West Africa
<b>Partner #2:</b> Bationo Babou, André <babou.bationo@gmail.com>, INERA - Institut de l'Environnement et de Recherches Agricoles
<b>Partner #3:</b> Diaminatou, Sanogo <sdiامي@yahoo.fr>, ISRA - Institut Senegalais de Recherche Agricole
<b>Partner #4:</b> Buah, Saaka <ssbuah@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #5:</b> Traore, Kalifa <ibosimon_1@yahoo.fr>, IER - Institut d'Economie Rural
<b>Partner #6:</b> Abasse, Tougiana <abasse.tougiani@gmail.com>, INRAN - L'Institut National de la Recherche Agronomique du Niger

Submitted on 2016-03-03 at 12:14 UTC

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -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 #2

Main Information	
<b>Title:</b> Towards Climate-Smart Village models development : current status and lessons learnt from West Africa	
<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	

Submitted on 2016-03-03 at 12:14 UTC

<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Draft synthesis report available
-------------------------	---

Next-user
Agricultural and environment departments, NGOs, climate change policy advisory bodies (e.g.: EPA, CNEDD, AEDD, CONEDD)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users use the knowledge on CSV models and portfolios including farmer managed natural regeneration of tree practice to skill themselves for local development planning and for investment prioritization in agriculture in the context of climate change.
<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, engagement, capacity building, awareness and sensitization through communication outreach and campaigns.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Zougmore, Robert <R.Zougmore@cgiar.org>, RPL WA - RPL West Africa
<b>Partner #2:</b> Bationo Babou, André <babou.bationo@gmail.com>, INERA - Institut de l'Environnement et de Recherches Agricoles
<b>Partner #3:</b> Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research
<b>Partner #4:</b> Abasse, Tougiana <abasse.tougiani@gmail.com>, INRAN - L'Institut National de la Recherche Agronomique du Niger
<b>Partner #5:</b> Diaminatou, Sanogo <sdiami@yahoo.fr>, ISRA - Institut Senegalais de Recherche Agricole
<b>Partner #6:</b> Traore, Kalifa <ibosimon_1@yahoo.fr>, IER - Institut d'Economie Rural
<b>Partner #7:</b> Buah, Saaka <ssbuah@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

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

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

Submitted on 2016-03-03 at 12:14 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 #3****Main Information****Title:** Climate-smart solutions for Mali: Prioritization of CSA investment plans**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:** 2016**Status:** On-going**Justification for cancelling the deliverable:** CSA prioritization was made in Mali. The prioritization led to the definition of two portfolios of CSA including:

- Portfolio 1 focusing on technologies integration (synergies) at landscape level: contour bunds, improved varieties, diversification of income with fish ponds, development of rice cultivation valleys
- Portfolio 2 focusing on technologies integration at field level: contour bunds, production and use of compost, improved varieties, sorghum and cowpea intercropping

Clients already identified to mainstream prioritized options into CSA projects in Mali (e.g. Helvetas Swiss)

Submitted on 2016-03-03 at 12:14 UTC

Next-user
National planning institutions, NGOs, policy advisory bodies, Regional organisations (e.g.: ECOWAS, CILSS, ROPPA)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users use data and information generated from the prioritization tool to inform their investment planning in agriculture and food security
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Engagement, Knowledge sharing, sensitization of key policy makers (e.g. Parliamentarians from the Rural development commission of Mali Parliament).

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Zougmore, Robert <R.Zougmore@cgiar.org>, RPL WA - RPL West Africa
<b>Partner #2:</b> Keita, Aissata <bijou842002@yahoo.com>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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

Deliverable dissemination
<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>

Submitted on 2016-03-03 at 12:14 UTC

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

## Deliverable #4

Main Information
<b>Title:</b> Understanding Farmers' Utilization of Web-Managed Climate and Market Information: Case of Esoko in Northern Ghana
<b>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)
<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> A manuscript finalized for submission to the special issue of Agriculture and Food Security Journal

Next-user
Agricultural department institutions, Research institutions, Academic institutions, National planning institutions, NGOs, policy advisory and decision making bodies
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next user informed for decision making about climate information dissemination across Ghana and possibly 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> Knowledge sharing

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Zougmore, Robert <R.Zougmore@cgiar.org>, RPL WA - RPL West Africa
<b>Partner #2:</b> Buah, Saaka <ssbuah@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

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

Submitted on 2016-03-03 at 12:14 UTC

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>



Submitted on 2016-03-03 at 12:14 UTC

### 5.3 Summary on next-users

Next user #1
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Agricultural department institutions, National planning institutions, NGOs, policy advisory and decision making bodies
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Dissemination workshops to inform next users about evidenced-based models of CSVs that could guide national to local investment planning
<b>Reported deliverables serve as evidence towards this achieved change:</b> Reports, policy briefs
<b>Lessons and implications for the next planning cycle:</b> Next users must be informed in all activities to facilitate scaling up.
Next user #2
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Agricultural and environment departments, NGOs, climate change policy advisory bodies (e.g.: EPA, CNEDD, AEDD, CONEDD)
<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 with next users to use the knowledge on farmer managed natural regeneration of tree practice to equip themselves for sectoral policy developments and the planning of investments in agriculture in the context of climate change. AEDD engaged in CSA portfolio prioritization in Mali
<b>Reported deliverables serve as evidence towards this achieved change:</b> Journal manuscript, info note
<b>Lessons and implications for the next planning cycle:</b> Partners to be capacitated in valorizing data and writing technical reports
Next user #3
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Regional organisations (e.g.: ECOWAS, CILSS, ROPPA), National planning institutions, NGOs, policy advisory bodies
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Next users to be engaged to use data and information generated from the prioritization tool and from the scenario downscaling to inform their investment planning in agriculture and food security
<b>Reported deliverables serve as evidence towards this achieved change:</b> Report, policy briefs, infonotes
<b>Lessons and implications for the next planning cycle:</b> None
Next user #4

Submitted on 2016-03-03 at 12:14 UTC

**Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:** Agricultural department institutions, Research institutions, Academic institutions, National planning institutions, NGOs, policy advisory and decision making bodies

**Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:** Knowledge sharing with next user for decision making in CSA investment planning

**Reported deliverables serve as evidence towards this achieved change:** Reports, data sets, scientific papers

**Lessons and implications for the next planning cycle:** None

Submitted on 2016-03-03 at 12:14 UTC

## 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> 2016-02-26
<b>End date:</b> 2016-02-26	<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> Profiling of emerging CSA options:How climate-smart is farmer managed natural tree regeneration practice	
<b>Description:</b> Despite the potential relevance of FMNR as an efficient way to contribute to climate change mitigation, there has been so far no attempt to substantiate anecdotal evidence about potentially high soil carbon sequestration rates with factual data provided by field-based experiments. In addition, assessing the co-benefits in term of food security for farmers would provide evidence of the climate-smartness of this practice. The main objective is to quantify the effects of FMNR on soil carbon, nitrogen and fertility status. We will also investigate the possible causes for any changes that might be observed between FMNR and conventional (regularly coppiced) stands. The study will contribute to a rigorous evaluation of C sequestration potential and of the climate smartness of FMNR. In collaboration with local partners, we will assess the co-benefits of this practice in term of productivity/food security enhancement.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Rufino, Mariana <m.rufino@cgiar.org>, CIFOR - Center for International Forestry Research	
<b>Status:</b> On-going	<b>Justification:</b> One technical report delivered on "How climate-smart is the FMNR practice: co-benefits that lead to food security in Nigerien drylands".  Partners are in the process of adding spatial data to create some sophisticated spatial models, information that will be included in the publication derived from the work

Activity #2	
<b>Title:</b> Integration of flagship projects - gender mainstreaming into CSVs action research –modelling of CSVs	
<b>Description:</b> This activity aims to coordinate integration of flagship projects and other research work at site in the climate-smart villages. The current portfolio of flagship projects include projects for the development of climate-smart technologies and practices, the design and communication of climate information to guide climate risk management by farmers and the strengthening of national science-Policy dialogue platforms to foster and enact informed Policy decision making for the agriculture and food security sectors in countries. It is crucial that the grass root level evidence on successful CSA options covers the simultaneous triple wins of CSA while being brought to scale at district and national levels. Also, as a cross cutting issue, gender related action-research that can contribute empowering women farmers to adopt climate-smart agriculture will be conducted in the different climate-smart villages.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Zougmore, Robert <R.Zougmore@cgiar.org>, RPL WA - RPL West Africa	
<b>Status:</b> On-going	<b>Justification:</b> Synthesis of CSV development Three gender activities have been completed in the CSVs.

Submitted on 2016-03-03 at 12:14 UTC

Activity #3	
<b>Title:</b> Investment prioritization for increased adoption of CSA in countries (Prioritisation tool-scenario process in Mali)	
<b>Description:</b> Widespread adoption of CSA can create sustainable landscapes and build momentum towards climate smart food systems. Achieving this requires integration of CSA across levels, from initiatives at the farmer field level to national and regional mobilization. We therefore need to accelerate the adoption of CSA techniques in the face of increasing climate change impacts. This requires tools for stakeholders to specifically integrate CSA into policy and planning. These tools must characterize CSA practices, prioritize locally appropriate actions, assess costs and benefits to identify investment opportunities, and link national and locally planning mechanisms. This activity aims to use the CSA prioritization tool developed by CCAFS to guide national level investment planning. This activity will be reinforced by the downscaling of the regional scenarios to country level to come up with products that will guide policy decision making as well as national level investment planning.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2016	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Ouedraogo, Mathieu <m.ouedraogo@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> On-going	<b>Justification:</b> CSA prioritization was made in Mali. The prioritization led to the definition of two portfolios of CSA including: - Portfolio 1 focusing on technologies integration (synergies) at landscape level: contour bunds, improved varieties, diversification of income with fish ponds, development of rice cultivation valleys - Portfolio 2 focusing on technologies integration at field level: contour bunds, production and use of compost, improved varieties, sorghum and cowpea intercropping Stakeholders were designed to elaborate CSA project to promote the use of these portfolios in Mali.

**Lessons regarding your project activities and possible implications for the coming planning cycle:** The prioritization process takes a lot of time. We need to develop a pool of experts in CSA prioritization to cover more countries.

Submitted on 2016-03-03 at 12:14 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-03 at 12:18 UTC

**Title:** Scaling up climate-smart agriculture technologies and tools to benefit regional, national and community levels end-users in West Africa

---

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	RP WA - West Africa Region	<b>Mgmt. liaison contact</b>	Zougmore, Robert <R.Zougmore@cgiar.org>
<b>Lead organization</b>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India	<b>Project leader</b>	Parety, Samuel <S.Parety@cgiar.org>
<b>Project type</b>	CCAFS CORE	<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 WA: West Africa
FP1: Climate-smart practices	
FP3: Low Emissions Agricultural Development	
FP4: Policies and Institutions for Climate-Resilient Food Systems	

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

This project does not have Bilateral projects

### Summary

CCAFS and its partners in West Africa has embarked on a series of pilot testing of approaches and tools in order to capacitate them with relevant best-bet options for an increased adaptive capacity to climate change. With the growing evidence of success for some of the tested approaches, tools, technologies and practices, we initiate the scaling-up and adoption of proven CSA options across the region.

The focus will be to expand the scaling up of climate services to guide farm management decision making through various channels such as the Rural Radios in Senegal, SMS and call center communication approach of ESOKO in Ghana, and the agricultural value chain programs in Burkina Faso (PROFIL) and Senegal (PAFA).

Also, CCAFS will backstop ROPPA, the West Africa Farmers Network on CSA during the farmers Universities.

CCAFS will also support the development of national agriculture action plans through capacitating the National science-policy dialogue platforms.

Submitted on 2016-03-03 at 12:18 UTC

## 2. Partners

### Partner #1 (Leader)

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Parety, Samuel <S.Parety@cgiar.org>	Activity 2014-244 *Leader*. Activity 2014-246 *Leader*. Activity 2014-245 *Leader*. The CCAFS regional program for West Africa, hosted by ICRISAT, engaged a number of initiatives that aimed to disseminate climate information services and climate-smart technologies to benefit end-users in the sub-region. The regional program led these scaling-up initiatives in collaboration with several partners (ANACIM, ESOKO, PROFIL & PAFA projects, ROPPA). The CCAFS WA Program co-designed activity proposals and provided technical and scientific backstopping to scaling up climate-smart agriculture for the benefit of national and regional farming communities in West Africa. Its also supported the national science-policy dialogue platforms to operate effectively.

### Partner #2

**Institution:** ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)

#### CCAFS Partner(s) allocating budget

RPL WA - RPL West Africa

#### Contacts

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------



Submitted on 2016-03-03 at 12:18 UTC

Partner	Ndiaye, Ousmane <ondiaeye70@gmail.com>	Activity 2014-244 *Partner*. ANACIM was responsible for capacitating through trainings and information sharing, the URAC radio network to disseminate climate information services to farmers in Senegal. ANACIM has: (1) Inventoried farmers' specific climate information needs and indigenous knowledge on bioclimate indicators; (2) Co-produced climate services that respond to farmers' priority information needs for farm management decision making; (3) Coordinated field trials with farmers; (4) Trained boundary organizations and extension services, partner professional communicators (rural radios) to understand and communicate probabilistic forecast information; and (5) Mainstreamed climate-smart agriculture approach in all sites consolidated through partnership with the C-CASA platform.
---------	---	---

### Partner #3

**Institution:** ESOKO Limited

#### CCAFS Partner(s) allocating budget

RPL WA - RPL West Africa

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Gordon Kotey, Nikoi <gordon@esoko.com>	Activity 2014-244 *Partner*. In Northern Ghana, Esoko used its ICT platform (in collaboration with Ghana met and Toto Agric in Kenya) to disseminate climate information services, mainly seasonal forecasts, CSA technologies and practices and nowcasts ( advisories about eminent climate events like floods) to farmers. In addition, Esoko collaborated with CSIR-SARI and MOFA to establish a data base of farmers and organized two training sessions to farmers on the protocol for using their mobile phone to receive climate information services and also revert to the platform call center.

### Partner #4

**Institution:** ISRA - Institut Senegalais de Recherche Agricole

#### CCAFS Partner(s) allocating budget

RPL WA - RPL West Africa

Submitted on 2016-03-03 at 12:18 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Dia, Djiby <djibydia@gmail.com>	Activity 2014-244 *Partner*. ISRA improved added value of climate information services for value chain crops (such as millet and cowpea) in Senegal. In partnership with PAFA and ANACIM, ISRA/BAME implemented this activity in the PAFA zones of Senegal. Climate information/ services as CSA options were mainstreamed into agricultural value chain crops production through training sessions. A survey was also conducted at farm level to assess the added-value, the cost-benefits of implementing tailored climatic information and to assess the contribution of these CSA options into the value chain. ISRA has been leading the testing of climate-smart villages models in Senegal.

**Partner #5****Institution:** INERA - Institut de l'Environnement et de Recherches Agricoles**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Some, Leopold <bsomel@yahoo.fr>	Activity 2014-244 *Partner*. In partnership with PROFIL project, INERA tested with farmers from the project (Yatenga region, Burkina), the added value of climate information services for value chain crops (such as cowpea and sesame). Climate information services as CSA options were mainstreamed into agricultural value chain crops production through training sessions, rural radio and extension services. A survey was also conducted at farm level to assess the added-value, the cost-benefits of implementing tailored climatic information and to assess the contribution of these CSA options into the value chain. INERA has been leading the testing of climate-smart villages models in Burkina.

**Partner #6****Institution:** ROPPA - Réseau des organisations paysannes et des producteurs agricoles de l'Afrique de l'Ouest**CCAFS Partner(s) allocating budget**

Submitted on 2016-03-03 at 12:18 UTC

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Tioro, Andre <atioro@yahoo.fr>	Activity 2014-245 *Partner*. Through organizing its farmers' University, ROPPA, the West African farmers organization network, contributed to the training of trainers from 13 ROPPA national platforms (including national constitutencies, youth groups, women groups, leaders, national platforms) on (1) the concept of climate smart agriculture, (2) existing or promising approaches and technologies, and (3) areas of application in the context of the promotion of family farming to foster income generating.

**Partner #7****Institution:** CSIR - The Council for Scientific and Industrial Research**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Karbo, Naaminong <minongkordam@yahoo.com>	Activity 2014-246 *Partner*. CSIR-Animal Research Institute (CSIR-ARI) is the focal institution for the Ghana science-policy dialogue platform. CSIR-ARI facilitated the functioning of the national science-policy dialogue platform of Ghana through (1) holding periodic meetings (such as the Climate Change and Livestock Development Conference held at the University of Cape Coast in February, 2015); (2) undertaking specific activities in Ghana such as coordinating and facilitating national discussion on climate change, agric. & food security that culminated to the development of the national climate-smart agriculture and food security action plan (2016-2020).

**Partner #8****Institution:** AEDD - Agence de l'Environnement et du Développement Durable (Mali)**CCAFS Partner(s) allocating budget**

Submitted on 2016-03-03 at 12:18 UTC

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Keita, Aissata <bijou842002@yahoo.com>	Activity 2014-246 *Partner*. AEDD is the focal institution for the Mali science-policy dialogue platform. AEDD collaborated with AMEDD NGO, member of the platform, to facilitate the functioning of the national science-policy dialogue platform of Mali through (1) holding periodic meetings for knowledge exchange among platform members; (2) undertaking specific activities in Mali such as coordinating and facilitating the CSA prioritization exercise in Mali. AEDD also organized special high level events such as the special session with the Malian parliament to share the results of the CSA prioritization in Mali.

**Partner #9**

**Institution:** CNEDD - Conseil National de l'Environnement pour un Développement Durable (Niger)

**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Safi Solange, Bako <safimod07@yahoo.fr>	Activity 2014-246 *Partner*. CNEDD is the focal institution for the Niger science-policy dialogue platform. This year, CNEDD has not been able to submit a work plan though the platform has held periodic meetings, and has been involved in national discussion on climate change, agric. & food security in Niger. In addition, CNEDD played key roles in linking up CCAFS WA to the Niger World Bank Program on CSA, led by the "3N".

**Partner #10**

**Institution:** Ministère de l'Agriculture et de l'Équipement Rural

**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

Submitted on 2016-03-03 at 12:18 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	DIEYE, Bounama <bounama1968@gmail.com>	Activity 2014-246 *Partner*. DA/MAER is the focal institution for the Senegal science-policy dialogue platform. The ministry consolidated the gains of the CCASA Platform of Senegal by strengthening the institutional and technical capacity of national stakeholders. It also built the capacities of stakeholders to better understand the integration of climate change dimension in policy documents. Also, the ministry improved the scientific and technical visibility of the CCASA Platform and its influence on the national scene. Priority actions have been defined to strengthen the capacity of policy makers on the issue of climate change for decision-making in the agricultural sector.

**Partner #11****Institution:** CONEDD - Conseil national de l'environnement et du développement durable**CCAFS Partner(s) allocating budget**

RPL WA - RPL West Africa

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Semde, Idrissa <idsemde@yahoo.fr>	Activity 2014-246 *Partner*  Platform has not been operational since 2014.

**Partner #12****Institution:** RPL WA - RPL West Africa**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Zougmore, Robert <R.Zougmore@cgiar.org>	Project leader in charge of project coordination and facilitation.

Submitted on 2016-03-03 at 12:18 UTC

**Partnerships overall performance over the last reporting period:** CCAFS scientists worked with Esoko and ANACIM to develop more accurate and specific seasonal rainfall forecasts, and raised capacity of partners to do longer-term analysis and provide more targeted information for farmers. In addition, ROPPA, the West Africa farmers' organisations network, and PROFIL and PAFA (two value chain projects in Senegal and Burkina Faso), disseminated seasonal forecast information and climates-smart agricultural options to farmers from various agricultural sectors and throughout their national constituencies (ROPPA national platforms). Furthermore, CCAFS together the national science policy dialogue platform have developed the national climate-smart agriculture and food security action plan (2016-2020) for Ghana

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** 1. Capacity development of partners - We have seen the need to continue capacitating partners in data collection, data handling and data analysis. This is expected to expedite actions in meeting report deadlines and achieve publication outputs within project periods. To enhance the quality of data we are creating spreadsheets of minimum data sets expected from partners; and we are improving reporting templates for technical reports to receive more comprehensive feedback information from partners.

2. Communication - we will continue to providing feedback information on project design and implementation by partners as part of our monitoring and evaluation process.

Submitted on 2016-03-03 at 12:18 UTC

### 3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	West Africa
Country	Not applicable	Not applicable	Burkina Faso
Country	Not applicable	Not applicable	Ghana
Country	Not applicable	Not applicable	Mali
Country	Not applicable	Not applicable	Niger
Country	Not applicable	Not applicable	Senegal

## 4. Outcomes

### 4.1 Project outcome narrative

#### **Project outcome statement**

Scaling up climate information services to millions of farmers and reduce climate risk for agriculture sector in West Africa

**Annual progress towards outcome (end of 2015):** CCAFS scientists worked with the national meteorological agency, Agence Nationale de l'Aviation Civile et de la Météorologie (ANACIM), the Ghana met service and the ESOKO company, Ghana, to develop more accurate and specific seasonal rainfall forecasts, and to raise capacity of partners to do longer-term analysis and provide more targeted information for farmers. The forecast information provided includes the total rainfall, the onset and end of the rainy season, plus a 10 day forecast across the rainy season. The information is conveyed to farmers as agro-meteorological advisories that are tailored to meet their local needs. Through a partnership with the Union des Radios Associatives et Communautaires du Sénégal (URAC), an association of 73 community-based radio stations promoting economic development through communication and local information exchange, the seasonal forecast will now reach all of Senegal's 14 administrative regions.

With ESOKO, Market price alerts, climate smart agricultural advice, weather forecast and voice messages on climate-smart agricultural practices are sent out to farmers from the CCAFS site in Northern Ghana in the language of their (farmers) choice.

ROPFA, the West Africa farmers' organisations network, and PROFIL and PAFA, two value chain projects in Senegal and Burkina Faso, also disseminated seasonal forecast information and climate-smart agricultural options to farmers from various agricultural sectors as well as throughout their national constituencies (ROPFA national platforms).

With these above mentioned channels, we expect to reach at over two million farmers in 2015.



Submitted on 2016-03-03 at 12:18 UTC

**Annual progress towards project outcome in the current reporting cycle (2015):** (1) In Northern Ghana, the Esoko platform has improved farmers' access to, and use of downscaled seasonal forecast and climate smart agriculture technologies and practices (agro-advisories) through mobile phone and Esoko platform. So far 835 farmers (of which 33% are females) are trained and use climate information through mobile phone technologies. Apart from daily and seasonal climate forecast, other information including agro-advisories alerts, market price alerts are also provided assisting farmers in their crop planning.

(2) Seasonal forecast by ANACIM through all rural radios now reach about 7 million farmers. This has been made possible through improved spatial coverage of rural radio over Senegal and training of all 80 rural radios of URAC.

(3) CCAFS-WA provided scientific and technical backstopping to ECOWAS and member-countries to now effectively mainstream CSA into regional agricultural plans and policies through creating the West Africa CSA alliance (WACSAA) and its intervention framework (<http://www.hubrural.org/Forum-CEDEAO-de-Haut-Niveaudes,12409.html?lang=en>), in line with the ECOWAP.

(4) Through its Farmers University and with the support of CCAFS, ROPPA capacitated its 13 national constituencies to now promote and implement CSA for family farming. The training included lead farmers, youth and women leaders who all committed to train their group members when back home.

(5) CCAFS-WA supported the Ghana science-policy dialogue platform to undergo a process that led to the development of a national CSA action plan, while in Burkina Faso, CCAFS worked with the scenario team and other CRPs to guide the formulation of the National Program for the Rural Sector-PNSR II (<https://www.youtube.com/watch?v=sxxMNkvSz0o>).

(6) Climate information/ services as CSA options are mainstreamed into agricultural value chain in Senegal and Burkina Faso. PROFIL and PAFA, the two value chain projects, disseminated seasonal forecast information and CAS technologies to farmers.

**Communication and engagement activities have contributed to achieving your Project outcomes:** CCAFS engaged with relevant partners in West Africa (ECOWAS, ROPPA, WAAPP) and national level organizations to (1) training actors (ROPPA Farmers University, WAAPP regional workshop on CSA) and (2) developing communication products (working papers, info note, blogs, videos, research articles). CCAFS-WA also supported ECOWAS to organizing the CSA forum that set up the WACSAA and its intervention framework (5 CGIAR scientists actively contributed); and also supported the scenario guided-policy formulation in Burkina Faso (National Program for Rural Sector Development, PNSR II).

**Evidence documents of progress towards outcomes:** [Case study senegal.pdf](#)

**Annual progress towards outcome (end of 2016):** ANACIM works with CCAFS and partners in Senegal to disseminate climate information services to rural population across the whole country

**Annual progress towards outcome (end of 2017):** If rural population has access to climate information services, how they use it and for what purpose will be monitored

**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:** Theory of change has been consistent with results: In Senegal the development and

dissemination of climate information services through rural community radio stations and SMS could reach 7 million rural people across the country, (<https://cgspace.cgiar.org/rest/bitstreams/59295/retrieve>). ECOWAS and member-countries are now effectively mainstreaming CSA into regional and national agricultural plans and policies through the CSA alliance (WACSAA) and implementation framework (<https://ccaafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo>), the development of country action plans (e.g. Ghana), and the design of National Plan for the Rural Sector for Burkina Faso-PNSR II (<https://www.youtube.com/watch?v=sxxMNkvSz0o>). These promising indications of policy-level recognition that could foster a wide adoption of CSA technologies in Ghana.

## 4.2 Contribution to CCAFS Outcomes

**RP WA - Outcome 2019:** National level decision-makers (Gov. ministries), national agricultural research systems, NGOs, civil society organizations, regional organizations use CCAFS science-derived decision support tools and systems to mainstream climate change into national plans and policies from local to national levels.

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

2019	
Target value: <Not defined>	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: 1	Cumulative target to date: 1	Target achieved: 2.0
Target narrative: <Not defined>		

Submitted on 2016-03-03 at 12:18 UTC

2015	
<p><b>Narrative for your achieved targets, including evidence:</b> 1-Development of a national policy document on climate-smart agriculture - A national CSA action plan (2016-2020) developed and validated national wide.</p> <p>2-CCAFS knowledge supported ECOWAS to now effectively mainstream CSA into regional and national agricultural plans and policies through the CSA alliance (WACSAA) and implementation framework (<a href="https://ccafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo">https://ccafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo</a>)</p> <p>3-Senegal Ministry of Agriculture is now using CIS as an agricultural input that guides yearly agricultural action planning. The national science-policy dialogue platform is formally embedded within the Agriculture Department as a decision support tool.</p> <p>4-CCAFS scenarios were used to guiding the formulation of the National Program for Rural Sector of Burkina Faso</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> Men and women are involved in the development process of all above policies and instruments (WACSAA, National CSA action plan, etc.).</p>	

2016	
<b>Target value:</b> 01	<b>Cumulative target to date:</b> 2
<p><b>Target narrative:</b> A national climate-smart agriculture action plan developed and validated by national stakeholders</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> Men as well as women actors are involved in the development process.</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

Submitted on 2016-03-03 at 12:18 UTC

**Contribution to other CCAFS Impact Pathways**

The two RP WA - Outcomes 2019 expected to be achieved and to contributing to CCAFS outcomes.

Region	Indicator	Contribution to the selected outcomes target in 2015	Target value contribution
R P W A : West Africa	# of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs	At regional level, ECOWAS is putting in place institutional arrangements and policies that will foster the promotion of CSA in the region (CSA alliance (WACSAA) and implementation framework) At national level, countries are now considering the national science-policy dialogue platforms as powerful tools to guide national decision making for issues related to climate change (e.g. the platforms of Senegal, Mali and Ghana). At sub-national level (district), district-level platforms are put in place to play the driving strap between national and community levels.	3

**Collaborating with other CRPs**

Forests, Trees and Agroforestry
<b>Description of collaboration:</b> CCAFS collaborated with FTA, WLE, DS, and CIFOR to implement a joint development of partnership framework for CGIAR research in Burkina Faso, and to support the revision of the PNSR (National Program for Rural Sector) using the CCAFS-led downscaled scenarios for West Africa.
<b>The achieved outcome contributions:</b> <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<b>Title:</b> The impact of climate information services in Senegal
<b>Outcome statement:</b> As of August 2015, seasonal forecasts are transmitted nationwide through 82 rural community radio stations and SMS, potentially reaching 7.4 million rural people across Senegal
<b>Research Outputs:</b> 1.Outcome case study report ( <a href="https://cgspace.cgiar.org/rest/bitstreams/59295/retrieve">https://cgspace.cgiar.org/rest/bitstreams/59295/retrieve</a> ) 2.Reaching more farmers-innovative approaches to scaling up CSA ( <a href="https://ccafs.cgiar.org/publications/reaching-more-farmers-innovative-approaches-scaling-climate-smart-agriculture#.VtAndsYrEuQ">https://ccafs.cgiar.org/publications/reaching-more-farmers-innovative-approaches-scaling-climate-smart-agriculture#.VtAndsYrEuQ</a> ) 3.Reporting on climate change: developing capacity in Senegal's media ( <a href="https://ccafs.cgiar.org/blog/reporting-climate-change-developing-capacity-senegal%E2%80%99s-media#.VtAoYcYrEuQ">https://ccafs.cgiar.org/blog/reporting-climate-change-developing-capacity-senegal%E2%80%99s-media#.VtAoYcYrEuQ</a> ) 4.There once was a woman named Mariama ( <a href="https://ccafs.cgiar.org/blog/there-once-was-woman-named-mariama#.VtApjcYrEuQ">https://ccafs.cgiar.org/blog/there-once-was-woman-named-mariama#.VtApjcYrEuQ</a> ) 5. The peanut farmer turns to a cell phone ( <a href="http://www.npr.org/sections/goatsandsoda/2015/12/03/456194983/this-peanut-farmer-turns-to-a-cellphone-and-prayer-for-a-top-crop">http://www.npr.org/sections/goatsandsoda/2015/12/03/456194983/this-peanut-farmer-turns-to-a-cellphone-and-prayer-for-a-top-crop</a> )
<b>Research Partners:</b> ISRA/ANACIM
<b>Activities that contributed to the outcome:</b> CCAFS scientists collaborated with the Senegalese National Meteorological Agency to develop downscaled climate information services and enhance the capacity of partners who are tasked to communicate climate information to farmer: ANACIM produces CI during the rainy season and is responsible for transmitting it directly to the MWG, rural radios, the Rural Development Departmental Services (SDDR) and farmers. Following a training of the 82 radio journalists by ANACIM on the jargon of climate and on the understanding of the seasonal forecast, climate information services across the rainy season are now transmitted as special radio programs in the 14 administrative regions of Senegal. The interactive nature of the radio program allows listeners to revert with their feedback including additional information, views, and requests of clarification. This scaling up of CIS has been possible thanks to the partnership between CCAFS, ANACIM and URACS with each stakeholder playing a specific enabling and complementary role.
<b>Non-research Partners:</b> ANACIM (Agence Nationale de l'Aviation Civile et de la Météorologie du Senegal) Union des Radios Associatives et Communautaires du Sénégal (URACS) Agriculture Directorate, Ministry of Agriculture and Rural Equipment
<b>Output Users:</b> ANACIM as the main public provider of climate information services Ministry of agriculture of Senegal as key user of the CIS to guide agricultural planning and capacitate ground extension agents URACS as key media disseminating information that is relevant to their radio audiences Agricultural development projects and programs
<b>How the output was used:</b> Farmers used the climate information received from the radio broadcast programs to planning their farm management (type of crop and variety, sowing date, weeding, fertilizers application dates, harvest period, etc.). The Ministry of agriculture used the seasonal forecast to decide on adaptation measures for agriculture and food security

Submitted on 2016-03-03 at 12:18 UTC

**Evidence of the outcome:** Acknowledgment letters and emails from rural radios and from URACS Letter of ANACIM to the Ministry of Agriculture forwarding the seasonal forecast information for 2015 rainy season  
Impact assessment study on communicating seasonal climate forecasts in Kaffrine, Diourbel, Louga, Thies and Fatick regions in Senegal. (Lo and Dieng 2015)

**References:** CCAFS. 2015. The impact of Climate Information Services in Senegal. CCAFS Outcome Study No.3. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: [www.ccafs.cgiar.org](http://www.ccafs.cgiar.org)

Lo HM, Dieng M. 2015. Impact assessment of communicating seasonal climate forecasts in Kaffrine, Diourbel, Louga, Thies and Fatick (Niakhar) regions in Senegal: Final Report for CCAFS West Africa Regional Program.

R. Zougmore, O. Ndiaye, 2015. Scaling up climate smart information services to guiding climate risk management by farmers in Senegal. pp: 56-60. In: Westermann O, Thornton P, Förch W. 2015 (Eds.), Reaching more farmers – innovative approaches to scaling up climate smart agriculture. CCAFS Working Paper no. 135.

**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:** [Case study senegal.pdf](#)

## Outcome case study #2

**Title:** National Climate-Smart Agriculture and Food Security Action Plan (2016 - 2020) developed for Ghana

**Outcome statement:** CCAFS science was used by the Ghana science-policy dialogue platform and the Ministry of Food and Agriculture (MOFA) to design and implement the National Climate-Smart Agriculture and Food Security Action Plan (2016-2020).

This is an implementation framework for an effective development of climate-smart agriculture in the ground. It formulates specific strategies that will contribute developing climate-resilient agriculture and food systems for all agro-ecological zones, as well as the human resource capacity required for a climate-resilient agriculture promotion in Ghana

**Research Outputs:** Working paper on the Action plan document with sections covering: (1) Linkage Between the Action Plan and Policy Documents, (2) Program Areas of the Agriculture and Food Security Focus Area, (3) Cross cutting issues, (4) Implementation arrangement, (5) Monitoring & Evaluation, (6) Conclusion and way forward, annex 1: Program areas, corresponding activities and lead actors.

Blog on the official launching:

**Research Partners:** CSIR-Ghana

Submitted on 2016-03-03 at 12:18 UTC

**Activities that contributed to the outcome:** The methodological approach consisted into: (1) data collection through desk reviews, interviews and small group meetings, (2) Interviews and consultations of relevant institutions, (3) Consultations workshops with various stakeholders, (4) data analysis and report writing. The participatory workshops were organized to bring representatives of stakeholder organizations together to discuss various components of the action plans and prepare inputs. These stakeholder consultation workshops were used to carry out prioritization of the action areas by the agro-ecological groupings. In addition, a validation workshop was held to provide a platform for a final discussion of the draft Action Plan with key stakeholders.

Through such inclusive and participatory approach, the final results were accepted as consensual and ready for implementation, from the high policy level down to the community one.

**Non-research Partners:** MoFA, MESTI, National Development Planning Commission

**Output Users:** Ministry of Food and Agriculture (MOFA)  
Ministry of Environment, Science, Technology and Information (MESTI)  
Rural sector development ministries  
NGOs  
local government authorities, Farmers organizations, small-scale agro-entrepreneurs  
Financial and technical partners for the agricultural sector

**How the output was used:** The Action Plan is a basis for ground implementation of CSA as it has defined implementation programmes in the respective Ghana agro- ecological zones. Proposed activities provide a useful framework to operationalize the eight programme areas of the Agriculture and Food Security focus area of the National Climate Change Policy.

**Evidence of the outcome:** There is a published book (attached as annex) and a working paper available at <http://hdl.handle.net/10568/69000>.

**References:** Essegbey GO, Nutsukpo D, Karbo N and Zougmore R. 2015. National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020). Working Paper No. 139. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: [www.ccafs.cgiar.org](http://www.ccafs.cgiar.org)

**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:** [ACTION PLAN final -press.pdf](#)

### Outcome case study #3

**Title:** ECOWAS now effectively mainstreaming CSA into regional agricultural policies through CSA alliance and implementation framework

**Outcome statement:** ECOWAS (+member-countries) have used the scientific and technical knowledge and information generated by CCAFS to develop a CSA implementation framework and an CSA alliance for West Africa. As member of the technical team of the high level forum, the CCAFS-WA RPL used CCAFS science to backstopping various technical documents of the forum. Moreover, CCAFS-WA led the development of a paper that was used to inform the CSA intervention framework and to guiding the framing of the West Africa CSA alliance.



Submitted on 2016-03-03 at 12:18 UTC

**Research Outputs:** Working paper No118 on the Overview of the Scientific, Political and Financial Landscape of Climate-Smart Agriculture in West Africa: crop production, livestock, fisheries, water, forestry/Agroforestry

Intervention Framework for the Development of Climate-Smart Agriculture under the West Africa Regional Agricultural Policy (ECOWAP/CAADP) implementation Process

West Africa Climate-Smart Agriculture Alliance (WACSAA): framework document

**Research Partners:** IWMI, IFPRI, ILRI, ICRAF, ICRISAT, CORAF, University of Ibadan

**Activities that contributed to the outcome:** (1) CCAFS-WA RPL was actively involved in the technical team put in place by ECOWAS to lead the preparation of background documents for the CSA forum, thus has backstopped the team on various knowledge on CSA and implications for agriculture in West Africa region.

(2) CCAFS-WA led the development of a paper on the Scientific, Political and Financial Landscape of Climate-Smart Agriculture in West Africa. This covered 5 sub-sectors: crop production, livestock, fisheries, water, forestry/Agroforestry. The paper was used a background document to inform the forum framework for intervention and for setting up a CSA alliance.

(3) The contributing scientists from IWMI, IFPRI, ILRI, ICRAF, ICRISAT, CORAF, and Ibadan University gave keynotes to introduce the forum (250 participants). This was facilitated by CCAFS-WA RPL.

(4) CCAFS has received more than 150 visitors and distributed about 500 documents. The book published in English and French was downloaded 1500 times.

**Non-research Partners:** Hub Rural  
ECOWAS (Agriculture Directorate)

**Output Users:** ECOWAS

Hub Rural

UEMOA

CILSS

Government Ministries from Rural Development

Parliamentarians (Rural development commission)

NGOs

Donors

NARS

**How the output was used:** The knowledge on the state of CSA in WA as well as its future has guided ECOWAS and WA partners to deliberate on future domains for the promotion of CSA in West Africa. Its helped design a suitable CSA alliance and an implementation framework that fits well with the ECOWAP.

**Evidence of the outcome:** High level forum of CSA stakeholders in West Africa  
(<http://www.hubrural.org/Forum-CEDEAO-de-Haut-Niveau-des,12409.html?lang=en>)

ECOWAS and member-countries now effectively mainstreaming CSA into regional and national agricultural plans and policies through the CSA alliance (WACSAA) and implementation framework  
(<https://ccaafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo>)



Submitted on 2016-03-03 at 12:18 UTC

**References:** Robert Zougmore, Alain Sy Traoré and Yamar Mbodj (Eds.), 2015. Overview of the Scientific, Political and Financial Landscape of Climate-Smart Agriculture in West Africa. Working Paper No. 118. CGIAR Research Program on Climate Change, Agriculture and Food Security. Available online at: [www.ccafs.cgiar.org](http://www.ccafs.cgiar.org)

Letter of thanks from Hub Rural

<http://www.hubrural.org/Forum-CEDEAO-de-Haut-Niveau-des,12409.html?lang=en>

**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:** [Working paper\\_Overview of CSA.pdf](#)

## 5. Project outputs

### 5.1 Overview by MOGs

#### Major Output groups - 2019

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

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

<Not defined>

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

<Not defined>

#### Major Output groups - 2014

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

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

<Not defined>

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

ECOWAS and member-countries now effectively mainstreaming CSA into regional and national agricultural plans and policies through the CSA alliance (WACSAA) and implementation framework (<https://ccafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo>), the development of country action plans (e.g. Ghana), and the design of National Plan for the Rural Sector for Burkina Faso-PNSR II (<https://www.youtube.com/watch?v=sxxMNkvSz0o>).

**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 level of involvement of various social groups and how women farmers have been receiving and using the climate information were monitored along the implementation.

#### Major Output groups - 2015

Submitted on 2016-03-03 at 12:18 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 2015 contribution towards the selected MOG**

<Not defined>

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

ECOWAS and member-countries now effectively mainstreaming CSA into regional and national agricultural plans and policies through the CSA alliance (WACSAA) and implementation framework (<https://ccafs.cgiar.org/blog/alliance-climate-smart-agriculture-launched-west-africa#.VrHKv8YrGpo>), the development of country action plans (e.g. Ghana), and the design of National Plan for the Rural Sector for Burkina Faso-PNSR II (<https://www.youtube.com/watch?v=sxxMNkvSz0o>).

**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:**

Access and use of climate information by various social groups and women farmers were monitored along with project implementation. The Ghana national climate-smart agriculture and food security action plan has clear involvement strategy for women using the Women in Agriculture Development (WIAD) technical directorate of MoFA.

### 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**

Using the ESOKO IT platform experience in Northern Ghana to inform the implementation of Ghana CSA action plan

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

The level of involvement of various social groups and how women farmers have been receiving and using the climate information were monitored along the implementation

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** The evidence based information from ground activities are now reaching national level platforms in order to enact relevant national climate change policies.

Submitted on 2016-03-03 at 12:18 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Documentation of indigenous knowledge on climate forecast by farmers	
<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> Extended	<b>Justification for cancelling the deliverable:</b> To be completed by end of 2016

Next-user
Rural radios, ICTs companies, agricultural value chain projects in Senegal and Burkina Faso
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users communicate widely the climate data and information across their respective farmers' networks to guide farmers decision making for climate risk management
<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

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	4
<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>	5

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

Submitted on 2016-03-03 at 12:18 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 #2****Main Information****Title:** Basket of climate-smart services, technologies and practices for CSA promotion within ROPPA network**MOG # 1:** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Policy briefs - Briefing paper**Year of expected completion:** 2015**Status:** Extended**Justification for cancelling the deliverable:** To be completed in 2016**Next-user**

The 13 ROPPA national platforms

**Knowledge, attitude, skills and practice changes expected in next-user:** The national Platform members take into account climate information and integrate climate-smart agriculture technologies into their family farm operations.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Engagement, knowledge sharing

Submitted on 2016-03-03 at 12:18 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Tioro, Andre <atioro@yahoo.fr>, ROPPA - Reseau des organisations paysannes et des producteurs agricoles de l'Afrique de l'Ouest

## Deliverable Ranking

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

## Deliverable dissemination

Open access restriction: <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 #3

## Main Information

<b>Title:</b> National Climate-Smart Agriculture and Food Security Action Plan (2016 - 2020)
--

Submitted on 2016-03-03 at 12:18 UTC

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

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

**Sub Type:** Policy briefs - Briefing paper

**Year of expected completion:** 2015

**Status:** Complete

#### Next-user

national science-policy dialogue platforms and their members

**Knowledge, attitude, skills and practice changes expected in next-user:** Next users are sensitized on and use scientific information to develop national agricultural action plans

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

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** cgspace

**Dissemination URL:** <https://cgspace.cgiar.org/handle/10568/69000>

#### Deliverable Metadata

Submitted on 2016-03-03 at 12:18 UTC

**Description:** The policy document – National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020) – provides the implementation framework for an effective development of climate-smart agriculture in the ground. It formulates specific strategies that will contribute developing climate-resilient agriculture and food systems for all agro-ecological zones, as well as the human resource capacity required for a climate-resilient agriculture promotion in Ghana. The action plan is therefore an effort to translate to the ground level the broad national goals and objectives in climate-smart agriculture. Its development has been made possible through the active engagement of various public and private institutions and organizations in Ghana. The methodology comprised desk research, data collection through interviews and participatory workshops and small group meetings. A review of relevant agricultural policy documents such as the Food and Agriculture Sector Development Policy (FASDEP), the METASIP and the Agriculture Sustainable Land Management Strategy and Action Plan was done to analyse the current national agricultural policy environment. Participatory workshops were organized to bring representatives of stakeholder organizations together to discuss various components of the action plans and prepare inputs. These stakeholder consultation workshops were used to carry out prioritization of the action areas by the agro-ecological groupings. The stakeholders included farmers, small-scale agro-entrepreneurs, women groups and local government authorities. In addition, a validation workshop was held to provide a platform for a final discussion of the draft Action Plan with key stakeholders. It brought together representatives from the relevant ministries and public institutions including MoFA, MESTI, NDPC, private sector entities and farmer-based organizations. The Action Plan defined implementation programmes in the respective agro- ecological zones and in the various districts. Activities defined in the action plan have been developed on the premise that the eight programme areas of the Agriculture and Food Security focus area of the NCCP, provide a useful framework for detailing the specific activities and their corresponding implementing agencies. Other key components discussed the cross-cutting issues in the implementation of the plan and the monitoring and evaluation system. What remains crucial now is the allocation of resources to effectively implement the plan. In this regards, the lessons from the prioritization of the action areas by the stakeholders are instructive. Each of the three agro-ecological zones has action areas of emphasis. However, the development and promotion of climate-resilient cropping systems is important for all three zones and national efforts to focus on this since it is at the foundation of food security. More specifically, for the Savannah Zone, water conservation and irrigation systems are critical. For the Transition Zone, the development of livestock production system is important whilst for the Forest Zone, capacity development is a priority. The key message from the prioritization is that, it guides the formulation of the location-specific activities to address climate change and therefore engenders effective allocation of national resources. What needs to be underscored is the fact that, it is not the formulation of plans that creates impact. It is the dedicated implementation and commitment to the ideals and principles undergirding the plans that bring results. The earnest hope is to have commitment manifested with this national action plan.

**Creator / Authors:** Essegbey GO,Nutsukpo D,Karbo N,Zougmore R

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2015-11-24T08:40:15Z,2015-11-24T08:40:15Z,2015-11-12

**Language:** en

**Coverage:** <Not defined>

#### Deliverable Data sharing

[ACTION PLAN final -press.pdf](#)

## Deliverable #4



Submitted on 2016-03-03 at 12:18 UTC

Main Information	
<b>Title:</b> Workshop	
<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> 2015	
<b>Status:</b> Complete	

Next-user #1
Rural radios
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Changes in awareness, knowledge in better understanding climate information and how to communicate it in easy to understand and use language to farmers.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Dissemination, radio broadcast

Next-user #2
The 13 ROPPA national platforms (Farmer university)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Engagement, knowledge, sharing
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Engage and sensitize the national Platform members to take into account climate information and integrate climate-smart agriculture technologies into their family farm operations.

Next-user #3
National science-policy dialogue platforms and their members
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Sensitizing next users on the use of scientific information to develop national agricultural action plans.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Engagement, knowledge, sharing, facilitation

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Ndiaye, Ousmane <ondiaye70@gmail.com>, ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)
<b>Partner #2:</b> Tioro, Andre <atioro@yahoo.fr>, ROPPA - Réseau des organisations paysannes et des producteurs agricoles de l'Afrique de l'Ouest

Submitted on 2016-03-03 at 12:18 UTC

**Partner #3:** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

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

Deliverable dissemination
Open access restriction: <Not defined>
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <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 #5

Main Information
<b>Title:</b> A scalable model of communicating seasonal forecast through ICT
<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

Submitted on 2016-03-03 at 12:18 UTC

<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> Extended	<b>Justification for cancelling the deliverable:</b> Underway, to be developed by end of 2016

Next-user
ICT companies
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> ICT companies now able to produce and deliver tailored climate information services for farmers.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Test, engagement, knowledge sharing and communication will be key

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Gordon Kotey, Nikoi <gordon@esoko.com>, ESOKO Limited

Deliverable Ranking	
Address gender and social inclusion aspect	4
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
<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 2016-03-03 at 12:18 UTC

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

Deliverable Data sharing
--------------------------

<b>Deliverable files</b> <Not defined>
---

**Deliverable #6**

Main Information
------------------

<b>Title:</b> Disseminating climate information and services through IT platform in Ghana
---

<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
--------------------------------

<b>Year of expected completion:</b> 2016
--

<b>Status:</b> On-going
-------------------------

<b>Justification for cancelling the deliverable:</b> Final technical report has been submitted.
---

Next-user
-----------

Ghana Ministry of Food and Agriculture (MoFA)
---

<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> MoFA will use the evidenced success of communicating climate information services from the ESOKO IT platform to leverage the implementation of national CSA action plan and other national agricultural development plans.
---

<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The Ghana science-policy dialogue platform will facilitate the knowledge sharing for effective engagement of national actors.
--

Partners contributing to this deliverable
---

<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
---

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>	4
---	---

Submitted on 2016-03-03 at 12:18 UTC

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: <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>

### 5.3 Summary on next-users

Next user #1
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> The 13 ROPPA national platforms
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Sensitizing the national Platform members to take climate information into account and integrate climate-smart agriculture technologies into their family farm operations.
<b>Reported deliverables serve as evidence towards this achieved change:</b> Technical report
<b>Lessons and implications for the next planning cycle:</b> Farmer university to be supported in the training of national constituencies, youth groups, women groups, leaders, national platforms) on climate smart agriculture.
Next user #2
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> National science-policy dialogue platforms and their members
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Next users were sensitized on using scientific information to develop national agricultural action plans
<b>Reported deliverables serve as evidence towards this achieved change:</b> The Ghana National Climate-Smart Agriculture and Food Security Action Plan (2016-2020)
<b>Lessons and implications for the next planning cycle:</b> Financial planning to be developed for the implementation of the action plan
Next user #3
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Rural radios
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> Awareness creation in better understanding climate information and how to communicate it in easy to understand and use language to farmers.
<b>Reported deliverables serve as evidence towards this achieved change:</b> Report
<b>Lessons and implications for the next planning cycle:</b> Rural radios must be continually capacitated to effectively communicate to farmers
Next user #4
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> ICT companies

Submitted on 2016-03-03 at 12:18 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:** Engagements, pilot testing and knowledge sharing with ICT companies to produce and deliver tailored climate information services for farmers.

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

**Lessons and implications for the next planning cycle:** Need to understand from farmers' point of view the best communication channel for receiving climate information from ICT companies.

#### Next user #5

**Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:** Ghana Ministry of Food and Agriculture (MoFA)

**Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:** Engagements with the Ghana science-policy dialogue platform and MoFA to use the evidenced success of communicating climate information services from the ESOKO IT platform to leverage the implementation of national CSA action plan and other national agricultural development plans.

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

**Lessons and implications for the next planning cycle:** There is need to strengthen the relationship and communication between Esoko and MoFA

Submitted on 2016-03-03 at 12:18 UTC

## 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> 2016-03-03
<b>End date:</b> 2016-03-03	<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> Scaling up climate information services to reach million farmers in West Africa (IT-radios-Value chain projects)	
<p><b>Description:</b> Following the successful implementation of the communication approach, ANACIM in Senegal has moved ahead through scaling-up the approach by channelling the climate information services through community rural radios in Senegal (URAC). This activity will continue with the 82 rural radios in Senegal.</p> <p>In Ghana, CCAFS initiated during 2014 a collaboration with ESOKO, a private company that can use its IT expertise and network in Ghana to scale up climate smart agriculture technologies in Northern Ghana. The specific goal is to improve access and use of downscaled seasonal forecast and climate smart agriculture technologies and practices (agro-advisories) through mobile phone and ESOKO platform by farmers in Northern Ghana.</p> <p>Some country value chain projects, are interested to mainstream the promising CSA technologies and practices into some of their agricultural sectors (e.g. Bissap, sorghum for PAFA project in Senegal; cowpea and sesame for PROFIL project in Burkina Faso).</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Parety, Samuel <S.Parety@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	

Submitted on 2016-03-03 at 12:18 UTC

<p><b>Status:</b> On-going</p>	<p><b>Justification:</b> In Sénégal, ANACIM has: (1) Inventoried farmers' specific climate information needs and indigenous knowledge on bioclimate indicators; (2) Co-produced climate services (including traditional and modern indicators) that respond to farmers' priority information needs for farm management decision making; (3) Trained and capacitated user communities and selected farmers to understand and apply climate forecast information; (4) Trained boundary organizations as well as extension services, partner professional communicators (rural radios) to understand and communicate probabilistic forecast information; and (5) Mainstreamed climate-smart agriculture approach in all sites consolidated through partnership with the C-CASA platform;</p> <p>In Northern Ghana, CCFAS has been working in partnership with Esoko to improve farmers' access to, and use of downscaled seasonal forecast and climate smart agriculture technologies and practices (agro-advisories) through mobile phone and Esoko platform. So far 835 farmers (of which 33% are females) have been trained on how to make use of seasonal forecast or climate information through mobile phone technologies. Apart from daily and seasonal climate forecast, other information including agro-advisories alerts, market price alerts are also provided to assist farmers in their crop planning. The work of Esoko is also synergized by the Participatory Integrated Climate Services for Agriculture (PICSA) project implemented by the Africa Institute for Mathematical Sciences in collaboration with the Ghana Meteorological Agency and the University of Reading. The PISCA platform continues to train farmers and extension officers in Ghana's Northern Region on how they can build resilience against climate change risks.</p> <p>Similarly, PROFIL and PAFA, (two value chain projects in Senegal and Burkina Faso), also disseminated seasonal forecast information and climates-smart agricultural options to farmers from various agricultural sectors and ROPPA national platforms.</p>
--------------------------------	---

**Title:** Using ROPPA platforms to pilot proven CSA options

Submitted on 2016-03-03 at 12:18 UTC

<b>Description:</b> As a follow up to CCAFS technical backstopping on CSA during the farmers' University of the West Africa Farmers Network (ROPPA, <a href="http://www.roppa.info/spip.php?article196">http://www.roppa.info/spip.php?article196</a> ), this organisation is interested to strengthen its national platforms capacity for a better understanding and use of climate-smart agriculture technologies and practices. Through this activity, pilot tests on CSA options will be implemented with some of the 13 ROPPA national platforms in West Africa. The aim is to foster the mainstreaming of CSA into ROPPA strategic planning and to promote the widespread use of CSA within ROPPA farmers across West Africa. ROPPA will coordinate the piloting of successful CSA options that could increase the family farm sovereignty.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Parety, Samuel <S.Parety@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #3	
<b>Title:</b> Backstopping national science policy platforms to mainstreaming climate change into agricultural development plans and policies	
<b>Description:</b> In West Africa, CCAFS supported the setup of national science-policy dialogue platforms in each of the five pilot countries. Nowadays, these platforms are shown capacity to reach national high level policy and decision makers and therefore can become truly springboards to use CCAFS science to inform national decision making. This activity aim to provide scientific and technical backstopping to allow the platforms move ahead with the development of climate change action plans for agriculture. The CCAFS engagement with countries focal institutions in charge of facilitating the functioning of these platforms (CNEDD-Niger, CONEDD-Burkina Faso, DAMER-Senegal, AEDD-Mali, CSIR-ARI-Ghana) will be strengthened through regular involvement of partners to CCAFS-led major events.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Parety, Samuel <S.Parety@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

**Lessons regarding your project activities and possible implications for the coming planning cycle:** In 2016, activities 244 will be pursued but now focused on: (1) the infusion of climate information services into value chain projects (PROFIL in Burkina Faso, PAFA in Senegal); (2) the dissemination of CIS through ESOKO IT platform in Northern Ghana. For activity 246, national science-policy platforms of Ghana, Senegal and Mali will pursue their activities on knowledge exchange to informing and enacting policies at national level. Activity 245 will discontinue during 2016 unless through funds allocated by ROPPA.

Submitted on 2016-03-03 at 12:18 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-02 at 15:45 UTC

**Title:** ICRISAT Quantification and Mitigation of greenhouse gas (GHG) emissions (Bridging)

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	RP SAs - South Asia Region	<b>Mgmt. liaison contact</b>	Aggarwal, Pramod <P.K.Aggarwal@cgiar.org>
<b>Lead organization</b>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India	<b>Project leader</b>	Whitbread, Anthony <a.whitbread@cgiar.org>
<b>Project type</b>	CCAFS CORE	<b>Detailed project workplan</b>	<Not defined>

**Project is working on**

Flaship(s)	Region(s)
FP3: Low Emissions Agricultural Development	RP SAs: South Asia

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

This project does not have Bilateral projects

**Summary**

Agricultural GHG emissions from crops and livestock production will be more than 6.3 Gt CO<sub>2</sub> eq in 2050. Climate change poses a real threat to resource-poor farmers of the developing world. The introduction of grain legumes or cereal crops in the dry season is one of the options for intensifying rice based systems. The impact of this intensification on GHG emissions and productivity is largely unknown, but could be a significant factor in many systems in South Asia. Automatic GHG monitoring equipment will be installed in the flooded rice system that has been successfully measuring GHG emissions on a conservation tillage experiment since last 2 years at the ICRISAT (Patancheru) with the help of CCAFS Phase-I funding. Besides this, we will validate APSIM-Oryza model under flooded cropping system. This project is going to play a crucial role in our climate smart out scaling activities.

Submitted on 2016-03-02 at 15:45 UTC

## 2. Partners

### Partner #1 (Leader)

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Whitbread, Anthony <a.whitbread@cgiar.org>	Activity 2014-95 *Leader*. Activity 2014-97 *Leader*.

### Partner #2

**Institution:** QUT - Queensland University of Technology

#### CCAFS Partner(s) allocating budget

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Rowlings, David William <d.rowlings@qut.edu.au>	Activity 2014-95 *Partner*. Activity 2014-97 *Partner*.

**Partnerships overall performance over the last reporting period:** Our project partner (QUT) helped in on-ground training to staffs, maintenance and troubleshooting of automated GHG measurement system, ensuring high quality datasets production and data analysis in the past.

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

*Submitted on 2016-03-02 at 15:45 UTC*

### 3. Locations

Project level	Latitude	Longitude	Name
Permanent agricultural trial site	17.508775045253948	17.508775045253948	Black Watershed 4, ICRISAT-Patancheru
Permanent agricultural trial site	17.492591012608784	17.492591012608784	ICRISAT-Patancheru Rice Field

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

1. Contribution to ICRISAT and CCAFS's climate smart out scaling activities, especially for climate smart village (CSV) in new adaptation work.
2. Increased precision in the quantification of GHG emissions from cropping systems in semi-arid tropics of South Asia.
3. Improvement in modeling of GHG emissions under cereal based cropping systems.

**Annual progress towards outcome (end of 2015):** Data and report on GHG emissions from dryland cropping systems under semi-arid tropics.

**Annual progress towards project outcome in the current reporting cycle (2015):** GHG emissions study from dryland maize-legume-fallow systems under conservation agriculture was completed in June 2015.

A significant influence of tillage on N<sub>2</sub>O emission was observed with the minimum tillage treatments between 55-60% higher than the respective conventional tillage treatments. No significant difference in emissions following residue application was observed but losses tended to be higher from the crop residues. Emissions of CO<sub>2</sub> were highest in both the minimum tillage and crop residue returned treatments compared to their comparative conventional tillage and zero residue treatments. Fertilizer emission factors (EF's) for the minimum tillage treatments are marginally higher than that of the conventional tillage under maize/pigeonpea cropping systems in 2014-15.

Manuscript on this is going to be submitted on March 2016.

Our GHG work on flooded rice based cropping systems will be completed in April 2016. GHG dynamics data from rice crop has already been analysed.

The application of neem coated urea (NCU) in alternate wetting and drying (AWD) rice plots reduced both CH<sub>4</sub> and N<sub>2</sub>O compared to the other treatments (urea+flooded rice, urea+AWD rice and NCU+flooded rice) resulting in a 20% reduction of GHG emissions compared to the conventional flooded urea treatment.

Emission study is going on post rainy crops (black gram, finger millet and safflower). For modeling, rice (variety RP Bio 226) growth analysis and phenological observations have been recorded during the crop growing season. The data analysis, crop model for parameterization and evaluation of model runs are under progress.

The GHG datasets is being processed to upload in ICRISAT's database.

**Communication and engagement activities have contributed to achieving your Project outcomes:** Large number of visitors to ICRISAT have toured the trials (>300) including the CCAFS management team. Project Scientist Dr Pradhan spent 4 months at JIRCAS Japan developing GHG techniques for measuring Biological Nitrification Inhibition (BNI) or sorghum including 2 public seminars.

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

**Annual progress towards outcome (end of 2016):** NA



Submitted on 2016-03-02 at 15:45 UTC

**Annual progress towards outcome (end of 2017):** NA

**Annual progress towards outcome (end of 2018):** NA

**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 have observed interesting result on GHG dynamics from flooded rice based cropping systems.

## 4.2 Contribution to CCAFS Outcomes

**RP SAs - Outcome 2019:** Governments and global organizations make rational decisions about mitigation based on local, regional and global evidences about mitigation potential in agriculture

**Indicator #1:** FP3 Indicator: # of low emissions plans developed that have significant mitigation potential for 2025, i.e. will contribute to at least 5% GHG reduction or reach at least 10,000 farmers, including at least 10% women.

2019	
<b>Target value:</b> <Not defined>	<b>Cumulative target to date:</b> 1
<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> 1	<b>Cumulative target to date:</b> 1	<b>Target achieved:</b> 1.0
<b>Target narrative:</b> <Not defined>		
<b>Narrative for your achieved targets, including evidence:</b> Emission factor (EF) calculated for different tillage and crop residue management practices from maize-legume fallow systems under semi-arid tropics.		
<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		

Submitted on 2016-03-02 at 15:45 UTC

2016	
<b>Target value:</b> <Not defined>	<b>Cumulative target to date:</b> 1
<b>Target narrative:</b> <Not defined>	
<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>

*Submitted on 2016-03-02 at 15:45 UTC*

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

There is not an Outcome Case Study added.

Submitted on 2016-03-02 at 15:45 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

**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:**

Prefilled if available

**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:**

Prefilled if available

Submitted on 2016-03-02 at 15:45 UTC

#### Major Output groups - 2016

**FP3 - MOG # 1:** Methods and data for quantifying low-emissions agriculture options appropriate to smallholder farmers

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

<Not defined>

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

<Not defined>

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** Prefilled if available

Submitted on 2016-03-02 at 15:45 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> GHG emissions from maize-legume rotation in the semi-arid tropics	
<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> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Study on GHG emissions from maize-legume rotation has been completed in 2015. Manuscript is going to submitted in March 2016.

Next-user
Researchers across different countries, policy makers in national & state governments, NGOs, Farmers and Extension agents
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> It will increase knowledge of next users in GHG emissions from dryland cropping system. It is going to play significant role in GHG mitigation strategies through climate smart agricultural practices.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Data sets, report, publication and communication through social media

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Whitbread, Anthony <a.whitbread@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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

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

Submitted on 2016-03-02 at 15:45 UTC

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

Deliverable Metadata
<b>Description:</b> Metadata will be shared after publication.
<b>Creator / Authors:</b> Prefilled if available
<b>Author Identifier:</b> Prefilled if available
<b>Publication / Creation date:</b> Prefilled if available
<b>Language:</b> Prefilled if available
<b>Coverage:</b> Prefilled if available

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

## Deliverable #2

Main Information
<b>Title:</b> High quality GHG data sets from flooded rice-dry season cropping 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> 2015
<b>Status:</b> On-going
<b>Justification for cancelling the deliverable:</b> Data from rice crop has already been analysed. GHG emission study on post rainy crops is under progress.

Next-user
Deliverable # 2, Researchers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> It is going to improve knowledge and skills of researchers regarding management, analysis and interpretation of large, and complex GHG data sets
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Advanced training and capacity building

Submitted on 2016-03-02 at 15:45 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Rowlings, David William <d.rowlings@qut.edu.au>, QUT - Queensland University of Technology

## Deliverable Ranking

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

## Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

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

## Deliverable Metadata

**Description:** Metadata will be shared after publication.

**Creator / Authors:** Prefilled if available

**Author Identifier:** Prefilled if available

**Publication / Creation date:** Prefilled if available

**Language:** Prefilled if available

**Coverage:** Prefilled if available

## Deliverable Data sharing

**Deliverable files**  
<Not defined>

## Deliverable #3

## Main Information

**Title:** Effect of agricultural intensification on GHG emissions dynamics under flooded rice-fallow system in semi-arid tropics



Submitted on 2016-03-02 at 15:45 UTC

<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> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> GHG dynamics study on flooded rice crop is completed during this reporting cycle. GHG emission measurement on post rice crops (black gram, finger millet and safflower) is under progress.

Next-user
Researchers, Students, Policy makers, NGOs, Farmers and Extension agents
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Enhanced knowledge on GHG emissions and mitigation strategies
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Report, publication and communication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Whitbread, Anthony <a.whitbread@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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

Deliverable dissemination
<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> Metadata will be shared after publication.
<b>Creator / Authors:</b> Prefilled if available

Submitted on 2016-03-02 at 15:45 UTC

**Author Identifier:** Prefilled if available

**Publication / Creation date:** Prefilled if available

**Language:** Prefilled if available

**Coverage:** Prefilled if available

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

Submitted on 2016-03-02 at 15:45 UTC

## 5.3 Summary on next-users

Next user #1
<b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> Researchers across globe, policy makers in governments, NGOs, Farmers and Extension agents involved in low emission agriculture activities.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> We have already disseminated our research findings to next users through field days, village meetings and presentations.
<b>Reported deliverables serve as evidence towards this achieved change:</b> Data
<b>Lessons and implications for the next planning cycle:</b> NA

*Submitted on 2016-03-02 at 15:45 UTC*

## **5.4 Project highlights**

Submitted on 2016-03-02 at 15:45 UTC

## 6. Activities

Activity #1	
<b>Title:</b> Complete the current phase of GHG emissions measurement from long-term conservation agriculture experiment with maize-legume cropping system	
<b>Description:</b> Information on GHG fluxes throughout the day/ night and season from conventional and improved semi-arid agricultural systems is still limited. Successful completion of our ongoing GHG emissions study from conservation agriculture experiment will be very much helpful for GHG mitigation strategies.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 28-02-2015
<b>Leader:</b> Whitbread, Anthony <a.whitbread@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #2	
<b>Title:</b> Undertake GHG measurement using the automated system to compare GHG dynamics of an intensified rice-legume/rice-cereal/rice-fallow system.	
<b>Description:</b> Automatic GHG measurement system that measures the fluxes of CO <sub>2</sub> , N <sub>2</sub> O and CH <sub>4</sub> continuously (day and night) will be installed in the flooded rice based cropping systems. It utilises the static closed chamber technique (non-steady-state, non-through flow) to measure GHG fluxes or rates of flow from soils. This system consists of both 12 automated measuring chambers linked to an automated sampling system and an in-situ gas chromatograph (GC), and external sensors to collect high resolution environmental data including soil temperature, soil moisture and rainfall.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Whitbread, Anthony <a.whitbread@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Extended	<b>Justification:</b> GHG measurement from flooded rice crop has been completed. However, emission study from post rice crops is under progress due to prevailing crop growing season at the current location which is going to be completed in April 2016.

**Lessons regarding your project activities and possible implications for the coming planning cycle:** NA

Submitted on 2016-03-02 at 15:45 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-03 at 14:41 UTC

# CCAFS COFUNDED W1\_W2\_W3

**Title:** Integrated assessments of climate change and adaptation impacts on agricultural systems using AgMIP and GYGA protocols in SSA and SA

<b>Start date (dd-MM-yyyy)</b>	01-01-2015	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	RP EA - East Africa Region	<b>Mgmt. liaison contact</b>	Kinyangi, James <j.kinyangi@cgiar.org>
<b>Lead organization</b>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya	<b>Project leader</b>	Claessens, Lieven <l.claessens@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 EA: East Africa

## Bilateral project(s) contributing to this project

190 - The Agricultural Modeling Intercomparison and Improvement project (AgMIP) - Regional Integrated Assessments in SSA and SA

## Summary

Bridging project hosting two bi-lateral projects: 1) AgMIP 2) Global Yield Gap Atlas. 1) Site and gender specific integrated assessments of climate change impacts on agriculture and food security are today essential in planning appropriate adaptation strategies. This work aims to fill knowledge gaps about i/ current production systems sensitivity to climate change, ii/ impacts of climate change on future production systems and iii/ benefits of adaptation under plausible representative agricultural pathways and climate scenarios for selected sub-national sites in SSA and SA in partnership with AgMIP.

2) This project will provide the first easily accessible, transparent, reproducible, and agronomically accurate web-based platform to estimate exploitable gaps in yield and water productivity for the world's major food crops, enabling farmers, governments, policy makers, agricultural research and extension institutions, funders of agricultural research, private sector organizations and others to identify regions with the greatest potential to sustainably increase global food supply.

Submitted on 2016-03-03 at 14:41 UTC

## 2. Partners

### Partner #1 (Leader)

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Claessens, Lieven <l.claessens@cgiar.org>	Activity 2014-142 *Leader*. Activity 2014-145 *Leader*. PI AgMIP East Africa, regional coordinator GYGA (EA-WA-SA)

### Partner #2

**Institution:** Mekelle University

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Tesfu, Yemane <yemane@gmail.com>	Economist Ethiopia

### Partner #3

**Institution:** EIAR - Ethiopian Institute of Agricultural Research

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Seid, Jemal <jemsethio@gmail.com>	PI Ethiopia

### Partner #4



Submitted on 2016-03-03 at 14:41 UTC

**Institution:** KARI - Kenya Agricultural Research Institute**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Esilaba, Anthony <anthony.esilaba@kalro.org>	PI Kenya

**Partner #5****Institution:** KMD - Kenya Meteorological Department**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Kilavi, Mary <marykilavi@yahoo.com>	Climate modeling Kenya

**Partner #6****Institution:** SUA - Sokoine University of Agriculture**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Tumbo, Siza <siza.tumbo@gmail.com>	PI Tanzania

**Partner #7****Institution:** TMA - Tanzania Meteorological Agency**CCAFS Partner(s) allocating budget:** <Not defined>

Submitted on 2016-03-03 at 14:41 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Mlonganile, Peter <pmlonganile@yahoo.co.uk>	Climate modeling Tanzania

**Partner #8****Institution:** UMD - Uganda Meteorological Department**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Nandozi, Carolyn <nscarolyn@gmail.com>	Climate modeling Uganda

**Partner #9****Institution:** Makerere University**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Bonabana-Wabbi, Jackline <jbonabana@caes.mak.ac.ug>	Economist Uganda

**Partner #10****Institution:** UEM - Universidade Eduardo Mondlane**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------

Submitted on 2016-03-03 at 14:41 UTC

Partner	Homann, S <s.homann@cgiar.org>	Don't have contact, ask Sabine
---------	-----------------------------------	--------------------------------

**Partner #11****Institution:** BCA - Bunda College of Agriculture**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Homann, S <s.homann@cgiar.org>	Don't have contact, ask Sabine

**Partner #12****Institution:** UCT - University of Cape Town**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Crespo, Olivier <olivier@csag.uct.ac.za>	Climate modeling South Africa

**Partner #13****Institution:** UFS - University of the Free State**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Walker, Sue <sue.walker@agro-impact.com>	Crop modeling South Africa

Submitted on 2016-03-03 at 14:41 UTC

**Partner #14****Institution:** MRI - Matopos Research Institute**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Sisito, Givious <gsisito@gmail.com>	Economist Zimbabwe

**Partner #15****Institution:** ARC - AGRICULTURAL RESEARCH COUNCIL**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Durand, Wiltrud <pdurand@mweb.co.za>	PI and crop modeling South Africa

**Partner #16****Institution:** University of Ghana**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Adjei Nsiah, Samuel <y_nsiah@yahoo.co.uk>	Activity 2014-145 *Partner*.

**Partner #17**

Submitted on 2016-03-03 at 14:41 UTC

**Institution:** AGRHYMET - Centre regional AGRHYMET**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Traore, Seydou <S.Traore@agrhyment.ne>	Activity 2014-142 *Partner*. Activity 2014-145 *Partner*.

**Partner #18****Institution:** UDS - University for Development Studies**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>	Dont know contact, ask Dilys.

**Partner #19****Institution:** IPAR - Initiative prospective agricole et rurale**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Hathie, Ibrahima <ihathie@gmail.com>	Economist Senegal

**Partner #20****Institution:** SARI - Savannah Agricultural Research Institute**CCAFS Partner(s) allocating budget:** <Not defined>

Submitted on 2016-03-03 at 14:41 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>	Dont know contact, ask Dilys.

**Partner #21****Institution:** INERA - Institut de l'Environnement et de Recherches Agricoles**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Ouattara, Korodjouma <korodjouma_ouattara@hotmail.com>	Activity 2014-145 *Partner*.

**Partner #22****Institution:** ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>	Don't know contact, ask Sibiry.

**Partner #23****Institution:** Agence Nationale de la Météorologie du Mali**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------

Submitted on 2016-03-03 at 14:41 UTC

Partner	Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>	Don't know contact, ask Sibiry.
---------	--	---------------------------------

**Partner #24****Institution:** UF - University of Florida**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Jones, James <jimj@ufl.edu>	AgMIP leader

**Partner #25****Institution:** University of Nebraska**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Cassman, Kenneth <kcassman1@unl.edu>	Activity 2014-145 *Partner*.

**Partner #26****Institution:** WUR - Wageningen University and Research Centre**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Van Ittersum, Martin <martin.vanittersum@wur.nl>	Activity 2014-145 *Partner*.

Submitted on 2016-03-03 at 14:41 UTC

**Partner #27****Institution:** CIAT - Centro Internacional de Agricultura Tropical**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Nyombi, Kenneth <k.nyombi@cgiar.org>	Activity 2014-145 *Partner*.

**Partner #28****Institution:** CIMMYT - International Maize and Wheat Improvement Center**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Tesfaye, Kindie <k.tesfaye@cgiar.org>	Activity 2014-145 *Partner*.

**Partner #29****Institution:** AfricaRice - Africa Rice Center**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Saito, Kazuki <k.saito@cgiar.org>	Activity 2014-145 *Partner*.

**Partner #30****Institution:** JKUAT - Jomo Kenyatta University of Agriculture and Technology**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Adimo, Ochieng <adimo8@gmail.com>	Activity 2014-145 *Partner*.



Submitted on 2016-03-03 at 14:41 UTC

**Partner #31****Institution:** IER - Institut d'Economie Rural**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Kouressy, Mamoutou <nany63@gmail.com>	Activity 2014-145 *Partner*.

**Partner #32****Institution:** NARO - National Agricultural Research Organization**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Kaizzi, Kayuki <kckaizzi@gmail.com>	Activity 2014-145 *Partner*.

**Partner #33****Institution:** MAFC - Ministry of Agriculture, Food security and Cooperatives**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Makoi, Joachim <joachimmakoi@yahoo.com>	Activity 2014-145 *Partner*.

**Partner #34**

Submitted on 2016-03-03 at 14:41 UTC

**Institution:** University of Zimbabwe**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Chikowo, Regis <regischikowo@yahoo.co.uk>	Activity 2014-145 *Partner*.

**Partner #35****Institution:** Federal University of Technology Minna**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Bala, Abdoullahi <abdoullahi_bala@yahoo.com>	Activity 2014-145 *Partner*.

**Partner #36****Institution:** ICAR - Indian Council of Agricultural Research**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Subash, Nataraja <nsubashpdfsr@gmail.com>	Activity 2014-145 *Partner*.

**Partner #37****Institution:** Melbourne University**CCAFS Partner(s) allocating budget:** <Not defined>

Submitted on 2016-03-03 at 14:41 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Timsina, Jagadish <timsinaj@hotmail.com>	Activity 2014-145 *Partner*.

**Partnerships overall performance over the last reporting period:** GYGA: partners performed as expected, project closed December 2015. AgMIP: partners mostly performing as expected, project ongoing.

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** Rapid and regular personnel changes in NARS. Challenges for capacity building (people get trained in the project and move on). Not sure what can be done about this.

*Submitted on 2016-03-03 at 14:41 UTC*

### 3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	East Africa
Region	Not applicable	Not applicable	West Africa
Region	Not applicable	Not applicable	South Asia
Region	Not applicable	Not applicable	Other

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

1) AgMIP: sub-national institutions are using the results of the regional integrated assessments (district/county, CSV level) to develop and promote locally relevant adaptation packages based on CSA technologies and practices. 2) GYGA: national institutions (MoA, NARS) are actively using the protocols on the interactive website to perform national food security assessments (under different climate and socio-economic scenarios) and use the results to develop and spatially target investments in CSA.

**Annual progress towards outcome (end of 2015):** 1) AgMIP: regional integrated assessments have been conducted in close collaboration with NARS and socio-economic scenarios have been developed in consultation with stakeholders (MoAs, sub-national govts, extension,...). During 2015 multiple workshops are planned to share and disseminate results from the analyses. This will contribute towards the 2019 outcomes.

2) GYGA: data and protocols for yield gap assessments are fully functional on the interactive atlas ([www.yieldgap.org](http://www.yieldgap.org)). The atlas has been presented to MoAs in a few countries (Nigeria, Ghana). During 2015 there will be efforts to further disseminate information and promote the use of the atlas by next users (MoAs, NARS). This will contribute towards the 2019 outcomes.

**Annual progress towards project outcome in the current reporting cycle (2015):** AgMIP: many stakeholder engagements took place during 2015 to make sure the regional integrated assessments are grounded in reality and socio-economic scenarios (RAPs) and adaptation packages (e.g. climate smart practices and portfolios) that are analyzed are at least 'feasible' and stakeholders feel confident with spreading research results.

GYGA: the interactive atlas is fully functional and starting to be used by MoAs and NARS. Use is being tracked and documented.

**Communication and engagement activities have contributed to achieving your Project outcomes:** The stakeholder engagement mentioned above have made extensive use of the AgMIP and CCAFS communication teams. E.g. <https://ccaafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.VtWrWOZu1Ro>

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

**Annual progress towards outcome (end of 2016):** During 2015, linkages will be made with new FP1 regional projects in EA (P4S-CSA, CSAP in CSVs) to make sure the results of both AgMIP and GYGA will contribute to future outcomes.

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

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

Submitted on 2016-03-03 at 14:41 UTC

**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 are learning again and again that stakeholder involvement is necessary from the very beginning of the 'research cycle'.

## 4.2 Contribution to CCAFS Outcomes

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

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

2019	
<b>Target value:</b> <Not defined>	<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> 4	<b>Cumulative target to date:</b> 4	<b>Target achieved:</b> 2.0
<p><b>Target narrative:</b> AgMIP: at least two sub-national institutions (typically at the district/county level, target Embu and Makueni counties in Kenya) are informed about the results of the integrated assessments (impacts of climate change and plausible adaptation packages under different socio-economic scenarios). The information is used in guiding local adaptation investment planning. GYGA: two national institutions (e.g. MoA, target Kenya and Ethiopia) are actively using the interactive website to explore national food security scenarios and target locations for sustainable intensification through investment in CSA.</p>		
<p><b>Narrative for your achieved targets, including evidence:</b> AgMIP: the Makueni county government, in particular the agricultural officer, is actively involved in and consulted about the work in the Wote CSV (ICRISAT research that started in 2012, ongoing AgMIP work, CIMMYT project,...). Extension officers are making use of project generated information (e.g. climate variability information, seasonal forecasts with targeted advice on CSA practices) to inform/advice farmers. The Sorghum-Legume (pigeonpea) intercrop that has been promoted as a climate-smart-technology, especially in the drier areas of Makueni, is now widely adopted ('600 farmers in the wider Wote area'). Evidence: interviews with extension officers and agricultural officer on 3/2/16 at event: <a href="https://ccafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.VtWrWOZu1Ro">https://ccafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.VtWrWOZu1Ro</a></p>		

Submitted on 2016-03-03 at 14:41 UTC

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> We are doing our very best to build a gender lens in the modeling activities but are still struggling. We could probably use some CCAFS expertise/advice on this.

2016	
Target value: <Not defined>	Cumulative target to date: 4
Target narrative: <Not defined>	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

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

### 4.3 Other Contributions

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

#### Collaborating with other CRPs

Dryland Systems
<b>Description of collaboration:</b> Systems modeling
<b>The achieved outcome contributions:</b> <Not defined>

Submitted on 2016-03-03 at 14:41 UTC

Dryland Cereals
<b>Description of collaboration:</b> Breeding for drought and heat tolerance
<b>The achieved outcome contributions:</b> <Not defined>



## 4.4 Outcome case studies

Outcome case study #1
<b>Title:</b> Hundreds of farmers adopting sorghum-legume climate-smart cropping system in semi-arid Kenya
<b>Outcome statement:</b> At least 600 smallholder farmers have adopted a sorghum-legume (pigeonpea/cowpea) cropping system as alternative for maize-beans in Wote, Makueni, Kenya.
<b>Research Outputs:</b> • New drought tolerant varieties of sorghum, cowpea, pigeon pea and green gram developed by ICRISAT and KALRO in collaboration with the private sector (seed) and released by the government of Kenya. • Participatory 'mother and baby' trials.
<b>Research Partners:</b> • Kenya Agricultural and Livestock Research Organization (KALRO) • Ministry of Agriculture, Livestock and Fisheries of the Govt of Kenya • Agricultural Extension department of Govt of Kenya in Makueni county • Kwamboo farmer self-help group • CCAFS East Africa
<b>Activities that contributed to the outcome:</b> • Participatory 'mother and baby' trials. • Training of extension officers on climate information, seasonal forecasts and climate-tailored agro-adviseries
<b>Non-research Partners:</b> • Ministry of Agriculture, Livestock and Fisheries of the Govt of Kenya • Agricultural Extension department of Govt of Kenya in Makueni county • Kwamboo farmer self-help group
<b>Output Users:</b> • Agricultural Extension department of Govt of Kenya in Makueni county • Kwamboo farmer self-help group
<b>How the output was used:</b> • Through participatory trials of different sorghum-legume systems, farmers choose and adopted the Seredo Sorghum – cow pea or pigeon pea system as an alternative to maize-beans.
<b>Evidence of the outcome:</b> <a href="http://news.trust.org/item/20150220084329-y056s/">http://news.trust.org/item/20150220084329-y056s/</a> Interviews with agricultural and extension officers on 3/2/2016: <a href="https://ccaafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.Vta_puZu1Rp">https://ccaafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.Vta_puZu1Rp</a>
<b>References:</b> <a href="http://news.trust.org/item/20150220084329-y056s/">http://news.trust.org/item/20150220084329-y056s/</a> Interviews with agricultural and extension officers on 3/2/2016: <a href="https://ccaafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.Vta_puZu1Rp">https://ccaafs.cgiar.org/news/improving-adaptive-capacity-farmers-eastern-kenya#.Vta_puZu1Rp</a>
<b>The primary 2019 outcome indicator that this case study is contributing to:</b> 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
<b>Explanation of the link between your outcome story and the CCAFS indicators:</b>
<b>Year:</b> 2015
<b>Annexes uploaded:</b> <Not defined>

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<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
<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 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>

Submitted on 2016-03-03 at 14:41 UTC

**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:**

\* Global Yield Gap Atlas is now fully functional and can be seen as a contribution to the innovative knowledge management system and decision support and dissemination tool.

**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:**

No gender dimension included in GYGA. Working on it in AgMIP

Submitted on 2016-03-03 at 14:41 UTC

**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:**

AgMIP regional integrated assessments of climate change impact and adaptation are coming along and are starting to be used as decision support tools for CSA prioritization.

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

<Not defined>

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

We are trying hard to include a gender dimension in the analyses, but sometimes data is an issue (non gender disaggregated household surveys e.g.)

### 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**

<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 2016 contribution towards the selected MOG**

<Not defined>

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

<Not defined>

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

Submitted on 2016-03-03 at 14:41 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Calibrated bio-physical and socio-economic models for integrated assessment of climate change	
<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> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Models are calibrated for most of the study sites but still ongoing for some.

Next-user
Country research teams
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Improved capacity and confidence in using the models.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Disciplinary training sessions, workshops, stakeholder interactions,...

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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

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

Submitted on 2016-03-03 at 14:41 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 #2****Main Information****Title:** Climate change impact reports for contrasted socio-economic and climate scenarios at sub-national scale level**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:**  
Reports ready for study sites of phase 1. Still ongoing in phase 2.**Next-user**

Agricultural and extension officers at sub-national level

**Knowledge, attitude, skills and practice changes expected in next-user:** Sound understanding of methodologies used for and results of impact assessments.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Stakeholder engagement workshops

Submitted on 2016-03-03 at 14:41 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

## Deliverable Ranking

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

## Deliverable dissemination

<b>Open access restriction:</b> Intellectual Property Rights (confidential information)
<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 #3

## Main Information

<b>Title:</b> Workshops to bring together all partners and stakeholders to assess impacts and interpret the results
---

Submitted on 2016-03-03 at 14:41 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> On-going	<b>Justification for cancelling the deliverable:</b> Several workshops were held during 2015 but several more planned for 2016

Next-user
Agricultural and extension officers at sub-national level
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Basic understanding of research methods and confidence in using the results
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Stakeholder engagement workshops

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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

Deliverable dissemination
<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>



Submitted on 2016-03-03 at 14:41 UTC

<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> Calibrated and validated crop models to simulate potential and water-limited yield of major cereals
<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> Models
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
Researchers, crop modelers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Confidence in calibrated and validated crop models
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Workshops

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Van Ittersum, Martin <martin.vanittersum@wur.nl>, WUR - Wageningen University and Research Centre

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	4

Submitted on 2016-03-03 at 14:41 UTC

What is your personal perspective of the importance of this product	3
---	---

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://www.yieldgap.org">www.yieldgap.org</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> Network of 12 country agronomists trained in yield gap assessment for food security studies	
<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> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
-----------

Submitted on 2016-03-03 at 14:41 UTC

Researchers, crop modelers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Confidence in methodologies used for yield gap assessment
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Workshops

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	4
What is your personal perspective of the importance of this product	3

Deliverable dissemination
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other
<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 2016-03-03 at 14:41 UTC

**Deliverable #6**

Main Information	
<b>Title:</b> Weather (observed/propagated) and crop model data available on website (IP pending)	
<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> Complete	

Next-user
Researchers, modelers (crop, livestock, climate)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Confidently using high quality weather data in models
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Data are accessible from the website and have also been made available through CCAFS

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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>	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://www.yieldgap.org">www.yieldgap.org</a>

Submitted on 2016-03-03 at 14:41 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 #7

Main Information
<b>Title:</b> Peer-reviewed publications on yield gap assessment protocols and methods
<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> Peer reviewed Publications
<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
Researchers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Awareness of methods and protocols
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Open access publications

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

Submitted on 2016-03-03 at 14:41 UTC

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: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: <a href="http://www.yieldgap.org/web/guest/gyga-publications">http://www.yieldgap.org/web/guest/gyga-publications</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> User friendly and transparent global yield gap atlas available on the website	
<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> Tools and Computer Software	<b>Sub Type:</b> Platforms
<b>Year of expected completion:</b> 2015	

Submitted on 2016-03-03 at 14:41 UTC

**Status:** Complete**Next-user**

Researchers, policy makers

**Knowledge, attitude, skills and practice changes expected in next-user:** Confidence in methodologies and results**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** User workshops**Partners contributing to this deliverable****Partner #1 (Responsible):** Cassman, Kenneth <kcassman1@unl.edu>, University of Nebraska**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****Open access restriction:** Yes**License adopted:** <Not defined>**Dissemination Channel:** other**Dissemination URL:** [www.yieldgap.org](http://www.yieldgap.org)**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 14:41 UTC*

**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> (AgMIP, Wote Kenya CSV, this reporting period): Agricultural and extension officers at sub-national (county) level. The new constitution in Kenya provides for a devolved government at the county level. The officers have power (and a budget) to assist, inform and improve the agricultural sector for better livelihoods, food security and adaptation to climate change and variability. They are genuinely interested in research that can inform their decision making. Whereas over the last years their main interest was in 'traditional' improved technologies (improved crop and livestock varieties, seeds, soil and water management,...) they recently became very interested in climate change (and variability) issues and are embracing the concept of climate smart agriculture.</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 best strategy is to meet regularly, from the beginning, and make sure the research is grounded in reality, have the stakeholders' buy-in so they can use the results with confidence.</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> Deliverable 274</p>
<p><b>Lessons and implications for the next planning cycle:</b> Target different stakeholders depending on the scale of analysis.</p>

Submitted on 2016-03-03 at 14:41 UTC

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> The Global Yield Gap and Water Productivity Atlas	
<b>Author:</b> Lieven Claessens	<b>Subject:</b> yield gaps, food security, climate variability, sustainable intensification
<b>Publisher:</b> UNL, WUR, ICRISAT	<b>Year:</b> 2015
<b>Project highlights types</b> Inter-center collaboration Policy engagement Capacity enhancement Breakthrough science Food security	
<b>Start date:</b> 2012-09-01	<b>End date:</b> 2016-03-02
<b>Is global:</b> Yes	
<b>Country:</b>	<b>Keywords:</b> yield gaps, food security, climate variability, sustainable intensification
<p><b>Highlight description:</b> This project provides the first easily accessible, transparent, reproducible, and agronomically accurate web-based platform to estimate exploitable gaps in yield and water productivity for the world's major food crops, enabling farmers, governments, policy makers, agricultural research and extension institutions, funders of agricultural research, foundations, private sector organizations and others to identify regions with the greatest potential to sustainably increase global food supply with improved management practices.</p>	
<p><b>Introduction / Objectives:</b> Yield gap assessment provides a powerful tool for improving the efficiency of agronomic research and of research prioritization, as well as for strategic planning and policy development to ensure food security at local, national, and global scales. Yet for the major crops and crop-producing regions of the world there are no reliable estimates of yield gaps (Yg) based on robust estimates of rainfed (Yw) and irrigated (Yp) yield potential and of actual yields (Ya). The Global Yield Gap Atlas (GYGA) seeks to rectify this critical deficiency for selected countries in sub-Saharan Africa (SSA) and South Asia (SA).</p>	
<p><b>Results:</b> Outputs from the GYGA project established scientifically robust protocols for estimating Yp, Yw, and Yg (<a href="http://www.yieldgap.org/web/guest/gyga-publications">http://www.yieldgap.org/web/guest/gyga-publications</a>), a global agro-climatic zonation scheme for upscaling results using local data for climate, soils, and cropping systems to estimates at regional and national scales, and new methods for propagation of long-term weather data specifically developed for yield gap assessment. Other important outputs and outcomes from GYGA-1 include: (i) a team of yield gap agronomists from 10 target countries in SSA and two in SA who understand data requirements and methods to perform yield gap assessments, and who lead efforts to identify the most suitable sources of data in their countries, (ii) the GYGA website (<a href="http://www.yieldgap.org">www.yieldgap.org</a>) with open access to yield gap analyses and underpinning data for these target countries<sup>1</sup>, (iii) improved coordination and data sharing among major projects with related objectives (CCAFS, AgMIP, HarvestChoice, Global Futures), and (iv) significant influence on global dialogues about constraints to food security and additional funding from other donors and institutions to further develop the GYGA.</p>	
<p><b>Partners:</b> University of Nebraska, Lincoln, USA; Wageningen University, the Netherlands; ICRISAT; CIMMYT; AfricaRice; country agronomists in 10 countries in SSA and 2 in SA.</p>	

Submitted on 2016-03-03 at 14:41 UTC

**Links / Sources for further information:** [www.yieldgap.org](http://www.yieldgap.org)

[www.nature.com/news/global-survey-reveals-routes-to-boosting-crop-yields-1.11306](http://www.nature.com/news/global-survey-reveals-routes-to-boosting-crop-yields-1.11306)

<http://news.sciencemag.org/sciencenow/2013/02/predicting-the-bumper-crops-of-t.html>

<http://www.pnas.org/content/early/2013/05/10/1208054110.full.pdf+html>

<http://www.sciencedirect.com/science/article/pii/S2211912412000387>

<http://link.springer.com/article/10.1007/s12571-012-0213-0#page-1>

<http://unsdsn.org/report-solutions-for-sustainable-agriculture-and-food-systems-released/>

[http://globalharvestinitiative.org/GAP/2013\\_GAP\\_Report\\_BOOK\\_ONLINE.pdf](http://globalharvestinitiative.org/GAP/2013_GAP_Report_BOOK_ONLINE.pdf)

Submitted on 2016-03-03 at 14:41 UTC

## 6. Activities

Activity #1	
<b>Title:</b> Conduct integrated assessments of climate change impacts on agricultural systems and food security using AgMIP protocols and simulate benefits of plausible adaptation packages at different scales at representative sites in EA,WA, Saf, and SA.	
<b>Description:</b> Site specific, integrated assessments of climate change impacts on agriculture and food security are today essential in planning appropriate adaptation strategies. This work aims to fill knowledge gaps about i/ current production systems sensitivity to climate change, ii/ impacts of climate change on future production systems and iii/ benefits of adaptation under plausible representative agricultural pathways and climate scenarios for selected sub-national sites in Eastern, Southern and Western Africa in partnership with AgMIP. Targeted enterprises include chickpea, livestock, maize, millet, peanut, sorghum representing AgMIP and Global Futures interests.	
<b>Start date (dd-MM-yyyy):</b> 01-09-2012	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #2	
<b>Title:</b> Develop protocols, geospatial analysis, and crop simulation models in yield gap assessment at different scales at representative sites in EA,WA, Saf, and SA	
<b>Description:</b> This project will provide the first easily accessible, transparent, reproducible, and agronomically accurate web-based platform to estimate exploitable gaps in yield and water productivity for the world's major food crops, enabling farmers, governments, policy makers, agricultural research and extension institutions, funders of agricultural research, foundations, private sector organizations and others to identify regions with the greatest potential to sustainably increase global food supply with improved management practices.	
<b>Start date (dd-MM-yyyy):</b> 01-03-2012	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Claessens, Lieven <l.claessens@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

**Lessons regarding your project activities and possible implications for the coming planning cycle:** n.a.

Submitted on 2016-03-03 at 14:41 UTC

## 7. Leverages

<Not defined>

Submitted on 2016-03-04 at 19:42 UTC

**Title:** CASCAID - Capacitating African Smallholders with Climate Advisories and Insurance Development

<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 WA - West Africa Region	<b>Mgmt. liaison contact</b>	Zougmore, Robert <R.Zougmore@cgiar.org>
<b>Lead organization</b>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya	<b>Project leader</b>	Traore, Pierre C. Sibiry <p.s.traore@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 WA: West Africa

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

190 - The Agricultural Modeling Intercomparison and Improvement project (AgMIP) - Regional Integrated Assessments in SSA and SA

### Summary

CASCAID aims to capacitate African smallholders and boundary partners with climate advisories, index insurance and integrated climate services. By 2019, CASCAID ambitions to extend the use of climate information for seasonal agricultural decision to over 1,500,000 farmers (650,000 women) in Burkina Faso, Ghana, Mali, Nigeria, Senegal. Building upon existing regional initiatives, it involves: i) elicitation of local seasonal climate information needs and valorization of local knowledge, ii) co-development of standardized climate and yield prediction products, iii) capacitation of NHMS and other intermediaries in interpreting, communicating information in context, and iv) development of socially differentiated index insurance for smallholders. Two 2015 quick-win activities on 'scaling climate services in Senegal through rural radios' and 'supporting index-based insurance development in Nigeria' frame subsequent activities in a participatory action research to achieve deeper impact. This is facilitated by linkages with regional CCAFS flagship1 projects, and leveraged in policy by the regional CCAFS flagship4 project.

Submitted on 2016-03-04 at 19:42 UTC

## 2. Partners

### Partner #1

**Institution:** ICRAF - World Agroforestry Centre

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Bayala, Jules <j.bayala@cgiar.org>	Activity 2014-351 *Partner*. Activity 2014-380 *Partner*. Activity 2014-346 *Leader*.  [note for CCAFS] Organization should be changed to ICRAF - World Agroforestry Centre - Mali

### Partner #2 (Leader)

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>	Activity 2014-346 *Partner*. Activity 2014-352 *Partner*. Activity 2014-351 *Partner*. Activity 2014-350 *Leader*. Activity 2014-380 *Leader*.  [note for CCAFS] Organization should be changed to ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Mali
Partner	Zougmore, Robert <R.Zougmore@cgiar.org>	Activity 2014-426 *Partner*.  [note for CCAFS] Organization should be changed to ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Mali

### Partner #3

**Institution:** AGRHYMET - Centre regional AGRHYMET

**CAAFS Partner(s) allocating budget**

Submitted on 2016-03-04 at 19:42 UTC

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Traore, Seydou <S.Traore@agrhyment.ne>	Activity 2014-346 *Partner*. Activity 2014-350 *Partner*. Activity 2014-351 *Partner*.  [note for CCAFS] pre-signed 2015 partner sub-agreement (amount: USD23K) could not be finalized due to a partners contract freeze order from ICRISAT management in spite of availability of funds for the project, curtailing involvement of Agrhyment in the project - especially in the preparation of daily gridded ground+satellite rainfall surfaces for use in CRAFT.

**Partner #4****Institution:** MANOBI S.A. - MANOBI Société Anonyme**CAAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Annerose, Daniel <daniel.annerose@manobi.net >	Activity 2014-350 *Partner*. Activity 2014-352 *Partner*.  [note for CCAFS] partner was successfully contracted as per 2015 PPA (amount: USD 56,587). First installment (80%) paid. Second installment put on hold due to partner contract freeze at ICRISAT.

**Partner #5****Institution:** WSU - Washington State University**CAAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya



Submitted on 2016-03-04 at 19:42 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Hoogenboom, Gerrit <gerrit.hoogenboom@wsu.edu>	Activity 2014-350 *Partner*.  [note for CCAFS] partner was successfully contracted as per 2015 PPA (amount: USD 42,252). First installment (80%) paid. Second installment put on hold due to partner contract freeze at ICRISAT. Partner may need to change in 2016 due to Drs. Gerrit Hoogenboom and Vakhtang Shelia having transferred from WSU to University of Florida.

**Partner #6****Institution:** Columbia University**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Greatrex, Helen <greatrex@iri.ucolumbia.edu>	Activity 2014-350 *Partner*.  [note for CCAFS] partner successfully contracted under direct CIAT-Columbia U. PPA
Partner	Greatrex, Helen <greatrex@iri.columbia.edu>	Activity 2014-352 *Leader*.

**Partner #7****Institution:** GMet - Ghana Meteorological Agency**CCAFS Partner(s) allocating budget**

ICRAF - World Agroforestry Centre - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------

Submitted on 2016-03-04 at 19:42 UTC

Partner	Asare, K <asarefi@yahoo.com>	Activity 2014-351 *Partner*. [note for CCAFS] partner originally to be funded through ICRAF as involvement mostly pertains to activity 351. However nature of contract not discussed during 2015 initial planning meeting. Funding originally intended to be ~USD 10K/year and may not warrant sub-agreements nor mention as a partner in P&R (subject to discussion). ICRISAT was also approached to directly fund this partner at USD 23K+ alongside ICRAF, but could not materialize due to partner contracts freeze in effect at ICRISAT (see Agrhymet above). For 2016, probably to be funded on ad-hoc basis (against invoices) by both ICRAF and ICRISAT.
---------	---------------------------------	---

## Partner #8

**Institution:** ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)

### CCAFS Partner(s) allocating budget

ICRAF - World Agroforestry Centre - Kenya

## Contacts

Type	Contact	Responsibilities and contributions
Partner	Ndiaye, Ousmane <ondiaye70@gmail.com>	Activity 2014-351 *Partner*.
Partner	Diaye, Ousmane <ousmane@iri.columbia.edu>	Activity 2014-426 *Leader*.  [note for CCAFS] partner originally funded through RPL then reversed to ICRISAT PPA but amount of corresponding bilateral funding from DFID was erroneously never entered in the ICRISAT-CIAT PPA. Corrective action has been taken in consultation with CCAFS in Dec. 2015, to be executed via RPL but on 2016 budgets. Partner has been funded by ICRISAT in 2015 under DFID bilateral for activity 426. Involvement of partner in project for 2016 will focus on activity 351, and partner should probably be funded on ad-hoc basis (against invoices) by ICRAF.

## Partner #9

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

### CCAFS Partner(s) allocating budget

Columbia University - United States

Submitted on 2016-03-04 at 19:42 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Dinku, Tufa <tufa@iri.columbia.edu>	Activity 2014-351 *Partner*.
Partner	Hansen, James <jhansen@iri.columbia.edu>	Activity 2014-427 *Leader*.

**Partner #10****Institution:** Agence Nationale de la Météorologie du Mali**CCAFS Partner(s) allocating budget**

ICRAF - World Agroforestry Centre - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Zan Diarra, Daouda <ddiarra165@gmail.com>	Activity 2014-351 *Partner*.  [note for CCAFS] partner originally to be funded through ICRAF as involvement mostly pertains to activity 351. However nature of contract not discussed during 2015 initial planning meeting. Funding originally intended to be ~USD 10K/year and may not warrant sub-agreements nor mention as a partner in P&R (subject to discussion). ICRISAT also directly funded this partner for activity 351 at ~USD 6K in 2015 through invoice reimbursements (ENACTS workshops). For 2016, probably to be funded on ad-hoc basis (against invoices) by both ICRAF and ICRISAT.

**Partner #11****Institution:** University of Ghana**CCAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------

Submitted on 2016-03-04 at 19:42 UTC

Partner	Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>	Activity 2014-352 *Partner*. [note for CCAFS] partner was successfully contracted as per 2015 PPA (amount: USD 52,628). First installment (80%) paid. Second installment put on hold due to partner contract freeze at ICRISAT. Partner under financial strain due to commitment of internal resources.
---------	---	--

**Partner #12****Institution:** IUCN - International Union for Conservation of Nature**CCAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Somda, Jacques <jacques.somda@iucn.org>	Activity 2014-380 *Partner*.  [note for CCAFS] partner contract could not be finalized due to a partners contract freeze order from ICRISAT management in spite of availability of funds for the project, curtailing involvement of IUCN for development of M&E framework for CASCAID. Proximal involvement in project meetings (activity 380) ensured through involvement of IUCN in FS4. Sub-agreement amount reduced for 2016 but needs signing.

**Partner #13****Institution:** CIMMYT - International Maize and Wheat Improvement Center**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Hellin, Jonathan <j.hellin@cgiar.org>	Activity 2014-427 *Partner*.

**Partner #14****Institution:** University of Reading

Submitted on 2016-03-04 at 19:42 UTC

**CCAFS Partner(s) allocating budget**

ICRAF - World Agroforestry Centre - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Dorward, Peter <p.t.dorward@reading.ac.uk>	Activity 2014-351 *Leader*. Activity 2014-346 *Partner*.

**Partner #15****Institution:** Direction nationale de la météorologie (Burkina Faso)**CCAFS Partner(s) allocating budget**

ICRAF - World Agroforestry Centre - Kenya

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Sanfo, Judith <sanfo_b@yahoo.com>	Activity 2014-351 *Partner*.  [note for CCAFS] partner formal involvement put on indefinite hold in November 2015 after second round of funding cuts (cf P&R entry of Nov. 2015). In spite of this, partner was funded to attend annual review and planning meeting. Also note that Mrs. Judith Sanfo passed away in 2015 and should be remove from the P&R system. Her replacement is Mr. Gregoire Baki (grebaki@yahoo.fr)

**Partnerships overall performance over the last reporting period:** Partnerships have generally performed at remarkably high levels of quality and consistency, especially given the adverse funding conditions and administrative bottlenecks. University of Ghana, in particular, always delivered ahead of time and committed own resources without guarantee of being paid back in the wake of looming cuts. With IRI, they completed all activity 352 deliverables. U. Reading over-achieved on 2015 capacity building goals. MANOBI S.A. opened significant leveraging opportunities in addition to advancing key deliverables. WSU and ANACIM achieved 2015 deliverables. Agrhymet and Ghana Met could not be contracted, and hence had to contribute under constraints, often on own funding.

Submitted on 2016-03-04 at 19:42 UTC

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** Divergences at CGIAR centers (ICRISAT) in interpretation of the use of FS project funds and administrative delays (ICRISAT, ICRAF) constitute the weakest component of the CASCAID partnership and constrain the ability of an otherwise exceptional team to deliver swiftly and accelerate synergies towards FS2 impact. CCAFS director should engage directly with concerned executives to enforce (i) the exclusive use of earmarked PPA funds for purposes agreed upon at project planning/reporting stages and (ii) the need to avail funds in a timely fashion given the West African monsoon season timing. Funds clearances now happen August-September, which is unacceptable. Partner-specific comments below.

Submitted on 2016-03-04 at 19:42 UTC

### 3. Locations

Project level	Latitude	Longitude	Name
Region	Not applicable	Not applicable	West Africa
Country	Not applicable	Not applicable	Burkina Faso
Country	Not applicable	Not applicable	Ghana
Country	Not applicable	Not applicable	Mali
Country	Not applicable	Not applicable	Nigeria
Country	Not applicable	Not applicable	Senegal
CCAFS Site	10.735	10.735	Lawra-Jirapa
CCAFS Site	13.509	13.509	Segou
CCAFS Site	14.242	14.242	Kaffrine
District	13.7493	13.7493	Nioro du Rip
Province	11.3689	11.3689	Sikasso Region
Village	12.1675	12.1675	Sukumba

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

- 1,500,000 farmers (including 650,000 women) use climate information for seasonal agricultural decision making in GH/ML/SN;
- 3 boundary institutions (extension service / private sector / NGO) implement equitable climate advisory services for 150,000 farmers in GH/ML/SN;
- 2 NHMS (in ML/SN) and 1 regional institution (Agrhymet) incorporate project outputs into improved crop monitoring and food security early warning systems in ML/SN? reaching out to an audience of at least 65,000 smallholder farmers;
- 3 NHMS (GH/ML/SN), 1 regional institution (Agrhymet) provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms (historical + monitored + forecast), reaching out to an audience of at least 300,000 smallholder farmers;
- 1 public-private partnership provides index-based insurance to 50,000 GH/SN farmers;
- Rural radios broadcast seasonal forecast information to 5 million farmers in SN;
- Nigeria's index-based insurance program incorporates project outputs into services targeting (in 2018) 15 million farmers.

**Annual progress towards outcome (end of 2015):** - 1 meteorological service and 1 regional institution (Agrhymet) provide through rural radios or other communication mechanism place-based forecast dissemination based on historical analyses of station data in at least 1 of the 5 target countries, reaching an audience of 50,000 smallholder farmers (activity #351)

- 1 rural radios umbrella network broadcasts seasonal climate forecast information to at least 5 million smallholder farmers in Senegal (activity #426)
- Nigeria's national index-based insurance program incorporates project outputs into services targeting (in 2018) 15 million farmers (activity #427)



Submitted on 2016-03-04 at 19:42 UTC

**Annual progress towards project outcome in the current reporting cycle (2015):** Under activity 351, CCAFS through IRI and ICRISAT helped Ghana Meteorological Agency and Mali-Meteo set up their own IRI's Data Library (DL) and maprooms (<http://maps.meteo.gov.gh:89/maproom>; <http://197.155.140.164>). Through U. Reading, ICRAF, Ghana Met. Agency and AIMS, the PICSA approach was deployed in 10 districts in Northern Ghana reaching 140 communities, an est. 6,000 farmers (40% female) - a follow up M&E analysis revealed changes in farmers practice for 97% of trainees. U. Reading, ICRAF and ICRISAT joined forces to translate the full PICSA field manual (<https://ccafs.cgiar.org/publications/participatory-integrated-climate-services-agriculture-picsa-field-manual#.VtmBSTaviFc>) into French in preparation for scaling out to Senegal and Mali (March 2016) and possibly Burkina Faso later on.

Under activity 426, ANACIM and ICRISAT helped reach an estimated 7.4 million smallholders in 2015 through

82 rural radios members of URAC

(<https://cgspace.cgiar.org/handle/10568/68144>).

Under activity 427, CCAFS through IRI and CIMMYT assisted Nigeria's FMARD ambitious plan to support 14.5 million smallholders with ambitious and inclusive insurance schemes, developing concept notes and a 4-year roadmap, and supporting South-South exchange, notably with (<https://cgspace.cgiar.org/rest/bitstreams/59174/retrieve>).

Very significant progress was made on several deliverables pertaining to activities 350, 352 as well, reported in the deliverables list.

**Communication and engagement activities have contributed to achieving your Project outcomes:**

Activities contributing to outcomes in 2015 published through CCAFS website. Internal learning process started with DFID quickwin 2015 examples percolating through other activity leads. Multiple other communication and engagement activities took place, involving NGOs / extension services (e.g. OXFAM, ADRA), in conjunction with FS4 (Project #1), bilateral (AgMIP, ASSAR,...) events. This led to an expansion of the sphere of influence of FS2, e.g. manifest in (i) changes in AgMIP strategy to be more stakeholder-driven on near-term goals, (ii) bilateral research proposals involving FS2 fanning out to WB-GIIF, DFID/NERC, NSO/FDOV, etc.

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

**Annual progress towards outcome (end of 2016):** - 1 NHMS, Agrhymet provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms in 1 country, reaching 100,000 smallholder farmers

- 1 rural radios umbrella network broadcasts seasonal forecast information to 5,000,000 SN farmers
- Nigeria's index-based insurance program serves (in 2018) 15,000,000 farmers
- 1 boundary institution implements equitable climate advisory services for 50,000 smallholder farmers in 1 country
- Agrhymet incorporates project outputs into crop monitoring and food security EWS in 1 country

**Annual progress towards outcome (end of 2017):** - 2 NHMS, Agrhymet provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms in 1 country, reaching 200,000 smallholder farmers

- 1 rural radios umbrella network broadcasts seasonal forecast information to 5,000,000 SN farmers
- Nigeria's index-based insurance program serves (in 2018) 15,000,000 farmers
- 2 boundary institutions implement equitable climate advisory services for 100,000

Submitted on 2016-03-04 at 19:42 UTC

smallholder farmers in 2 countries

- Agrhymet incorporates project outputs into crop monitoring and food security EWS in 2 countries

**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:** <Not defined>

## 4.2 Contribution to CCAFS Outcomes

**RP WA - Outcome 2019:** National meteorological services and regional (e.g. AGRHYMET, ACMAD) and international organizations (e.g. WMO) cogenerate scalable climate services to improve farm-related climate risk management decision making. National agricultural research systems and meteorological services partner to deliver and communicate tailored agro-climatic advisories and services. Farmers and farmers organizations access and use climate information and weather-related insurance schemes to improve agriculture and climate risk management strategies.

**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> Activity 346: 0 Activity 350: 3 Activity 351: 8 Activity 352: 1 Activity 426: 1 Activity 427: 1	<b>Cumulative target to date:</b> Cannot be Calculated

Submitted on 2016-03-04 at 19:42 UTC

2019
<p><b>Target narrative:</b> Activity 346: (activity targeted at end-users): Over 2 million farmers (including 0.8 million women) use climate information in support of seasonal agricultural decision making in Burkina Faso, Ghana, Mali, Nigeria, and Senegal</p> <p>Activity 350: 2 NHMS (in Burkina Faso and/or Mali and/or Senegal) and 1 regional institution (Agrhymet) incorporate project outputs into improved crop monitoring and food security early warning systems in Mali and/or Burkina Faso and/or Senegal</p> <p>Activity 351: 4 boundary institutions (extension service and/or private sector and/or NGO) implement equitable climate advisory services for at least 200,000 farmers in Burkina Faso, Ghana, Mali, and Senegal and 4 NHMS (Burkina Faso, Ghana, Mali, Senegal) and 1 regional institution (Agrhymet) provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms (historical + monitored + forecast) in 4 of 5 target countries, reaching out to an audience of at least 400,000 smallholder farmers</p> <p>Activity 352: At least 1 public-private partnership providing project outputs in their index insurance services to small holder farmers</p> <p>Activity 426: 1 rural radios umbrella network continues to broadcast seasonal climate forecast information to about 5 million smallholder farmers in Senegal</p> <p>Activity 427: Nigeria's national index-based insurance program incorporates project outputs into services targeting (in 2018) 15 million farmers</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> Activity 351: 1 Activity 426: 1 Activity 427: 1	<b>Cumulative target to date:</b> Cannot be Calculated	<b>Target achieved:</b> 3.0
<b>Target narrative:</b> Activity 351: 1 meteorological service and 1 regional institution (Agrhymet) provide through rural radios or other communication mechanism place-based forecast dissemination based on historical analyses of station data in at least 1 of the 5 target countries, reaching an audience of 50,000 smallholder farmers Activity 426: 1 rural radios umbrella network broadcasts seasonal climate forecast information to at least 5 million smallholder farmers in Senegal Activity 427: Nigeria's national index-based insurance program incorporates project outputs into services targeting (in 2018) 15 million farmers		
<b>Narrative for your achieved targets, including evidence:</b> cf. project outcomes reporting		
<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 and social inclusion is inherently built into the deployment of activities 351 and 426, where capacitation is directed to both men and women. For example, 17 female radio communicators were trained under 426 in Senegal in the interpretation and dissemination of seasonal forecast information. Under 351, 40% of PICSA trainees were women.  Activity 352 specifically addresses gender dimensions of index-based insurance, e.g. through the production of a 'Gender Materials Pack - Assessing the Impact of Agricultural Insurance on Gender Dynamics in Northern Ghana'. This work will help further genderize activities started under 427, 350.		

Submitted on 2016-03-04 at 19:42 UTC

2016	
<b>Target value:</b> 6	<b>Cumulative target to date:</b> Cannot be Calculated
<p><b>Target narrative:</b> - 1 NHMS and 1 regional institution (Agrhymet) provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms (historical + monitored + forecast) in 1 country, reaching 100,000 farmers</p> <p>- 1 rural radios umbrella network continues to broadcast seasonal climate forecast information to at least 5 million smallholder farmers in Senegal</p> <p>- Nigeria's national index-based insurance program serves (in 2018) 15 million farmers</p> <p>- 1 boundary institution implements equitable climate advisory services for 50,000 farmers in 1 country</p> <p>- 1 regional institution (Agrhymet) incorporates project outputs into improved crop monitoring and food security EWS in 1 country</p>	
<p><b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> [346] at least 30% women, 30% youth help co-design, co-test and co-validate climate services-smart options adapted to genderized and socially-differentiated contexts</p> <p>[350-3 &amp; 426] at least 20% women farmer- observers in the co-prediction network(s) deployed during PY2 (activity mostly carried over from PY1)</p> <p>[351] attention will be given to different requirements associated with wealth and gender in forecast communication and decision making</p> <p>[352] gender and equity orientation during PY1 will be further entrenched in index insurance design processes</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

Activity 2014-346 will contribute to:

- (1) enhanced adaptive capacity to manage climate risks (Climate Smart Agriculture) among smallholders – including women and marginalized groups - by generating and providing timely, relevant, and actionable climate information services
- (2) increased early warning and response preparedness (Policy & Institutional Change) by

Submitted on 2016-03-04 at 19:42 UTC

organisations that support farmers by building their capacity to use climate information and helping them integrate climate services into their policies and practices

Activity 2014-351: Improved availability of historical climate information showing trends and of downscaled forecasts on wider range of climate characteristics will inform policy at district, national and regional levels.

### Collaborating with other CRPs

Dryland Systems
<b>Description of collaboration:</b> use of CRP-DS baseline household data for Ghana, Mali
<b>The achieved outcome contributions:</b> <Not defined>

Submitted on 2016-03-04 at 19:42 UTC

## 4.4 Outcome case studies

Outcome case study #1
<b>Title:</b> In West Africa, PICSA takes root in smallholders quest for enhanced resilience
<b>Outcome statement:</b> By developing and deploying a holistic, Participatory Integrated Climate Services for Agricultural (PICSA) approach where historical climate data is taken into account to guide farmers in their livelihood options and throughout the season, CCAFS helped 6,000 smallholder farmers change their practices in 140 communities of northern Ghana. Changes included choice of crop, livestock management, and incremental sales in their own livelihood enterprises, in their quest for stronger resilience.
<b>Research Outputs:</b> cf. annexes
<b>Research Partners:</b> The PICSA approach was developed by the University of Reading in UK. ICRAF participated in tailoring the approach to CCAFS selected sites in West Africa through training organization, with support from ICRISAT. In Ghana, PICSA deployment and monitoring and evaluation involved the African Institute for Mathematical Sciences (AIMS).
<b>Activities that contributed to the outcome:</b> Ghana Meteorological Agency staff were trained in the preparation and analysis of historical weather data series required for the implementation of the Participatory Integrated Climate Services for Agriculture (PICSA) approach. Subsequently, intermediaries - here extension service agents of OXFAM and ADRA - were trained on PICSA as well. This training of trainers (ToT) allowed OXFAM and ADRA staff in turn to implement PICSA with their collaborating farmers in the field, guiding planning and implementation of cropping season activities. The ToT also involved participants from Burkina Faso and Mali, setting the stage for outscaling of the approach to other countries.
<b>Non-research Partners:</b> Ghana Meteorological Agency. OXFAM. Adventist Development and Relief Agency (ADRA).
<b>Output Users:</b> Next users: extension agents of the above listed NGOs (OXFAM, ADRA). End users: local communities in northern Ghana.
<b>How the output was used:</b> Farmers were taught PICSA approach and used it long before the season to select different livelihood options based on season probabilities taking into account historical climate data of their localities. Just before the season, options are fine-tuned based on actual season forecasts and subsequently receive within season forecasts for guidance.
<b>Evidence of the outcome:</b> A monitoring and evaluation study was conducted by University of Reading in collaboration with African Institute for Mathematical Sciences and Ghana Meteorological Agency to assess the use of PICSA by the farmers and also assess how useful they found the approach.
<b>References:</b> cf. annexes
<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="#">Torgbor2015_M&amp;E_reports_PICSA_Ghana.pdf</a>

Submitted on 2016-03-04 at 19:42 UTC

## 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 # 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

Submitted on 2016-03-04 at 19:42 UTC

**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 # 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>

**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>



Submitted on 2016-03-04 at 19:42 UTC

**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:**

CRAFT now includes relevant West African crops besides maize, 1 new crop model (APSIM) and is ready to incorporate the preferred crop model used by Agrhymet for the region (Sarrah). Data streams, protocols are developing for operational, gridded yield forecasting as activity 350 connects to AgMIP, JECAM/GEOGLAM and Sen2Agri projects.

**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 gender and social dimension of this activity comes from our ability, through AgMIP, to (i) model different farm household endowment levels through sliding input levels in agricultural models and (ii) analyse income and livelihood outcomes through socially differentiated strata. Available in CASCAID starting 2017 (est), not before.

Submitted on 2016-03-04 at 19:42 UTC

**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**

<Not defined>

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

Index insurance products were designed for Northern Ghana, and a roadmap towards implementation was laid out with the Ghana Agricultural Insurance Program. In Senegal, all major index-based insurance stakeholders took part in a consultation workshop on the scaling/supporting role of mobile platforms leading to at least 3 collaborative project proposals.

**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:**

A set of gender sensitive index insurance design materials, customized for the Northern Region of Ghana was produced. Materials were fully designed and pretested, plus local partners and logistics identified. Due to funding constraints, they have not yet been used in a full fieldwork campaign but are ready for implementation.

**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:**

PICSA approach was taught to NGO extension agents (OXFAM, ADRA) in northern Ghana and used to guide farmers in their options and practices. Data were collected on the use of the approach by farmers, revealing that 97% of trainees changed their practice as a consequence.

**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:**

PICSA reached 6,000 farmers (of which 40% female). Composition of CoPs will ensure a minimum 30% women and 30% youth to help co-design, co-test and co-validate climate services-smart options adapted to genderized and socially-differentiated contexts.

Submitted on 2016-03-04 at 19:42 UTC

**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:**

Ghana, Mali NHMS were trained to improve their skill in data quality control and analysis to generate information that is useful for the farmers on the ground. They were also introduced to work with TAMSAT on the estimation of daily rainfall through merging of satellite data with their station data.

**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:**

Increased awareness by NHMS and intermediaries of the different requirements of farmers of different gender and wealth and education levels, regarding climate information and communication approaches. Increased capacity of female and male farmers in pilot sites to interpret and use climate and crop information for decision making.

### 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**

- 1 regional institution (Agrhymet) incorporates project outputs into improved crop monitoring and food security EWS in 1 country

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

- at least 20% women farmer- observers in the co-prediction network(s) deployed during PY2 (activity mostly carried over from PY1)

**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**

- materials for gender sensitive index insurance design and participatory farmer led climate discussions

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

- gender and equity orientation engaged during PY1 will be further entrenched in index insurance design processes

Submitted on 2016-03-04 at 19:42 UTC

**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**

- 1 boundary institution implements equitable climate advisory services for 50,000 farmers in 1 country

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

- attention is given to different requirements associated with wealth and gender in forecast communication and decision making

**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**

- 1 NHMS and 1 regional institution (Agrhymet) provide place-based forecast dissemination based on high-resolution gridded data, new products and maprooms (historical + monitored + forecast) in 1 country, reaching 100,000 farmers

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

- gender dimension appears at the level of MOG#2

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

Submitted on 2016-03-04 at 19:42 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> 2 x academic manuscripts ready for submission	
<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> 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> activity ongoing and on schedule

Next-user
Academics
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Two expected papers on <ul style="list-style-type: none"> <li>- The Ghanian index insurance approach</li> <li>- Scientific advances from gender sensitive participatory approaches</li> </ul>
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Making sure that the papers are properly communicated to all end users and linked to blog articles and appropriate knowledge exchange

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University
<b>Partner #2:</b> Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>, University of Ghana

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

Submitted on 2016-03-04 at 19:42 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 #2****Main Information****Title:** Materials for gender sensitive index insurance design and participatory farmer led climate discussions**MOG # 3:** Weather related Insurance products are designed, tested, and brought to scale with implementing partners**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Reference material**Year of expected completion:** 2015**Status:** Complete**Next-user #1**

Index insurance industry - GAIP

**Knowledge, attitude, skills and practice changes expected in next-user:** Can use the materials in their future index insurance design process. Can use the information elicited from the farmer visits and material design process to develop effective index insurance plans. This will be focussing more on participatory approaches in Ghana and on effective 2-way information flows for Senegal**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Developing and testing the materials in 2015 in conjunction with all stakeholders, inc the insurance industry. Appropriate knowledge exchange so that they are able to use the materials. Backstopping and support

Submitted on 2016-03-04 at 19:42 UTC

Next-user #2
Academics
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Better understanding of gender and livelihoods in Northern Ghana
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> participatory action research

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University
<b>Partner #2:</b> Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>, University of Ghana

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

Deliverable dissemination
<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> GENDER MATERIALS PACK ASSESSING THE IMPACT OF AGRICULTURAL INSURANCE ON GENDER DYNAMICS IN NORTHERN GHANA
<b>Creator / Authors:</b> Greatrex, H.; Maccarthy, D.S.K.; Alo, S.
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2015
<b>Language:</b> ENG
<b>Coverage:</b> Ghana

Submitted on 2016-03-04 at 19:42 UTC

## Deliverable Data sharing

[CASCAID\\_Gender\\_Materials\\_Pack.pdf](#)

## Deliverable #3

## Main Information

**Title:** A workshop on sustainable index insurance design for Ghana**MOG # 3:** Weather related Insurance products are designed, tested, and brought to scale with implementing partners**Main Type:** Workshops**Sub Type:** Workshop**Year of expected completion:** 2015**Status:** Complete

## Next-user #1

Index insurance community in Ghana

**Knowledge, attitude, skills and practice changes expected in next-user:** Increased capacity on how to use a farmer led design process for index insurance. This is a key part of knowledge sharing and will allow all stakeholders and industrial partners to become a real part of the process.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The workshop will allow two-way information flow between industrial partners and project partners, allowing closer collaboration in future years, increased followup and uptake of project outputs and allow new ideas to be pulled into the project

## Next-user #2

Project partners

**Knowledge, attitude, skills and practice changes expected in next-user:** An increase knowledge of project results, which can influence future activities**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Knowledge sharing between different project activities e.g. shared workshops and activities where appropriate

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University**Partner #2:** Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>, University of Ghana



Submitted on 2016-03-04 at 19:42 UTC

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

Deliverable dissemination
<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> Workshop Report - Initial meeting of CASCAID Activity 352
<b>Creator / Authors:</b> Greatrex, H.; Garvin, S.
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2015
<b>Language:</b> ENG
<b>Coverage:</b> Ghana

Deliverable Data sharing
<a href="#">CASCAID 352 April workshop report.pdf</a>

## Deliverable #4

Main Information	
<b>Title:</b> Assessment of existing information flows and multi-input communication for index insurance in Senegal	
<b>MOG # 3:</b> Weather related Insurance products are designed, tested, and brought to scale with implementing partners	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Research report

Submitted on 2016-03-04 at 19:42 UTC

**Year of expected completion:** 2015**Status:** Complete**Next-user**

Current operational insurance projects

**Knowledge, attitude, skills and practice changes expected in next-user:** There are several large index insurance projects in Senegal, using qualitative and quantitative information in different ways, in addition to the many information providers already in existence. This will be a research report that will inform the next user on how historical and real time information can be used effectively.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Report, working with stakeholders directly. The output will include an initial communications plan for future engagement and an analysis of the software platforms needed for effective information flows -

**Partners contributing to this deliverable**

**Partner #1 (Responsible):** Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University

**Partner #2:** Annerose, Daniel <daniel.annerose@manobi.net>, MANOBI S.A. - MANOBI Société Anonyme

**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
<b>What is your personal perspective of the importance of this product</b>	4

**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:** DRAFT RESEARCH REPORT - HOW CAN INFORMATION FLOWS AND MOBILE TECHNOLOGY ADD VALUE TO INSURANCE AND UNLOCK NEW OPPORTUNITIES IN SENEGAL?

**Creator / Authors:** Braun, M; Ouni, S., Annerose, D.; Ndour, M.; Greatrex, H.

Submitted on 2016-03-04 at 19:42 UTC

<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2015
<b>Language:</b> ENG
<b>Coverage:</b> Senegal

Deliverable Data sharing
<a href="#">CASCAID 352 information flows report.pdf</a>

**Deliverable #5**

Main Information
<b>Title:</b> Public outreach
<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> 2015
<b>Status:</b> Extended <b>Justification for cancelling the deliverable:</b> cf. attachment

Next-user
Public
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Building awareness, communicating the project and its results is key to its success. Increased awareness leads to better engagement and stronger buy-in from commercial and regional partners
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> CCAFS Blog articles, updates on appropriate social media channels

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University
<b>Partner #2:</b> Annerose, Daniel <daniel.annerose@manobi.net>, MANOBI S.A. - MANOBI Société Anonyme
<b>Partner #3:</b> Maccarthy, Dilys S.K. <dmaccarthy@ug.edu.gh>, University of Ghana

Submitted on 2016-03-04 at 19:42 UTC

Deliverable Ranking	
Address gender and social inclusion aspect	4
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
<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> in preparation
<b>Creator / Authors:</b> Greatrex, H.
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2016 (expected)
<b>Language:</b> ENG
<b>Coverage:</b> <Not defined>

Deliverable Data sharing
<a href="#">CASCAID 352 outreach.pdf</a>

## Deliverable #6

Main Information	
<b>Title:</b> Setting up partnerships and CoP	
<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> 2015	

Submitted on 2016-03-04 at 19:42 UTC

<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> For this first year of the project, partnerships were established with national hydrological and meteorological services (NHMS), national agricultural research services (NARS), selected NGOs, local communities, national extension services, decentralized authorities. Guidelines for targeting /prioritization of promising climate-smart crop-livestock agroforestry practices were developed and the inventory activity is yet to be conducted. Some training of trainers to master PICSA approach were conducted in the project sites in Mali and in Ghana. Also some training activities were conducted beyond project sites through other R&D project at ICRAF such as SmAT-Scaling. Expected complete 2016.
-------------------------	---

Next-user
National extension services
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge in new ways of getting the actors involved and changes in practices using climate smart approaches to address agricultural production issues in risk prone areas
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Strategies include a strong involvement of partners and stakeholders from the beginning, thereby fostering ownership and establishing a community of practice

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Bayala, Jules <j.bayala@cgiar.org>, ICRAF - World Agroforestry Centre

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

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

Submitted on 2016-03-04 at 19:42 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 #7

Main Information
<b>Title:</b> Eliciting district-level portfolios of climate services-smart [options x context] through participatory action research
<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> Extended
<b>Justification for cancelling the deliverable:</b> delayed start, and lack of segregation with activity 351 - expected complete 2016

Next-user #1
Farmers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Use of generated climate information and early warning messages to improve tactical planning of farming activities. Climate services-smart [options x context] may include: i) adjustment in fertilizer/pesticide application rates/dates, ii) planting densities and dates, iii) adjustment of relative farm areas planted under specific crops, iv) harvest dates and post-harvest management.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Strategies include a strong involvement of partners and stakeholders from the beginning, thereby fostering ownership and establishing a community of practice

Submitted on 2016-03-04 at 19:42 UTC

Next-user #2
Extensionists
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge, attitude and skills of extensionists improved in advisory services delivery with appropriate climate information and early warning messages to help farmers take the appropriate decision when planning of the farming activities
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Strategies include a strong involvement of partners and stakeholders from the beginning, thereby fostering ownership and establishing a community of practice

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Bayala, Jules <j.bayala@cgiar.org>, ICRAF - World Agroforestry Centre

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

Deliverable dissemination
<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>

Submitted on 2016-03-04 at 19:42 UTC

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

## Deliverable #8

Main Information	
<b>Title:</b> Deploying a scaling strategy beyond project intervention sites	
<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> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> delayed start, and lack of segregation with activity 351 - expected complete 2016

Next-user
Extentionists/NGO
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> New skills in analyzing the target population (categories) and the environment (including the market and institutions) in which the technologies are being promoted to guide the field actions of scaling
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Early involvement, field visits and trainings will be combined to expose this group of actors to the new approaches. Project leaders will also be contacted and the new approaches presented to them.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Bayala, Jules <j.bayala@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>



Submitted on 2016-03-04 at 19:42 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 #9

Main Information
<b>Title:</b> Analysed historical climate data for 7 stations in northern Ghana
<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> 2015
<b>Status:</b> Complete

Next-user
Met services and intermediaries

Submitted on 2016-03-04 at 19:42 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Met services to make analysed information available to users and to develop improved downscaled seasonal forecasts (which require analysed historical information to produce)  
Intermediaries will improve information and services that they provide to smallholders and rural communities as a result of obtaining improved historical and forecast products from Met services.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Capacity building, training and sharing of good practice examples from successful implementation (eg from Ghana and Tanzania)

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Dorward, Peter <p.t.dorward@reading.ac.uk>, University of Reading

**Partner #2:** Asare, K <asarefi@yahoo.com>, GMet - Ghana Meteorological Agency

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** -1

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

#### Deliverable Metadata

**Description:** IMPLEMENTATION OF ENHANCING NATIONAL CLIMATE SERVICES (ENACTS), and BASELINE INFORMATION ON CROPS, SOIL AND CLIMATE IN NORTHERN GHANA

**Creator / Authors:** Asare, K.; Torgbor, F.F.; Duut, A.; Nenkam, A.M.

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2015

**Language:** ENG

**Coverage:** Ghana

Submitted on 2016-03-04 at 19:42 UTC

Deliverable Data sharing
<a href="#">ENACTS_Report.pdf</a>
<a href="#">Norther_Ghana_Baseline_Report.pdf</a>

**Deliverable #10**

Main Information
<b>Title:</b> Prototype system for merging gauge and satellite data
<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> Information outputs
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
Met services and research organisations
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Met services will be able to merge data and start to produce historical climate information and downscaled seasonal forecasts for areas where there are no met stations. In turn climate service providers will start to include the improved information and forecasts for locations previously not adequately covered.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Sharing of prototype and results with met services and intermediary climate service providers through capacity building and as part of PICSA

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Dorward, Peter <p.t.dorward@reading.ac.uk>, University of Reading
<b>Partner #2:</b> Traore, Seydou <S.Traore@agrhyment.ne>, AGRHYMET - Centre regional AGRHYMET

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

Submitted on 2016-03-04 at 19:42 UTC

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> CASCAID 351.3 - Update on merging of satellite and rain gauge data, and implementation of ENACTS in Ghana and Mali
<b>Creator / Authors:</b> Maidment, R.; Black E.; Greatrex, H.; Asare, K.; Nenkam, A.
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2016
<b>Language:</b> ENG
<b>Coverage:</b> Ghana, Mali

Deliverable Data sharing
<a href="#">TAMSAT+ENACTS_presentations_Feb2016.pdf</a>

## Deliverable #11

Main Information
<b>Title:</b> One EnKF (Ensemble Kalman Filter) parameterized in MATLAB with supporting agronomic calibration and validation datasets
<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> Datasets
<b>Year of expected completion:</b> 2016
<b>Status:</b> On-going
<b>Justification for cancelling the deliverable:</b> activity on-going and on schedule

Next-user
Graduate students / academia / Agrhymet

Submitted on 2016-03-04 at 19:42 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Development of knowledge and programming skills to prepare next generation of agricultural models

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** One PhD student from the region and two MSc students will be recruited in the project to work on the development of the Ensemble Kalman Filter and supporting datasets

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

#### Deliverable Ranking

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

#### Deliverable dissemination

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

[DBSTARS\\_Mali\\_v3.2.zip](#)

Submitted on 2016-03-04 at 19:42 UTC

**Deliverable #12**

Main Information	
<b>Title:</b> One paper on RS estimates of NDVI and plant height time profiles of smallholder crops	
<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> 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> activity on schedule

Next-user
Graduate students / academia / Agrhymet / scientific community
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Reference to local data, experimental protocols and research results more representative of local smallholder conditions. Use of these references in future research on crop recognition and crop conditions monitoring in highly fragmented agricultural systems. Use of spectral / temporal / textural libraries referenced by the paper
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Peer-reviewed journals such as Remote Sensing of Environment

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	3
<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

Submitted on 2016-03-04 at 19:42 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**[STARS\\_RS\\_2015-12-24\\_PCST\\_manuscript\\_Export\\_CCAFS\\_P&R.pdf](#)**Deliverable #13****Main Information****Title:** One paper on yield precision improvement (bias reduction / lead time) using EnKF, RS data**MOG # 1:** New climate information and analysis that enhances the capacity of data providers (e.g. regional and national meteorological institutions) to meet the demands of climate service beneficiaries**Main Type:** Peer reviewed Publications**Sub Type:** Peer-reviewed journal articles**Year of expected completion:** 2016**Status:** On-going**Justification for cancelling the deliverable:**  
ongoing and on schedule**Next-user**

Graduate students / academia / Agrhymet / scientific community

**Knowledge, attitude, skills and practice changes expected in next-user:** Reference to local data, experimental protocols, research results more representative of local smallholder conditions. Use of references in future research on crop recognition and conditions monitoring in fragmented agricultural systems. Use of spectral/temporal/textural libraries referenced by the paper. Use of DA methods for improved lead time, accuracy of yield predictions**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Peer-reviewed journals such as Ecological Modelling

Submitted on 2016-03-04 at 19:42 UTC

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	

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 #14

Main Information	
<b>Title:</b> One CRAFT training workshop held at Agrhymet for 4 NMHS and 4 NARS	
<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	



Submitted on 2016-03-04 at 19:42 UTC

<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> Activity was initially expected to be delivered by 2015, but rescheduled during the Nov. 2015 re-planning stage in the P&R in view of administrative bottlenecks and funding cuts. CRAFT work is ongoing but will require several more months to come up with a mature case study data set for Southern Mali that will then be used in a partners training workshop. Workshop materialization is conditional upon signing of Agrhymet sub-agreement currently on hold. Otherwise activity processing on track and on schedule.

Next-user
Agrhymet / Univ. Ghana / NARS / NMHS staff
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Exploratory use of CRAFT for sub-country yield monitoring and food security advisory generation
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Training workshop with data and tools sharing and subsequent internet support

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Traore, Seydou <S.Traore@agrhyment.ne>, AGRHYMET - Centre regional AGRHYMET
<b>Partner #2:</b> Hoogenboom, Gerrit <gerrit.hoogenboom@wsu.edu>, WSU - Washington State University
<b>Partner #3:</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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>

Submitted on 2016-03-04 at 19:42 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 #15

Main Information	
<b>Title:</b> CRAFT calibrated for West African conditions using CMDT data	
<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> Models
<b>Year of expected completion:</b> 2016	

Submitted on 2016-03-04 at 19:42 UTC

<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> CRAFT work reports 5 major achievements: (i) incorporation of other crops of importance to the region, .e.g sorghum, millet, peanut; (ii) completion of P-aware CERES-Sorghum and Millet models; (iii) interfacing with APSIM now available alongside DSSAT; (iv) completion of SarraH QuadUI translator making interfacing with Sarrah also possible; (v) development of a calibration dataset for Southern Mali including management and reference yield data (1990-2000). This is significant progress achieved under difficult conditions including: late signing of WSU sub agreement, refusal of ICRISAT to sign Agrhymet sub agreement. Main consequence is unavailability of compatible daily, merged ground-satellite gridded rainfall surfaces.
-------------------------	---

Next-user
Agrhymet / Univ. Ghana / NARS / NMHS staff / Academia
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Exploratory use of CRAFT for sub-country yield monitoring and food security advisory generation
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Partial dataset sharing during aforementioned training workshop

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Hoogenboom, Gerrit <gerrit.hoogenboom@wsu.edu>, WSU - Washington State University
<b>Partner #2:</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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
<b>Open access restriction:</b> Yes
<b>License adopted:</b> <Not defined>
<b>Dissemination Channel:</b> other

Submitted on 2016-03-04 at 19:42 UTC

Dissemination URL: <http://tools.agmip.org/quadui.php>**Deliverable Metadata**

**Description:** QuadUI is the application originally developed under AgMIP to translate agricultural model inputs and parameters from one model to another. One specific deliverable under activity 350.2 on CRAFT is the production of a full translational capability between DSSAT, APSIM and SarraH model allowing interfacing of CRAFT and SarraH. This was deemed a high priority activity as SarraH is the preferred crop model used at Agrhymet Regional Centre. The translator has been completed following work between CASCAID scientists M. Adam (ICRISAT/CIRAD), Gerrit Hoogenboom (WSU/UF), Meng Zhang (UF), Cheryl Porter (UF), Henri Songoti (Agrhymet), Agali Alhassane (Agrhymet), Pierre C. Sibiry Traore (ICRISAT/IER).

**Creator / Authors:** Zhang, M., Porter, C., Adam, M., Hoogenboom, G., Songoti, H., Alhassane, A., Traore, P.C.S.

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2015

**Language:** ENG

**Coverage:** <Not defined>

**Deliverable Data sharing**

**Deliverable files**  
<Not defined>

**Deliverable #16****Main Information**

**Title:** Farmer-observer network established for rain, yield/crop condition measurements with 90 farmers registered in Niore, Senegal

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

**Main Type:** Capacity

**Sub Type:** Capacity

**Year of expected completion:** 2016

Submitted on 2016-03-04 at 19:42 UTC

<p><b>Status:</b> On-going</p>	<p><b>Justification for cancelling the deliverable:</b> -  Field mission organized to (i) inventory existing rain gauge network and its condition in target area; (ii) establish contact with farmer organizations towards later enrollment; (iii) organize introductory meetings with cooperatives and associations; (iv) map institutional setup in target area.  - Equipment already procured and ready to dispatch in target area: 50 smartphones + accessories, 100 rain gauges  - review of planting date prediction methods in progress  - contacts established with R4 (Rural Resilience Initiative) in Tambacounda, Kolda to also develop advisory services there. R4 already agreed to use MANOBI's mobile platforms for advisory services deployment in Kolda area.</p>
--------------------------------	--

Next-user
<p>Smallholder farmers / boundary agents &amp; institutions / agro-dealers / extension services / scientists</p>
<p><b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Use of crowd sourcing tools and ICT for collaborative measurement and quality control of field-level climate and crop production data. Capacity development in stakeholders leading to emergence of a fertile environment for mobile-based farm services.</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> Provision of rain gauge and mobile equipment / plan to participating farmers in consultation with target communities. Provision of support staff (field based + back office) for system installation and quality control. MANOBI platform provided with database management functionalities. Development of working relationship with mobile operators and local private sector.</p>

Partners contributing to this deliverable
<p><b>Partner #1 (Responsible):</b> Annerose, Daniel &lt;daniel.annerose@manobi.net&gt;, MANOBI S.A. - MANOBI Société Anonyme</p>
<p><b>Partner #2:</b> Traore, Pierre C. Sibiry &lt;p.s.traore@cgiar.org&gt;, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics</p>

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

Submitted on 2016-03-04 at 19:42 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 #17

Main Information	
<b>Title:</b> Farmer-observer network established for rain, yield/crop condition measurements with 90 farmers registered in Segou, Mali	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2016	
<b>Status:</b> Cancelled	<b>Justification for cancelling the deliverable:</b> Activity not started. Postponed indefinitely due to 2016 CCAFS cuts

Next-user
Smallholder farmers / boundary agents & institutions / agro-dealers / extension services / scientists

Submitted on 2016-03-04 at 19:42 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Use of crowd sourcing tools and ICT for collaborative measurement and quality control of field-level climate and crop production data. Capacity development in stakeholders leading to emergence of a fertile environment for mobile-based farm services.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Provision of rain gauge and mobile equipment / plan to participating farmers in consultation with target communities. Provision of support staff (field based + back office) for system installation and quality control. MANOBI platform provided with database management functionalities. Development of working relationship with mobile operators and local private sector.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Annerose, Daniel <daniel.annerose@manobi.net>, MANOBI S.A. - MANOBI Société Anonyme

**Partner #2:** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

#### 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>

Submitted on 2016-03-04 at 19:42 UTC

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

## Deliverable #18

Main Information
<b>Title:</b> Research report on dissemination of seasonal forecasts through rural radios in Senegal
<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
URACS (Rural community radio union of Senegal)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> We will organize three revolving training workshops to better cover the country (North, Center and South) and to train as many journalists as possible. After the training, journalists will be better capacitated to convey climate services and discuss concretely with the met service how to convey available climate information.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Rural radio journalists last year workshop suggested to install rain gauges at as many rural radios as possible so they can feedback more closely with farmers. This approach will help ANACIM engage and maintain connectivity with radio journalists while also benefiting from their feedback or those received from communities.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Diaye, Ousmane <ousmane@iri.columbia.edu>, ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)
<b>Partner #2:</b> Zougmore, Robert <R.Zougmore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

Deliverable Ranking	
Address gender and social inclusion aspect	4
Potential for/ actual contribution to outcomes	5
Level of shared ownership (partnerships across org.)	4



Submitted on 2016-03-04 at 19:42 UTC

What is your personal perspective of the importance of this product	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/59295/retrieve">https://cgspace.cgiar.org/rest/bitstreams/59295/retrieve</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 #19

Main Information	
<b>Title:</b> Setup of dedicate human resources, steering committee with rotation schedule, communication and collective learning plan	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2015	

Submitted on 2016-03-04 at 19:42 UTC

<p><b>Status:</b> Extended</p>	<p><b>Justification for cancelling the deliverable:</b> Due to CCAFS funding cuts the expected securement of dedicate HR was hampered. Nonetheless ICRAF hired one PDF scientist (Dr. Djibril Dayamba) and ICRISAT hired one scientific officer (Mrs. Andree M. Nenkam). Lack of funds and time resources did not allow progress with communication and collective learning plan. However this issue was discussed at the Feb. 2016 annual review and learning meeting.</p> <p>In a related developed ICRISAT and Meteo-Mali are in process of signing a MoU to manage operations of a Joint Agro-Meteorological Services Incubator (JAMSi) to facilitate capacity building through permanent hosting of ICRISAT staff at Meteo-Mali.</p>
--------------------------------	---

Next-user
NHMS, NARES, FOs, NGOs, private sector, and other key boundary partners including policy makers
<p><b>Knowledge, attitude, skills and practice changes expected in next-user:</b> This will foster improved understanding by next users (e.g. NHMS) of their respective roles in developing and serving climate information for smallholders. The same learning process will apply to other partner categories involved in the CASCAID project.</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> 1. Dedicate HR hired by to guide the overall implementation of the CASCAID project.</p> <p>2. Steering committee with representation from CGIAR centers, academia/ARIs, RROs, private sector, farmer organizations, international NGOs, NHMS, NARS, and extension services</p> <p>3. Communication and collective learning plan</p>

Partners contributing to this deliverable
<p><b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry &lt;p.s.traore@cgiar.org&gt;, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics</p>
<p><b>Partner #2:</b> Bayala, Jules &lt;j.bayala@cgiar.org&gt;, ICRAF - World Agroforestry Centre</p>

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

Submitted on 2016-03-04 at 19:42 UTC

<b>Open access restriction:</b> Restricted Use Agreement - Restricted access
<b>Restricted access until:</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> Memorandum of Agreement Between the Agence Nationale de la Météorologie (MALI-METEO) and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) Relating to the Operation of the Joint Agro-Meteorological Services Incubator (JAMSi)
<b>Creator / Authors:</b> Traore, P.C.S.; Diarra, D.Z.; Nenkam, A.N.
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2015
<b>Language:</b> ENG
<b>Coverage:</b> Mali

Deliverable Data sharing
<a href="#">20150901_DraftMoA_ICRISAT-Meteo-Mali_V02_AMN+PCST_Final_En_revMeteoMali.docx</a>

## Deliverable #20

Main Information
<b>Title:</b> Initial planning and engagement meeting (Jan/Feb 2015)
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed
<b>Main Type:</b> Workshops
<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
NHMS, NARES, FOs, NGOs, private sector, and other key boundary partners including policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> general understanding about the CASCAID project objectives, its philosophy and approach to kick-start a cascade of new capacitation mechanisms for the emergence of climate services for West African smallholders

Submitted on 2016-03-04 at 19:42 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** scoping of 'game changers' among next users will be undertaken in preparation for the initial planning and engagement meeting to maximize the likelihood of impact resulting from their attendance

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

#### Deliverable Ranking

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

#### Deliverable dissemination

Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -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 #21

Submitted on 2016-03-04 at 19:42 UTC

Main Information	
<b>Title:</b> Yearly review, learning and planning meeting (2015)	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	

Next-user
NHMS, NARES, FOs, NGOs, private sector, and other key boundary partners including policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users will learn from the progresses and challenges of PY1. They will assist in revising and prioritizing PY2 targets, relay back to their constituencies revised project directions and roadmaps.
Proposed focus (2015): initial results from #426, #351 (capacitation and communication strategies for the portaging of climate information at scale).
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Yearly review, learning and planning meetings will be organized in the different CASCAID countries on a rotational basis: Ghana, Mali, Senegal to ensure participation of a variety of relevant stakeholders from host country. National media will to be invited to cover a side event to present learnings from ending PY

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	3
<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>	4

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>

Submitted on 2016-03-04 at 19:42 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 #22

Main Information	
<b>Title:</b> Yearly review, learning and planning meeting (2016)	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2016	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> none - due 2016

Next-user
NHMS, NARES, FOs, NGOs, private sector, and other key boundary partners including policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users will learn from the progresses and challenges of PY2. They will assist in revising and prioritizing PY3 targets, relay back to their constituencies revised project directions and roadmaps.
Proposed focus (2016): initial results from activities 427 and 352 (co-development of index-based insurance from local to national scales).
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Yearly review, learning and planning meetings will be organized in the different CASCAID countries on a rotational basis: Ghana, Mali, Senegal to ensure participation of a variety of relevant stakeholders from host country. National media will to be invited to cover a side event to present learnings from ending PY

Submitted on 2016-03-04 at 19:42 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

## 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 #23

## Main Information

<b>Title:</b> Yearly review, learning and planning meeting (2017)
---

Submitted on 2016-03-04 at 19:42 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> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2017	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> none - due 2017

Next-user
NHMS, NARES, FOs, NGOs, private sector, and other key boundary partners including policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Next users will learn from the progresses and challenges of PY2. They will assist in revising and prioritizing PY3 targets, relay back to their constituencies revised project directions and roadmaps.
Proposed focus (2017): results from activities 350 and 351 (co-development of next-generation tools for actionable climate information with end-users).
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Yearly review, learning and planning meetings will be organized in the different CASCAID countries on a rotational basis: Ghana, Mali, Senegal to ensure participation of a variety of relevant stakeholders from host country. The third review, learning and planning meeting will see increased media coverage, stronger presence from policy makers

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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 19:42 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 #24

Main Information	
<b>Title:</b> Yearly review, learning and planning meeting (2018)	
<b>MOG # 2:</b> New knowledge, capacity, and tools supporting the provision of equitable climate services for farmers are developed	
<b>Main Type:</b> Workshops	<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2018	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> none - due 2018

Next-user
NHMS, NARES, FOs, NGOs, private sector and other boundary partners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Learn from the progresses and challenges during PY4 and the overall CASCAID project. Assist in highlighting project achievements and present roadmaps towards sustainable climate services developed over the course of CASCAID.
During the 2018 and final review and learning meeting, the ensemble of project results will be reviewed.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Yearly review, learning and planning meetings will be organized in the different CASCAID countries on a rotational basis: Ghana, Mali, Senegal to ensure participation of various stakeholders from host country. Final workshop will involve very significant media engagement and coverage, as well as attendance from national and regional policy makers.

Submitted on 2016-03-04 at 19:42 UTC

Partners contributing to this deliverable	
<b>Partner #1 (Responsible):</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	

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 #25

Main Information
<b>Title:</b> Development and implementation of project-wide monitoring and evaluation (M&E) system (including social differentiation / gender)

Submitted on 2016-03-04 at 19:42 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> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Databases
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Administrative delays protracted preparation of sub-agreement with IUCN. Then budget cuts put the sub-agreement on hold effectively preventing IUCN from developing the M&E infrastructure. We hope to obtain clearance for a smaller (USD 11K) contract to IUCN in 2016 to partly address that shortcoming

Next-user
NHMS, NARES, FOs, NGOs, private sector and other boundary partners
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Project stakeholder have better understanding of barriers and enablers for climate services implementation at scale, know best options to effectively i) leveraging opportunities arising from private sector, civil society, information technology and ii) addressing technical and social bottlenecks towards implementation.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Early involvement, field visits and trainings will be combined to expose this group of actors, including climate resilience project leaders, to the new approaches

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature

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

Submitted on 2016-03-04 at 19:42 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 #26****Main Information****Title:** background paper on rolling out agricultural insurance in Nigeria**MOG # 3:** Weather related Insurance products are designed, tested, and brought to scale with implementing partners**Main Type:** Reports, Reference Materials and Other Papers**Sub Type:** Discussion paper**Year of expected completion:** 2015**Status:** Complete**Next-user**

Federal Ministry of Agricultural and Rural Development; Nigeria Agricultural Insurance Corporation

**Knowledge, attitude, skills and practice changes expected in next-user:** Implementation details of 2015 roll-out of agricultural insurance, and design of Planting with Peace Program through 2017, will incorporate insights and recommendations from the background paper.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The background paper will be co-authored by FMARD, and inform discussions with Nigeria program partners at a planning workshop.**Partners contributing to this deliverable**

Submitted on 2016-03-04 at 19:42 UTC

**Partner #1 (Responsible):** Hellin, Jonathan <j.hellin@cgiar.org>, CIMMYT - International Maize and Wheat Improvement Center

**Partner #2:** Hansen, James <jhansen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

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

Deliverable dissemination
<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/handle/10568/53101">https://cgspace.cgiar.org/handle/10568/53101</a>

Deliverable Metadata
<p><b>Description:</b> This report explores evidence and insights from five case studies that have made significant recent progress in addressing the challenge of insuring poor smallholder farmers and pastoralists in the developing world. In India, national index insurance programmes have reached over 30 million farmers through a mandatory link with agricultural credit and strong government support. In East Africa (Kenya, Rwanda and Tanzania), the Agriculture and Climate Risk Enterprise (ACRE) has recently scaled to reach nearly 200,000 farmers, bundling index insurance with agricultural credit and farm inputs. ACRE has built on strong partnerships with regional initiatives such as M-PESA mobile banking. In Ethiopia and Senegal, the R4 Rural Resilience Initiative has scaled unsubsidized index insurance to over 20,000 poor smallholder farmers who were previously considered uninsurable, using insurance as an integral part of a comprehensive risk management portfolio. With strong public and private sector support, the Mongolia Index-Based Livestock Insurance Project (IBLIP) insures more than 15,000 nomadic herders and links commercial insurance with a government disaster safety net. Finally, the Index-Based Livestock Insurance (IBLI) project in Kenya and Ethiopia demonstrates innovative approaches to insuring poor nomadic pastoralists in challenging circumstances.</p> <p>A few common features appear to have contributed to recent progress within these case studies:</p> <ul style="list-style-type: none"> <li>explicitly targeting obstacles to improving farmer income;</li> <li>integration of insurance with other development interventions;</li> <li>giving farmers a voice in the design of products;</li> <li>investing in local capacity; and</li> <li>investing in science-based index development.</li> </ul> <p>Evidence from these case studies can inform the ongoing debate about the viability of scaling up index-based insurance for vulnerable smallholder farmers in the developing world. The rapid progress observed in recent years suggests that index insurance has the potential to benefit smallholder farmers at a meaningful scale, and suggests the need to reassess arguments that lack of demand and practical implementation challenges prevent index-based insurance from being a useful tool to reduce rural poverty.</p>

Submitted on 2016-03-04 at 19:42 UTC

<b>Creator / Authors:</b> Greatrex H,Hansen J,Garvin S,Diro R,Le Guen M,Blakeley S,Rao K,Osgood D
<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> 2015-01-23T10:34:21Z,2015-01-23T10:34:21Z,2015-01
<b>Language:</b> en
<b>Coverage:</b> <Not defined>

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

**Deliverable #27**

Main Information
<b>Title:</b> Workshop on "Evidence-Based Insurance Development for Nigeria's Farmers"
<b>MOG # 3:</b> Weather related Insurance products are designed, tested, and brought to scale with implementing partners
<b>Main Type:</b> Workshops
<b>Sub Type:</b> Workshop
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
Federal Ministry of Agricultural and Rural Development; Nigeria Agricultural Insurance Corporation
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Implementation details of 2015 roll-out of agricultural insurance, and design of Planting with Peace Program through 2017, will incorporate insights and guidance that come out of the workshop and background paper.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Workshop and background paper will engage key decision-makers.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Hellin, Jonathan <j.hellin@cgiar.org>, CIMMYT - International Maize and Wheat Improvement Center
<b>Partner #2:</b> Hansen, James <jhansen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society

Submitted on 2016-03-04 at 19:42 UTC

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: <a href="https://cgspace.cgiar.org/rest/bitstreams/59217/retrieve">https://cgspace.cgiar.org/rest/bitstreams/59217/retrieve</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>

Submitted on 2016-03-04 at 19:42 UTC

## 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 inclusion of DFID quickwin activities 426 and 427 enlarged the spectrum of key next users for CASCAID in 2015, with two main categories: (i) intermediaries, including NHMS, and (ii) policy makers. Policy makers were limited to Nigeria (FMANR) - evidence of knowledge, attitude, skills and practice changes remains to be quantified, but will likely have profound implications owing to the size of Nigerian economy and the proximity of FMANR with the ECOWAS institutions. Intermediaries included NGOs involved in agricultural extension in northern Ghana (ADRA, OXFAM), NHMS involved in the development of climate services (Ghana, Mali, Senegal), and rural radio networks relaying seasonal forecasts to larger audiences (URAC, Senegal). Evidence of KAS and practice changes were collected in Ghana and Senegal through M&amp;E activities, and anecdotal evidence of increasing demand for climate information and training in the use thereof. A secondary emergent trend is the increased demand in NHMS for capacitation in business planning as they struggle to visualize alternative income opportunities from nascent climate services.</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> Cascaded training of trainers in northern Ghana for PICSA, focus on intermediaries that demonstrate genuine demand through commitment of own resources, reliance on younger, technologically savvy staff, and involvement of other country participants to scale out the process</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> cf. proposed outcome case study for Ghana</p>
<p><b>Lessons and implications for the next planning cycle:</b> Skype discussions across all CASCAID activity leaders allowed the identification of Senegal as the next 'low hanging fruit' for priority leveraging of PICSA activities, through the exploitation of existing institutional build-up and R&amp;D fabric. In 2016, we expect in particular to reach a keener understanding and 'landscaping' of roles in public-private partnerships developing in the operational implementation of climate services - e.g. where do the respective roles of NHMS, NGOs/CSOs, and private sector start and end along the climate information value chains.</p>



*Submitted on 2016-03-04 at 19:42 UTC*

## **5.4 Project highlights**

## 6. Activities

Activity #1	
<b>Title:</b> PARTICIPATORY ACTION RESEARCH ON CLIMATE SERVICES	
<p><b>Description:</b> This pilot activity builds upon existing initiatives and engages with stakeholders and change agents across scales to achieve effective partnership and ownership. It ensures a collegial site selection process, supports the scaling of relevant information, tactical options and supporting processes tested under #350, 351, 352 in GH/ML/SNI. It expands the use of proven approaches including the CCAFS Kaffrine experience and the PICSA approach. It helps integrate, promote and disseminate better early warning, food security, and farm advisory solutions building on existing tools, e.g. ENACTS, TAMSAT, AgMIP, CRAFT. It seeks convergence with FP1.1 and FP4 projects.</p> <p>Activities #349 and #351 are complementary. Activity #351 develops the supply side of climate services focusing on next-users, #349 develops demand side working with end-users. Univ. Reading, Agrhyment Regional Centre and ICRISAT are primary supporting partners. Boundary organizations to assist in dissemination and uptake will be identified in PY1 for each target country and district.</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Bayala, Jules <j.bayala@cgiar.org>, ICRAF - World Agroforestry Centre	
<b>Status:</b> On-going	<p><b>Justification:</b> Partnership with NARS, NHMS, NGOs and local communities has been successfully established. Moreover NHMS and some NGOs have been trained on PICSA approach that they were able to roll out with farmers in the field in northern Ghana. This experience has proved successful.</p>

Activity #2	
<b>Title:</b> IMPROVED CROP MONITORING & YIELD FORECASTING	
<p><b>Description:</b> This proof-of-concept activity aims to improve:</p> <ol style="list-style-type: none"> <li>1. field-scale yield prediction with remote sensing (RS). A RS data assimilation framework will improve in-season SarraH estimates of crops biomass and grain, using BMGF-STARS Mali data. In 2017 we will incorporate fertility management and satellite imagery.</li> <li>2. real-time forecasting of district-level food security. CRAFT will be calibrated using historical CMDT data (Mali). This will include capacity building to overhaul EWS down to district level. In 2017 we will migrate from hindcasting to forecasting and expand to Senegal.</li> <li>3. co-prediction of seasonal climate, crop performance. We will establish 3 grass-root co-forecasting networks in the Kaffrine, Lawra-Jirapa and Segou districts, equipped with rain gauges and mobile plans to provide field-level management, rainfall, crop information in exchange for access to market information, other mobile services. Data collected will be used to develop a mobile yield prediction app. This activity will involve NARS, NMHS and private sector.</li> </ol>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	

Submitted on 2016-03-04 at 19:42 UTC

<b>Status:</b> On-going	<b>Justification:</b> Our understanding of the potential for landscape scale RS of fertility levels, crops was improved. STARS-One, an android app for image-based advisories was produced. CRAFT was customized for West African conditions (inclusion of other crops beyond maize, plugging-in of APSIM, finalization of SarraH translator, improvement of CERES-SG/ML, now P-aware). Contacts were established with FOs in Nioro dept, hardware (rain gauges, smartphones) procured. SHEAR proposal submitted with ANACIM, MANOBI, ACMAD, Agrhymet preselected by DFID/NERC. Agreements made with R4 project in Kolda. Interfacing with activity 352 ongoing through MANOBI platform. Mali selected as 3d sen2agri project country pilot (after Ukraine, South Africa)
Activity #3	
<b>Title:</b> CAPACITY STRENGTHENING AND COMMUNICATION MECHANISMS FOR INTEGRATED CLIMATE SERVICES (ICS)	
<b>Description:</b> 1. Identify optimal information generating tools and communication approaches: (a) review tools for generating climate-related information, downscaled seasonal forecasts, rain gauge networks; (b) evaluate existing communication approaches (radio, mobile,...) with stakeholders across scales (smallholders, intermediaries, FOs, policy makers). Approaches will include CCAFS-Kaffrine and PICSA 2. Develop capacity of national and regional providers of met. info through training and support to produce and avail historical climate information and to substantially improve seasonal forecasts to station level 3. Improve merging of satellite and ground-truth climatic data. Researchers on ENACTS and TAMSAT work together to deliver historical and near real-time information on daily basis for locations with and without ground-based observations. 4. Develop, pilot and scale sustainable ICS for smallholders using above and partnerships established in #346. Establish pilots in Ghana, Mali PY1-2 and then scale out PY3-4. #346 to support scaling activities. 5. Support #346 on evaluation process design and results analysis.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Dorward, Peter <p.t.dorward@reading.ac.uk>, University of Reading	
<b>Status:</b> On-going	<b>Justification:</b> Meteorological agencies in Ghana and Mali were trained to improve skills in data quality control, analysis to generate information that is useful for the farmers on the ground. They were also introduced to work with TAMSAT on the estimation of daily rainfall through merging of satellite data with their station data. Both NHMS successfully underwent several ENACTS trainings leading to the activation of dedicate national data libraries and maprooms, and capacity building in-house. The interfacing of these products and the activation of acquired capacities with communication mechanisms (TV/radio, SMS platforms) will gear up in 2016 learning from the Senegal experience.

Submitted on 2016-03-04 at 19:42 UTC

Activity #4	
<b>Title:</b> WEATHER INDEX-BASED CROP INSURANCE SERVICES	
<p><b>Description:</b> Ghana: build upon CCAFS and AgMIP activities on weather-index based crop insurance. Further strengthen focus on tenderized material for index design, integration of index insurance into larger institutional frameworks using PPPs with GAIP and GhanaMet (via #351). 2015: draw together key partners, start farmer led discussions, work with Ghana Met to assess data sources, work on index design. 2016: expanded "dry run" of index insurance year and economic research games. 2017+: further linking of findings and materials with the index insurance industry.</p> <p>Senegal: focus on information flows for index insurance and role of PPPs. Investigate how to ensure effective collection and communication of qualitative, quantitative, historical or "real time", observations, model-derived information between various stakeholders. Assess how mobile and crowdsourcing can be used with index insurance. 2015: assess current information use in existing index insurance projects, draw together key partners. 2017+: develop information platforms and services for operational insurance programs.</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Greatrex, Helen <greatrex@iri.columbia.edu>, Columbia University	
<b>Status:</b> On-going	<p><b>Justification:</b> A kick-off workshop was organized to examine the attributes of an insurance program needed for scaling, clarify links with GAIP and other CCAFS initiatives (PICSA, FS4). A set of gender sensitive index insurance design materials was produced, customized, and tested for Ghana (northern region). Due to funding constraints, the materials have not yet been used in a full fieldwork campaign. This research is planned for publication in future years. A workshop brought together the Senegal ecosystem of actors involved in index-based insurance to better understand the value-adding and scaling roles of information flows and mobile technology for index-based insurance.</p>

Activity #5
<b>Title:</b> PROJECT COORDINATION AND COLLECTIVE LEARNING
<p><b>Description:</b> 1. Setup HR, steering committee, communication plan &amp; procedures, engagement objectives vis-a-vis other Flagship and bilateral projects.</p> <p>2. Initial planning and engagement meeting: discuss and agree on detailed annual work plan targets and reporting deadlines, sub-agreements.</p> <p>3. Yearly review, learning and planning meeting (11/15): annual internal project reflection, learning and documentation event - adjust project activities. Preparation of yearly reporting to CCAFS.</p> <p>4. Yearly review, learning and planning meeting (11/16): annual internal project reflection, learning and documentation event - adjust project activities. Preparation of yearly reporting to CCAFS.</p> <p>5. Yearly review, learning and planning meeting (11/17): annual internal project reflection, learning and documentation event - adjust project activities. Preparation of yearly reporting to CCAFS, plans for project follow-up</p> <p>6. Yearly review, learning and terminal meeting (11/18): annual internal project reflection, learning and documentation event - adjust project activities. Preparation of final reporting to CCAFS.</p>

Submitted on 2016-03-04 at 19:42 UTC

<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2018
<b>Leader:</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> On-going	<b>Justification:</b> Initial planning meeting held Feb 2015 at ONOMO Hotel, Bamako. Annual review and planning meeting planned for Nov 2015 postponed in the wake of the Radisson Terror Attacks in Bamako 11/20/15. The meeting was subsequently organized Feb 1-3, 2016 at ONOMO Hotel, Bamako jointly with FS4 project meeting. Cost of ~25K USD for Feb16 meeting requested special clearance from DDG-R, ICRISAT due to CRP funds use freeze.

#### Activity #6

<b>Title:</b> CLIMATE ADVISORIES QUICKWIN: Scaling climate services in Senegal through rural radios (2015)	
<b>Description:</b> CCAFS and ANACIM have worked in Kaffrine (since 2011), Thies, Louga and Diourbel (since 2013) to test the design and communication of downscaled, probabilistic seasonal forecasts, and to evaluate their impact on farmers' management and livelihood outcomes. After four years, this activity aims to scale lessons learnt from ground experimentation with URAC and the estimated 2 million farmers reached through this initial experience, to the whole country with the following specific objectives: 1) Consolidate the finding on risk management interventions in the sites of Kaffrine, Thies, Louga and Diourbel during recent years through co-production of climate information products and tools with farmers; 2) Train the network of rural radio communicators to understand and be able to communicate seasonal and intra-seasonal forecast information to farmers communities; this will also include the documentation of indigenous knowledge on climate forecast by farmers in each site.	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Diaye, Ousmane <ousmane@iri.columbia.edu>, ANACIM - Agence National de l'Aviation Civile et de la Météorologie (Senegal)	
<b>Status:</b> Complete	

#### Activity #7

<b>Title:</b> INDEX-BASED INSURANCE QUICKWIN: supporting index-based insurance development in Nigeria	
<b>Description:</b> In September 2014, Nigeria's Federal Ministry of Agriculture and Rural Development (FMARD) has announced plans to provide insurance to 15 million farmers by 2017. CCAFS will organize a planning workshop and a high-level panel event, and produce a background paper to contribute to the design and development of this program. The 1-1/2 day workshop will focus on (a) lessons and evidence to strengthen the roll-out of insurance in 2015, (b) exploring opportunities for CCAFS to add value in implementation of the Planting for Peace Program, and (c) briefly discussing other areas of potential FMARD-CCAFS collaboration. The 1/2-day high-level panel will showcase Nigeria's insurance program with a few major international stakeholders and DfID in particular. A background paper will provide guidance on the challenges of implementing the insurance program, drawing on experience from successful agricultural insurance initiatives in Africa and India; with emphasis on immediate issues surrounding the 2015 roll-out.	

Submitted on 2016-03-04 at 19:42 UTC

<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Hansen, James <jhansen@iri.columbia.edu>, IRI - International Research Institute for Climate and Society	
<b>Status:</b> Complete	

**Lessons regarding your project activities and possible implications for the coming planning cycle:** CCAFS needs to more aggressively enforce centers compliance in the use of project funds. Discussions underway to help better segregate the scope of activities 346 and 351 which appeared convoluted during the Feb. 2016 annual review meeting. Reaching farmers through NGOs has proved efficient towards scale in Ghana, and will be used in other sites/countries immediately. Training GH, ML NHMS (ENACTS/TAMSAT/PICSA) will be scaled in 2016 starting with Senegal. Regarding the general cohesion of the project, partners recognized that Senegal may be the best opportunity to accelerate interconnection, dovetailing and mutual leveraging of activities through PPPs involving MANOBI, ANACIM and other partners, and will prioritize links between 346 (CoPs involved in CSA), 350 (farmer-observer networks), 351 (PICSA), 352 (index-based insurance) in Kaffrine, Nioro, Kolda districts - essentially inseminating the fertile Senegal institutional environment with further NHMS and intermediaries capacitation (whereas 346, 351 were not prioritizing Senegal early on).

Submitted on 2016-03-04 at 19:42 UTC

## 7. Leverages

Leverage #1	
<b>Title:</b> Spurring a Transformation for Agriculture through Remote Sensing (STARS)	
<b>Partner name:</b> BMGF - Bill & Melinda Gates Foundation - United States	
<b>Year:</b> 2015	
<b>Flagship:</b> FP2: Climate Information Services and Climate-Informed Safety Nets	<b>Budget:</b> US \$514,785.24

Submitted on 2016-03-04 at 09:26 UTC

**Title:** (ICRISAT WA) Capacitating science-policy exchange platforms to mainstream climate change into national agricultural and food security policy plans

---

<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>	ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India	<b>Project leader</b>	Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>
<b>Project type</b>	CCAFS COFUNDED	<b>Detailed project workplan</b>	<Not defined>

### Project is working on

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

Bilateral project(s) contributing to this project
190 - The Agricultural Modeling Intercomparison and Improvement project (AgMIP) - Regional Integrated Assessments in SSA and SA

### Summary

Through its regional scenario process and the set-up of national science-policy exchange platforms, CCAFS-WA has engaged with regional and national structures in charge of planning agricultural development and food security. The CCAFS national science-policy exchange platforms will form the backbone for a top-down and bottom-up mainstreaming of climate change into national development frameworks by (1) catalyzing multi-scale, participatory identification of priorities and knowledge gaps using appropriate tools and inclusive approaches to define priority investments, and (2) learning from multi- and trans-disciplinary action research in selected districts of three pilot countries. The existing national platforms will be involved in the capacity building process by providing technical, scientific and political supports to local communities. This systemic framework for integrated climate impact assessments and adaptation planning will produce site-specific contextual insights and scalable evidence to guide national and sub-national policy designs and decision-making processes.



Submitted on 2016-03-04 at 09:26 UTC

## 2. Partners

### Partner #1 (Leader)

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>	Project leader, supervision and general guiding for the project implementation
Project Coordinator	Totin, Edmond <e.totin@cgiar.org>	Project coordination, scientific input and coordination with the national partners

### Partner #2

**Institution:** IUCN - International Union for Conservation of Nature

#### CCAFS Partner(s) allocating budget

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Somda, Jacques <jacques.somda@iucn.org>	Track the impact of the activities within the Flagship-4 project, collecting stories of impact from the stakeholders in the three intervention areas as a way of measuring changes, and get a sense of how the stakeholders perceived/portrayed the changes happening at the national & community levels. Empower stakeholders in tracking the impact of the project's activities; Create space for joint reflection and knowledge sharing

### Partner #3

**Institution:** AEDD - Agence de l'Environnement et du Développement Durable (Mali)

#### CCAFS Partner(s) allocating budget

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India

Submitted on 2016-03-04 at 09:26 UTC

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Adideye Maiga, Mohamed <adideye@yahoo.fr>	(2016) POLICY ENRICHMENT AND PRIORITY SETTING (i) Internal project reflection, learning and documentation event; (ii) Development of a portfolio of case stories to enrich national policy development based on quantitative predictions of CSA benefits at district levels. For selected and more advanced districts / constituencies, exploratory development of Local Adaptation Plans of Action (LAPAs); (iii) Appropriation and customization of the CCAFS CSA prioritization toolkit for each country by the national science-policy platforms

**Partner #4****Institution:** CSIR - The Council for Scientific and Industrial Research**CCAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India

**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Karbo, Naaminong <minongkordam@yahoo.com>	(2016) POLICY ENRICHMENT AND PRIORITY SETTING (i) Internal project reflection, learning and documentation event; (ii) Development of a portfolio of case stories to enrich national policy development based on quantitative predictions of CSA benefits at district levels. For selected and more advanced districts / constituencies, exploratory development of Local Adaptation Plans of Action (LAPAs); (iii) Appropriation and customization of the CCAFS CSA prioritization toolkit for each country by the national science-policy platform

**Partner #5****Institution:** DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural**CCAFS Partner(s) allocating budget**

ICRISAT - International Crops Research Institute for the Semi-Arid Tropics - India

**Contacts**

Type	Contact	Responsibilities and contributions
------	---------	------------------------------------

Submitted on 2016-03-04 at 09:26 UTC

Partner	DIEYE, Bounama <bounama1968@gmail.com>	(2016) POLICY ENRICHMENT AND PRIORITY SETTING (i) Internal project reflection, learning and documentation event; (ii) Development of a portfolio of case stories to enrich national policy development based on quantitative predictions of CSA benefits at district levels. For selected and more advanced districts / constituencies, exploratory development of Local Adaptation Plans of Action (LAPAs); (iii) Appropriation and customization of the CCAFS CSA prioritization toolkit for each country by the national science-policy platform
---------	---	---

**Partnerships overall performance over the last reporting period:** - IUCN trained the M&E focal points on the M&E framework and collected the baseline information in the 3 intervention countries.

- CSIR conducted the district scenarios workshops, engaged a master student to investigate the disconnects between scales, produced a video in the preparation of their advocacy event with the MPs (coming weeks)
- AEDD conducted the district scenarios workshops, the discordance study and organized a high-level event with MPs to advocate for more investment in Agriculture.
- MAER-DA completed the scenarios, the discordance analysis and had a good representation at the COP-21

**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** The partnership is maturing and partners are enlarging their network, growing beyond the district boundaries. In Senegal the CCASA platform raised significant additional resources from WAAPP and displayed a very active role at the COP-21. The platforms are all willing to developing proposals for funding. They have essentially become hubs for effective networking and linkages with research and development partners at that level, and community people are responsive to platform activities. Another learning from PY2 is the high level of complementarity between the 3 national platforms, with Senegal excelling at advocacy, Ghana at analytics, Mali at cross-sectorial integration.

Submitted on 2016-03-04 at 09:26 UTC

### 3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Ghana
Country	Not applicable	Not applicable	Mali
Country	Not applicable	Not applicable	Senegal
District	13.2713	13.2713	Cinzana
District	14.1065	14.1065	Kaffrine
District	10.1547	10.1547	Lawra
District	9.1854	9.1854	Jirapa
District	11.3689	11.3689	Bougouni
District	10.2833	10.2833	Nandom
District	14.718	14.718	Bambey
District	14.4137	14.4137	Linguère
District	12.3795	12.3795	Koutiala

## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

In the three countries (Ghana, Mali and Senegal), national directorates involved in policy design and implementation at the Ministries and parliamentary committee for Agriculture and Environment are using the platforms compiled knowledge to inform national food and agricultural policies. At the district level, the relevant institutions (Extension services, NGOs, District Assemblies and traditional and religious authorities) are disseminating climate-smart supportive options and by-laws.

**Annual progress towards outcome (end of 2015):** In the three countries (Ghana, Mali and Senegal), national directorates involved in policy design and implementation at the Ministries and within parliamentary committees for Agriculture and Environment are knowledgeable on districts climate-smart options that can fit into national food and agricultural policy plans. At district level, the relevant institutions (Extension services, NGOs, District Assemblies and traditional and religious authorities) are knowledgeable on the available climate-smart supportive options and by-laws.

**Annual progress towards project outcome in the current reporting cycle (2015):** (i) Project work plans for 2015 were developed in January. Sub-agreements were signed with partners in April; (ii) Protocols for scenario visioning processes were developed and validated by national teams in each country (early May 2015); (iii) Stakeholders of district-level platforms envisioned the futures of their agriculture and identified drivers of change (see an example at <https://ccafs.cgiar.org/blog/scenarios-help-guide-discussions-what-ghana%E2%80%99s-future-could-look#.Vss3ATLcseE> in mid-June; (iv) Sub-national platforms stakeholders were oriented on project monitoring and evaluation with M&E structures established in April; (v) Analyses of the disconnect between national decision-making and local reality, and development of roadmaps to address the policy scale gap through district-level platforms were completed in Mali and Senegal). (VI) High level events during which platform members met to lobby Members of Parliaments for investments in agriculture were organized in Mali (Nov) and are in preparation in Ghana and Senegal.

**Communication and engagement activities have contributed to achieving your Project outcomes:** A better informed stakeholder at all levels, facilitating interaction at different scales, including national and districts for inclusive policy formulation and implementation stands out as the expected project outcome. The district-level scenarios developed with multi-actors from both national and local scales, started stimulating the joint and inclusive policy development processes. Video and radio talks were produced to broadcast and inform policy actors. The analysis of the disconnect between national decision-making and local realities is done identifying priorities for action and orientations for refining policy instruments. The report was shared with members of Parliament.

**Evidence documents of progress towards outcomes:** [Scenarios Dakar\\_Jt15.pdf](#)

**Annual progress towards outcome (end of 2016):** At national level, structures and individuals in charge are equipped with prioritization tools customized for their country, and apply them alongside data, narratives and, if possible LAPAs from district-level study cases to rewrite selected policy instruments.

Submitted on 2016-03-04 at 09:26 UTC

At district level, organizations and individuals in charge are empowered with new knowledge and tools valorised at the national level and initiate a process of emulation in other sub-national constituencies, e.g. through legislative bodies.

**Annual progress towards outcome (end of 2017):** In the three countries, national and district institutions involved in policy design and implementation establish procedures for effective interaction which ensures that climate-smart supportive options and by-laws are integrated in national food and agricultural policies (setting up the top-down and bottom-up procedures).

**Annual progress towards outcome (end of 2018):** In the three countries, three district assemblies are sharing lessons and experiences on designing and implementing food and agricultural policy plans that integrate climate-smart options with other communities nationally and internationally to encourage the revision of the national policies.

**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 activities aim at delivering the outputs (1) National-local interfaces are capacitated to contribute to the national policy making process. (2) Revised National policy mechanisms and Instruments for climate-smart agriculture and adaptation planning. (3) Stakeholders have a better understanding of the local impacts of Climate Change, and are familiar with tools for investment planning; (4) Process and policy content are documented and shared. The activities from 2014-2015 have so far delivered on outputs 1 and 2. Outputs 3-4 need more communication and our focus in 2016 will be on disseminating our findings for capacity building, at national and local levels.

## 4.2 Contribution to CCAFS Outcomes

**RP WA - Outcome 2019:** National level decision-makers (Gov. ministries), national agricultural research systems, NGOs, civil society organizations, regional organizations use CCAFS science-derived decision support tools and systems to mainstream climate change into national plans and policies from local to national levels.

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

2019	
Target value: 3	Cumulative target to date: 7

Submitted on 2016-03-04 at 09:26 UTC

2019		
<b>Target narrative:</b> In each of the three countries, we expect that at least one policy will be enacted and that the local communities will be involved in the process for designing a policy in relation with the food system and climate change		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		

2015		
<b>Target value:</b> 3	<b>Cumulative target to date:</b> 3	<b>Target achieved:</b> 3.0
<b>Target narrative:</b> <Not defined>		
<b>Narrative for your achieved targets, including evidence:</b> In the three countries, processes are on-going to re-fine local policies so that they further integrate climate change and food security dimensions, based on local scenarios and the ASSAR project's outcomes. For instance, in Mali priority investment points were identified and a strategic actions plan was developed accordingly. Actions are on-going, at both local and national levels to inform high-level policy actors. In this frame, district platforms' members held a first meeting with the MPs to bring science-based information to them in order to raise concerns over the challenges posed by climate change in agricultural sector.		
<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> In Y1 of the project, a social differentiation study was conducted to map the different categories of stakeholder in the districts targeted. The platforms were formed with a large diversity of stakeholder as a way to give a better view of each community, so their needs and expectations are well voiced. In 2015, for instance 21%; 33% and 13% of the platform members engaged in the scenarios development are women, respectively in Ghana, Mali and Senegal. In Senegal, the process was facilitated by a woman; in Ghana the platforms intermediaries are from different social groups.		

2016		
<b>Target value:</b> 1	<b>Cumulative target to date:</b> 4	
<b>Target narrative:</b> A test will be made to experiment in 1 country how to foster district level decision-makers, civil society organizations, regional organizations to make use of CCAFS science-derived decision support tools and systems to mainstream climate change into district plans and policies		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> In each district-platform the different social groups are represented. The process is open and inclusive in order to capture the diversity that exists in each community in the policy cycle.		

2014		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> <Not defined>

Submitted on 2016-03-04 at 09:26 UTC

2014
<b>Target narrative:</b> This indicator was slightly modified during the West-Africa Regional meeting in Kenya and for 2014, the project mainly worked to set the scene for the institutional arrangement that will support the effective integration of climate smart practices / strategies in the food systems, in the three intervention countries. Therefore, for each country, the project work to establish three district-platforms (at local levels), in addition to the national multi-stakeholders' platform. We expect that through this setting, effective interaction will be facilitated between the national and local scales for both a top-down and bottom-up mainstreaming of climate change into national development frameworks.
<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>

### 4.3 Other Contributions

#### Contribution to other CCAFS Impact Pathways

The Flagship 4 activities will contribute to Flagship 2 by helping to bring its findings to scale via the multi-stakeholders devices that were created at district level

Region	Indicator	Contribution to the selected outcomes target in 2015	Target value contribution
--------	-----------	--	---------------------------



Submitted on 2016-03-04 at 09:26 UTC

R P W A : West Africa	# of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs	The Adaptation at Scale in the Semi Arid Region project ( A S S A R p r o j e c t - <a href="http://start.org/programs/assar">http://start.org/programs/assar</a> ) established strong links with the CCAFS-Flagship 4 project in Mali and Ghana. The ASSAR project is also working with the district platforms. There are many synergies between the two projects, issues addressed and intervention areas. The timeframes for the projects also overlap. Additionally, the AgMIP project provides a unique and unprecedented set of quantitative tools to analyze production systems sensitivity to current climate, impacts from climate change on future systems (visualized from scenario exercises) and benefits of adaptation.	null
--------------------------	--	---	------

## Collaborating with other CRPs

Dryland Systems
<b>Description of collaboration:</b> In 2 districts of Mali, the Africa Rising project use also the district platforms instead of re-engaging new stakeholders. District platforms are also mobilized by the AgMIP project in the Koutiala district site.
<b>The achieved outcome contributions:</b> <Not defined>

## 4.4 Outcome case studies

Outcome case study #1
<p><b>Title:</b> Facilitating multi-scale interaction to create enabling conditions for for inclusive climate policy formulation and implementation</p>
<p><b>Outcome statement:</b> The project activities are contributing to bring science-based information to policy actors at all levels, and facilitating interaction at different scales, including national and districts for inclusive policy formulation and implementation.</p>
<p><b>Research Outputs:</b></p> <ul style="list-style-type: none"> <li>- Active and vibrant district platforms (3 in each country where the project works)</li> <li>- M&amp;E framework developed</li> <li>- Improved policy literacy gap on climate change at district level</li> <li>- District level futures(scenarios) on climate smart agriculture developed, of which certain have been quantified following AgMIP protocols at high levels of detail</li> <li>- Improved communication and networking of flagship4 activities</li> <li>- Radio talks, interactive workshop, farmers' forum and festivals held for information broadcasting.</li> <li>- Various communities sensitized by district platforms on CSA practices and measures for mitigating the climate change effects</li> <li>- Analysis of disconnect between national policies and local reality, and development of roadmaps to address the policy gaps (in each country)</li> </ul>
<p><b>Research Partners:</b> CSIR-Animal Research Institute, Ghana</p>
<p><b>Activities that contributed to the outcome:</b></p> <ul style="list-style-type: none"> <li>- District-level scenario with stakeholders of sub-national platforms to envision the future of their agriculture practices and identified drivers of change in the 30 years to come</li> <li>- Climate talks to disseminate the climate policy information and sensitize policy actors on the policy gaps</li> <li>- M &amp; E framework pilot-tested at the district level in each country</li> <li>- Meeting of district platforms with high- level actors (MPs) for advocacy on investments towards agricultural adaptation</li> </ul>
<p><b>Non-research Partners:</b> AEDD- Agence de l'Environnement et du developpement Durable (Mali)            AMEDD- Association Malienne D'Eveil pour le Developpement durable (Mali)            MAER-DA Direction de l'agriculture (Senegal)            IUCN - International Union for the Conservation of Nature (PACO - Burkina Faso)</p>
<p><b>Output Users:</b> Planning officers in the ministries of Agriculture and Environment in Ghana; Mali and Senegal            Policy decision-makers: District Assemblies of Jirapa, Lawra and Nandom (Ghana); members of the nation council of agriculture and rural development at the Parliaments of Mali and Senegal</p>
<p><b>How the output was used:</b> The policy review and disconnect analysis reports were shared with the ministries and the MPs. For instance, in Mali, based on the disconnect analysis the MPs agreed to revisit the natural resource management policy. The process is going-on.</p>
<p><b>Evidence of the outcome:</b> A consultancy was conducted by Dr Carla Roncoli (Emory University) to analyze the relationship between activities-outcomes. A draft paper is in preparation for journal publication. In Ghana, platforms facilitated development of local rules to protect the environment and these by-laws will be compiled to be used in the district policy.</p>
<p><b>References:</b> Upcoming</p>

Submitted on 2016-03-04 at 09:26 UTC

**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

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:** [Etudes Locales MLDIA 19 Nov.doc](#)

## 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 # 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>
Major Output groups - 2014
<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 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>

Submitted on 2016-03-04 at 09:26 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 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:**

In 2015, the project activities delivered key results, including the documentation of related climate change policy gaps, the comparative analysis and functioning of the district platforms (Ghana case study) with different leading structures in delivering the complex project outputs.

**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:**

Based on the stakeholder analysis done in 2014, we ensured that all the relevant social groups are part of the processes, and in each country, the policy review processes were facilitated by the country man

Submitted on 2016-03-04 at 09:26 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 2015 contribution towards the selected MOG**

<Not defined>

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

The district-level scenarios provided opportunities to identify the priorities and climate- food-related concerns; gaps analysis helps to explore opportunities to improve the effectiveness of adaptation activities and flow of knowledge, experience and resources across levels, the on-going dialogues with high-level policy actors will contribute to implement the window of opportunities.

**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:**

Relevant social groups were part of the scenarios development with a good representation of women, in all the 9 district where the FS4 works

### 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**

Empower the 9 district platforms with tools and data that allow them to design policy instruments in their own right

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

Develop gender specific topic to sensitise the local leader on the necessity to include social differentiation perspective in the district policy design

**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**

Action research in each area by engaging different stakeholders and mainly local communities and taking stock from the disconnect study of 2015

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

Special attention will be paid to have the different social groups

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** The platforms are becoming hubs for effective networking and linkages with other research and development partners and there are rooms for leverage in the coming years.

*Submitted on 2016-03-04 at 09:26 UTC*

Submitted on 2016-03-04 at 09:26 UTC

## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Review of existing policy instruments and processes in 3 countries (Ghana, Mali and Senegal)	
<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> 2014	
<b>Status:</b> Complete	

Next-user
national platforms, project scientists
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Platforms' leaders, the platforms' members and project scientists have a better understanding of the barriers for food policies implementation and know what the best options to effectively addressing climate change adaptation for food security and agriculture challenges
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> In each of the three countries, the national platform members conduct the analysis of existing policy instruments including processes and content in order to identify the key barriers that hinder their effective implementation.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural
<b>Partner #3:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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>	4
<b>What is your personal perspective of the importance of this product</b>	2



Submitted on 2016-03-04 at 09:26 UTC

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/60874/retrieve">https://cgspace.cgiar.org/rest/bitstreams/60874/retrieve</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> M&E framework assessment of baseline modus operandi for policy generation
<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> 2014
<b>Status:</b> Complete
Next-user
National platforms, project scientists, CCAFS FS4 staff

Submitted on 2016-03-04 at 09:26 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** National platforms, project scientists, CCAFS FS4 staff will have adequate tools to assess the changes brought about the CCAFS FS4 activities in the intervention areas

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Development and activation of a M&E framework for assessing incremental changes in policy processes. The expected changes are related to (i) attitude change; (ii) change in discourse; (iii) change in procedure and (iv) change in food policy content.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature

#### Deliverable Ranking

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

#### Deliverable dissemination

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

**License adopted:** <Not defined>

**Dissemination Channel:** -1

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

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

[Rapport suivi-évaluation CSPEP 2015 final.doc](#)

Submitted on 2016-03-04 at 09:26 UTC

**Deliverable #3**

Main Information	
<b>Title:</b> National-local interfaces are established in 9 representative districts (3 countries) of the 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> Capacity	<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2014	
<b>Status:</b> Complete	

Next-user
Districts levels' authorities for example, traditional leaders, champions in the regions, decentralised staff; Regional coordinating councils; Sector ministries,
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Improved interaction between different levels (national/local) through the established platforms at national and districts' levels. The platforms will offer rooms for the different stakeholders to meet, talk to each other, and provide options for effective
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Establishment of multi-stakeholder platforms at selected district level including the CCAFS sites (in Mali, Ghana and Senegal) and development and formalization of institutional mechanisms to connect these with national platforms and ensure seamless bottom-up and top-down communication

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rurale
<b>Partner #3:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)
<b>Partner #4:</b> Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	4
<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>	4

Submitted on 2016-03-04 at 09:26 UTC

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/blog/new-knowledge-sharing-platform-helps-mali-rig-better-defense-against-climate-change#.Vs4vejLcseE">https://ccafs.cgiar.org/blog/new-knowledge-sharing-platform-helps-mali-rig-better-defense-against-climate-change#.Vs4vejLcseE</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> Annual progress reports	
<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	
Science-policy platforms and project scientists	

Submitted on 2016-03-04 at 09:26 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** Platforms' leaders and project scientists have created enabling conditions for effective interaction of stakeholders.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Through the effective dialogue space and interaction, local communities will be engaged/involved in policy design for better integration of climate change in agricultural policies.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature

**Partner #2:** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

**Partner #3:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

**Partner #4:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

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

#### Deliverable Metadata

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

Submitted on 2016-03-04 at 09:26 UTC

Coverage: &lt;Not defined&gt;

## Deliverable Data sharing

[Rapport Final Flagship Décembre 2015.doc](#)  
[Progres\\_report\\_flaship4\\_2015.doc](#)  
[DRAFT 2015 ANNUAL REPORT FOR FS4.doc](#)

## Deliverable #5

## Main Information

**Title:** Participatory gap analysis**MOG # 1:** Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues**Main Type:** Tools and Computer Software**Sub Type:** Tools**Year of expected completion:** 2015**Status:** On-going**Justification for cancelling the deliverable:**  
Completed in Mali and Senegal. In Ghana it is being finalized by master students

## Next-user

National and districts platforms, project scientists, CSOs, FOs, private sector and parastatals, extension services, NGOs

**Knowledge, attitude, skills and practice changes expected in next-user:** All the stakeholders will contribute to the participatory gap analysis aiming at reducing the disconnect between national decision making and local demand / needs.**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The stakeholders, including the national and districts platforms, project scientists, CSOs, FOs, private sector, extension services, and NGOs will work together to make a joint analysis of the policy context

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research**Partner #2:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Equipeement Rurale

Submitted on 2016-03-04 at 09:26 UTC

**Partner #3:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <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="#">Rapport discordances_Feb16.doc</a>

## Deliverable #6

Main Information	
<b>Title:</b> Institutional landscaping and social differentiation toolkit	
<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

Submitted on 2016-03-04 at 09:26 UTC

<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> This deliverable will be done under ASSAR project

Next-user
National and districts platforms, project scientists, CSOs, FOs, private sector and parastatals, extension services, NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The national and districts platforms, project scientists, CSOs, FOs, private sector and parastatals, extension services, NGOs are able to do the institutional landscape and social differences.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Based on the experience within the platforms, the platform leaders and the scientists will develop the Institutional landscaping and social differentiation toolkit for

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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>



Submitted on 2016-03-04 at 09:26 UTC

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

&lt;Not defined&gt;

**Deliverable #7****Main Information****Title:** Annual progress report**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**

Platforms members, project scientists and district assemblies, CSOs, FOs, private sector and parastatals, extension services, NGOs

**Knowledge, attitude, skills and practice changes expected in next-user:** The different stakeholders engaged in the project have appropriate knowledge and expertise to critical reflect on the events that happened and are able to draw lessons from their experiences**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The project leader will initiate a regular sessions within the different involved stakeholders for internal reflection to create conditions for learning and documentation event - annual steering committee meeting to critically review what worked in year 2, what did not work and adjust project activities accordingly**Partners contributing to this deliverable****Partner #1 (Responsible):** Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature**Partner #2:** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research**Partner #3:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

Submitted on 2016-03-04 at 09:26 UTC

**Partner #4:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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 #8

Main Information
<b>Title:</b> Publications about the analysis and contributions of the inclusive policy design on its effective implementation

Submitted on 2016-03-04 at 09:26 UTC

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

**Main Type:** Peer reviewed Publications

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

**Year of expected completion:** 2016

**Status:** <Not defined>

#### Next-user

Project scientists and National platform members

**Knowledge, attitude, skills and practice changes expected in next-user:** The scientific community and the national will have concrete evidences to inform the policy makers about the change that could be brought in by promoting an inclusive policy design

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Engaged the platforms members in a process that allow them to learn from their success stories, but also from their failure. Cross visits will be organize to facilitate a joint learning

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

**Partner #2:** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

#### 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

Submitted on 2016-03-04 at 09:26 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
<b>Deliverable files</b> <Not defined>

## Deliverable #9

Main Information
<b>Title:</b> Models, tools & software and Publications
<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>

Next-user
Platforms members, and district assemblies, CSOs, FOs, private sector and parastatals, extension services, NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Platforms members, scientists and CSOs, FOs, extension services, NGOs have adequate toolkit to engage a participatory policy development process
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Conduct action research in each area by engaging different stakeholders and mainly local communities, through the districts platforms, in participatory policy design.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

Submitted on 2016-03-04 at 09:26 UTC

**Partner #2:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

**Partner #3:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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> Develop and implement M&E and Communication plans

Submitted on 2016-03-04 at 09:26 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> Working paper
<b>Year of expected completion:</b> 2017	
<b>Status:</b> <Not defined>	

Next-user #1
Science-policy platforms members, project scientists, scientific community, ministry of education, of agriculture, of environment
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Platforms members and project scientists will be able to engage and follow the changes concerning the food security policy process and content
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Platforms members, at both national and local levels will be trained (by IUCN) about how to engage and follow the changes of policy

Next-user #2
Ministries (MoFA, MoE, MoF) and legislative (relevant technical commissions in Parliament), NARS private sector and parastatals, extension services, NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> All involved stakeholders have the capacity to document and measure changes of policy
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Training of the involved stakeholders through workshops

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature
<b>Partner #2:</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #3:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural
<b>Partner #4:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

Deliverable Ranking	
Address gender and social inclusion aspect	<Not defined>

Submitted on 2016-03-04 at 09:26 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> <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 #11

Main Information	
<b>Title:</b> Annual steering committee minutes and revised workplans for impending year	
<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>	

Submitted on 2016-03-04 at 09:26 UTC

Next-user
Platform members and project scientists
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The involved stakeholder participate to the steering committee meeting to set clear agenda and have a better overview of the progress
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The different partners will be sensitised to get use to the process

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature
<b>Partner #2:</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #3:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural
<b>Partner #4:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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>



Submitted on 2016-03-04 at 09:26 UTC

<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> Policy instrument
<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> 2017
<b>Status:</b> <Not defined>

Next-user
Platforms members, project scientists, decision markers, NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Platforms members have adequate tools/methods to engage an interactive/participatory policy design process
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The activities within the national platforms will focus on facilitating the development of sectorial climate-smart policy instrument

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural
<b>Partner #3:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

Submitted on 2016-03-04 at 09:26 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 #13

Main Information	
<b>Title:</b> Communication products to inform about the new sectorial policy	
<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> Communication Products and Multimedia	<b>Sub Type:</b> Articles for media or news
<b>Year of expected completion:</b> 2017	

Submitted on 2016-03-04 at 09:26 UTC

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

Platforms members, project scientists, decision markers, NGOs

**Knowledge, attitude, skills and practice changes expected in next-user:** The engaged stakeholders have tools to raise public awareness**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** The engaged stakeholders have developed public awareness products served in each country to inform about the new sectorial policy**Partners contributing to this deliverable****Partner #1 (Responsible):** Somda, Jacques <jacques.somda@iucn.org>, IUCN - International Union for Conservation of Nature**Partner #2:** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research**Partner #3:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural**Partner #4:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)**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>

Submitted on 2016-03-04 at 09:26 UTC

<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> Reports, publications: Upscaling plans captured and disseminated through a roadmap in each country.
<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
Platforms members, project scientists, decision markers, NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Policy developed are largely used
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> People all work together to set up appropriate mechanism for scaling up the climate policies

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics
<b>Partner #2:</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #3:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

Submitted on 2016-03-04 at 09:26 UTC

**Partner #4:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

**Partner #5:** Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics

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 #15

Main Information
<b>Title:</b> Three strategic reports on lessons learned from Nepalese LAPA and how it might be adapted

Submitted on 2016-03-04 at 09:26 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> Research report
<b>Year of expected completion:</b> 2016	
<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Because of earthquake in Nepal, and later the Nov budget cut

Next-user
Staff in Ministries of Agriculture, Environment, Finance; Policy and Decision Makers; Media in the three countries
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The reports will provide relevant information to stimulate change in the way climate change policy is deployed, devolved and implemented in the national food system policies from national to sub-national levels.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Organization of public events to launch the reports (including the high-level parliamentary event) and use of media channels available in the countries for the dissemination of their content.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

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>

Submitted on 2016-03-04 at 09:26 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 #16

Main Information
<b>Title:</b> Three multi-lingual video documentaries on the benefits of participatory policy design (in local languages)
<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> Communication Products and Multimedia
<b>Sub Type:</b> Video
<b>Year of expected completion:</b> 2015
<b>Status:</b> Complete

Next-user
Ministry of Agriculture, of Environment and finance staffs; Policy and Decision Makers; Media and Civil society in the three countries
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> National policy makers, farmer organizations and district level assemblies are aware about the importance of the climate change challenges. They are more motivated to seek for options to support the small stakeholders who are hardly dealing with these challenges.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The national platform members will work to write a script of the documentary/video and the specific case they find relevant to capture the attention of decision makers at multiple scale and entice them to get engaged further in climate change adaptation.

Submitted on 2016-03-04 at 09:26 UTC

## Partners contributing to this deliverable

**Partner #1 (Responsible):** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

**Partner #2:** DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural

**Partner #3:** Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

## Deliverable Ranking

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

## Deliverable dissemination

**Open access restriction:** Yes

**License adopted:** <Not defined>

**Dissemination Channel:** -1

**Dissemination URL:** [https://www.youtube.com/watch?v=-9x891\\_utoo](https://www.youtube.com/watch?v=-9x891_utoo)

## 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 09:26 UTC

**Deliverable #17**

Main Information	
<b>Title:</b> Three high-level parliamentary events (one in each of the three target 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> 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> The workshop was organised with the members of parliament in Mali, and planned for Senegal and Ghana in the coming months.

Next-user
Members of parliament, government members, scientists (research institutions and academia), national media
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The high-level decisions makers have better understandings of the success stories on climate change policy management from the other regions. They have relevant information on how to proceed to effectively consider climate change policies into the national food systems in an integrated manner.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> In each of the three countries, the national science-policy platforms will organise a 1-day or 1 half-day workshop which will involve keynote communications by experts to thematic parliamentary commissions.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Équipement Rural
<b>Partner #3:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

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 09:26 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 #18

Main Information	
<b>Title:</b> Impact of climate change and benefits of adaptation quantified in 3 districts with AgMIP methods	
<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> 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	
Scientists community; district authorities, Ministries of agriculture, environment, finance; Media in the three countries	

Submitted on 2016-03-04 at 09:26 UTC

**Knowledge, attitude, skills and practice changes expected in next-user:** The benefits of this research will be usable knowledge for local and national decision makers and stakeholders on how communities, including urban population in the three countries are vulnerable to climate change and what can be done to make them more resilient to climate change-related stressors.

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** In each country, the national science-policy platforms will organise a range of workshop for mobilising the relevant stakeholders. Experts on climate change issues will be invited to provide knowledge with the stakeholders and develop scenarios with the key engaged stakeholders, at the district level.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research

#### Deliverable Ranking

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

#### Deliverable dissemination

**Open access restriction:** Effective Date Restriction - Embargoed period

**Restricted embargoed date:**

**License adopted:** <Not defined>

**Dissemination Channel:** other

**Dissemination URL:** <ftp://data.agmip.org>

#### Deliverable Metadata

**Description:** Regional Integrated Assessment files for the AgMIP CIWARA sites (CIWARA: Climate change Impacts on West African agriculture: a Regional Assessment), including climate, crop (APSIM, DSSAT), ACMO (AgMIP Crop Model Outputs), economic (TOA-MD) results files.

**Creator / Authors:** Maccarthy, D.S.K.; Traore, P.C.S.; Hathie, I.; Ly, M.; Nenkam, A.; Adam, M.; Salah-Freduah, B.

**Author Identifier:** <Not defined>

**Publication / Creation date:** 2015

**Language:** ENG

**Coverage:** Koutiala (Mali), Navrongo (Ghana), Nioro (Senegal), Tamale (Ghana)

Submitted on 2016-03-04 at 09:26 UTC

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

## Deliverable #19

Main Information
<b>Title:</b> Young professional networks connected to national and district-level platforms
<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> Capacity
<b>Sub Type:</b> Capacity
<b>Year of expected completion:</b> 2015
<b>Status:</b> Cancelled
<b>Justification for cancelling the deliverable:</b> Budget cuts

Next-user
Young entrepreneurs, private sector, district-level decision makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> For the sustainable development of the platform, the stakeholders will work to engage young professionals, by transferring critical knowledge on climate change effects to today's young people as a way to preparing youth for the challenges ahead and ensuring that next generation is able to create a sustainable future.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Organise mobilisation/sensitization roundtables at both national and local levels using media channels. Explore formal involvement of regional, national and sub-national young professional network representatives (e.g. YPARD) in national and sub-national platforms. Contract the YPARD network to organize such events.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Karbo, Naaminong <minongkordam@yahoo.com>, CSIR - The Council for Scientific and Industrial Research
<b>Partner #2:</b> DIEYE, Bounama <bounama1968@gmail.com>, DA-MAER - Direction de l'Agriculture - Ministère de l'Agriculture et de l'Equipeement Rurale
<b>Partner #3:</b> Adideye Maiga, Mohamed <adideye@yahoo.fr>, AEDD - Agence de l'Environnement et du Développement Durable (Mali)

Deliverable Ranking
<b>Address gender and social inclusion aspect</b>
<Not defined>

Submitted on 2016-03-04 at 09:26 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>

## 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> Districts levels' authorities, traditional leaders, champions in the regions, decentralized staff (Agric. Extension, education staff etc.) have been active in scenarios development, identification of gaps at district level and exploration of opportunities. We stimulate change of attitude by strengthening the interaction between traditional authorities and District Assembly. Also, in the three countries, the platform members are more engaged in the local development, searching for data, information to feed the district development board. For instance, we observed that in Ghana, the platform members are now developing local by-laws at community level to ban indiscriminating trees cutting and bush burning. They compiled the by-laws for the district assembly to be inserted in the local development 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> Joint meetings, field visits and workshop were mainly used with these stakeholders</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> The district scenario served to bring all these actors together to explore the main challenges in their districts. For instance, in Ghana through this activity they all found that's crucial to fight against the indiscriminating trees cutting and bush burning. That's where the traditional authorities agreed to help with community by-laws which will be compiled and inform the district policy</p>
<p><b>Lessons and implications for the next planning cycle:</b> The strong linkage established between traditional leaders and public authorities will make the work much easier in the coming years, as they are all committed to bring the experience at scale, to the national authorities.</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> National level: science-policy platform and associated members both executive (ministries [MoFA, MoE, MoF] and legislative (relevant technical commissions in Parliament). The high-level actors were engaged in many activities (scenarios development, policy analysis) and the feedback provided relevant information that motivated them to engage policy change.</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> Workshops, document/video sharing were the main means through which we interacted with these actors</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> The policy gaps analysis was presented at the Malian parliament and the MPs were excited to get a feedback. For instance, on food security side, the gaps analysis shows how regulation and certification of improved seeds in Mali is a barrier to local agricultural innovation and adaptation and the feedback to the MPs aimed at lobbying for more investments from the government of Mali in agriculture to subsidise seed certification</p>
<p><b>Lessons and implications for the next planning cycle:</b> Keeping the interaction with the high-level actors and facilitating a regular meeting with the local actors will help to deliver on the outcome expected.</p>

Submitted on 2016-03-04 at 09:26 UTC

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> District platforms to advocate MPs for investments in agricultural	
<b>Author:</b> Edmond Totin	<b>Subject:</b> Representatives of the district-platforms met with the members of the nation council of agriculture and rural development at the Parliament to inform them on the challenges they are going through in their different locations, but also a way to draw their attention on strategies for integrating climate change issues into national agricultural policies so as to improve the living conditions of the most climate-vulnerable.
<b>Publisher:</b> ICRISAT	<b>Year:</b> 2015
<b>Project highlights types</b> Successful communications Gender and social inclusion Innovative non-research partnerships Policy engagement	
<b>Start date:</b> 2016-02-26	<b>End date:</b> 2016-02-26
<b>Is global:</b> No	
<b>Country:</b> Mali	<b>Keywords:</b> Policy; Food Security; Lobby
<b>Highlight description:</b> <Not defined>	
<p><b>Introduction / Objectives:</b> Mali's economy is predominantly agro-based with agriculture contributing to about 70% of the GDP. Smallholder farmers play a key role in the production system, but these days they are exposed to many challenges, including climate variability risks. Science policy platforms were formed in three pilot districts to promote climate smart technologies and enable conditions for effective science-policy interaction. A range of activities, including policy information sharing, joint consultation were conducted within the platforms. The platforms members met with the MPs to inform them on their activities and to raise concerns over the challenges posed by climate change in agricultural sector.</p>	
<p><b>Results:</b> The climate policy review was presented to MPs and the gaps that still exist were highlighted. The focus was on how these gaps prevents from effective implementation of the climate policies in Mali. The report of the study was shared with the nation council of agriculture and rural development at the Parliament to inform them on the challenges that smallholder farmers are going through in their different locations. More specifically, attention was put on how regulation and certification of improved seeds in Mali is a barrier to local agricultural innovation and adaptation. At the end, the MPs agreed to explore with Ministry of Agriculture option for more investments to create enabling conditions for the smallholder farmers, so that they can get easy access to clean seed.</p>	

*Submitted on 2016-03-04 at 09:26 UTC*

**Partners:** ICRISAT; AEDD; AMEDD

**Links / Sources for further information:** <Not defined>



## 6. Activities

Activity #1	
<b>Title:</b> 1. ANCHORING PLATFORMS IN CONTEXT	
<p><b>Description:</b> 1.1 Analysis of existing policy instruments (policy formulation and implementation) for exploring gaps between the regulation in place and the practices in the ground in order to make suitable recommendations for effective capacity building options that enact agricultural and equitable food system policies</p> <p>1.2 Development and activation of a M&amp;E framework for assessing incremental changes in policy processes and institutions brought about by the project</p> <p>1.3 Establishment of multi-stakeholder platforms at selected district level including CCAFS sites and development and formalization of institutional mechanisms to connect these with national platforms and ensure seamless bottom-up and top-down communication</p> <p>1.4 Elicitation of local demand for climate-smart policy instruments through the training of multi-stakeholder platform members in scenario visioning, outcome mapping, and the district-level production of representative agricultural pathways and CSA portfolios</p>	
<b>Start date (dd-MM-yyyy):</b> 22-09-2014	<b>End date (dd-MM-yyyy):</b> 31-12-2014
<b>Leader:</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #2	
<b>Title:</b> 2. LAYING THE GROUND FOR CO-PRODUCTION	
<p><b>Description:</b> 2.0 Internal project reflection, learning and documentation event - annual steering committee meeting to</p> <p>2.1 Analysis of the disconnect between national decision-making and local reality, and development of a roadmap to address the policy scale gap through district-level platforms</p> <p>2.2 Development and deployment of institutional landscaping toolkit and social differentiation tools across communities in target districts, and analysis of past and ongoing climate-smart projects from the perspective of user engagement in the design process</p> <p>2.3 Model current systems sensitivities to climate change, impacts of climate change on future production systems and benefits of adaptation for locally-endorsed and exogenous CSA practices using AgMIP integrated assessment protocol, including calibrated crop and TOA models for local conditions</p> <p>2.4 Organize roundtables and topical trainings to foster national young agro-entrepreneur schemes, rural professionals and women networks and capacities, and link them to national platforms</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Extended	<b>Justification:</b> The activity 2.4 is extended to 2016 because of resource limitation

Activity #3
-------------

Submitted on 2016-03-04 at 09:26 UTC

<b>Title:</b> 3. POLICY ENRICHMENT AND PRIORITY SETTING	
<b>Description:</b> The policy review conducted in year 1 will help to establish the sub-national infrastructure and elucidate the local needs for scenario development. The finding of the exercise within the local community will provide strong evidences to feed the policy procedures	
<b>Start date (dd-MM-yyyy):</b> 01-01-2016	<b>End date (dd-MM-yyyy):</b> 31-12-2016
<b>Leader:</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #4	
<b>Title:</b> 4. SECTORIAL CLIMATE-SMART POLICY RELEASE	
<b>Description:</b> This activity aims at facilitating the change in policy procedure at national level to include local perspective, but also, at least in one country, the activity will contribute to influence the national food security policy content	
<b>Start date (dd-MM-yyyy):</b> 01-01-2017	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Totin, Edmond <e.totin@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	
<b>Status:</b> Complete	

Activity #5	
<b>Title:</b> 2B. GRAFTING INSTITUTIONAL PRECURSORS OF PRACTICE AT SCALE (2015 BONUS FUNDS ACTIVITY)	
<b>Description:</b> Project partners will learn from the Nepal LAPA experience and implementation process.	
We will develop 3 video documentaries destined to raise awareness about the importance of, and pathways towards participatory policy design for adaptation to climate change. These documentaries will be bilingual (English/French) and dubbed in dominant languages for the FP4 countries: Dagare (Ghana), Bamanankan (Mali), Wolof (Senegal).	
ICRISAT has connections with the Association of European Parliamentarians with Africa ( <a href="http://www.awepa.org">www.awepa.org</a> ) who, inter alia, organize seminar series in African Parliaments on thematic issues to reach out to MPs and policy makers.	
Three 1-day or 1 half-day events will involve keynote communications by experts to thematic parliamentary commissions and will be organized within the Parliament premises by the national science-policy platforms. Experts will be selected in consultation with CCAFS-FP4 management team and TORs will build upon material developed by FP4 within and beyond West Africa	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2015
<b>Leader:</b> Traore, Pierre C. Sibiry <p.s.traore@cgiar.org>, ICRISAT - International Crops Research Institute for the Semi-Arid Tropics	

Submitted on 2016-03-04 at 09:26 UTC

<p><b>Status:</b> Cancelled</p>	<p><b>Justification:</b> This much anticipated activity was conceived to absorb the expected USD150K from the 2015 performance bonus. A West African delegation was constituted in March in preparation for a May study visit to Nepal to learn from the LAPA experience. The visit was postponed to late 2015 when the earthquake hit Nepal. Then, CCAFS cuts in November led the team to postpone the visit indefinitely. For the same second reason the three 1-day high-level events were cancelled. Notwithstanding, the videos work was carried forward with help from the national CCAFS science policy platforms.</p>
---------------------------------	---

**Lessons regarding your project activities and possible implications for the coming planning cycle:** In the three countries, through this project, we stimulate the cross-scale interaction, showing to stakeholders the need to engage a joint consultation in policy development. The policy actors are slowly (but certainly) getting used to this joint-process. For instance, in Mali, the MPs explained that they will consult the district actors and the traditional chiefs to make new changes in the national resource conservation policies... It is a good start!

Submitted on 2016-03-04 at 09:26 UTC

## 7. Leverages

Leverage #1	
<b>Title:</b> Adaptation at Scale in Semi-Arid Regions (ASSAR) project	
<b>Partner name:</b> START - START - United States	
<b>Year:</b> 2015	
<b>Flagship:</b> FP4: Policies and Institutions for Climate-Resilient Food Systems	<b>Budget:</b> US \$113,300.00