Submitted on 2016-03-04 at 08:16 UTC

CCAFS CORE W1_W2 ONLY

Title: (BRIDGING- GLO- BIOVERSITY) Climate change variabilty adaptation planning tools for bananas and plantains

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2016
Management liaison	F1 - Flagship 1	**Mgmt. liaison contact**	Bonilla, Osana <o.bonilla@cgiar.org>
Lead organization	BI - Bioversity International - Italy	**Project leader**	Staver, Charles <c.staver@cgiar.org>
Project type	CCAFS CORE	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP1: Climate-smart practices	Global: Global

Bilateral project(s) contributing to this project

This project does not have Bilateral projects

Summary

An alternative to Ecocrop to address specific needs of semi-perennial crops and the effect of climate change was developed and validated, and a framework proposed to address weather variability. Final activities will be undertaken to complete and validate a set of tools to facilitate stakholder adaptation planning. They will focus on the analysis of variability based on weather records and practices used across global homologues sites to address similar weather events.

Tools will be evaluated in terms of their workability for national climate change plannning. Three regional stakeholder platforms will provide a forum to discuss the tools and propose venues for their application.

Banana stakeholders from at least 20 countries will be aware of potential data needs and tools for engaging in climate change adaptation planning.

2. Partners

Partner #1 (Leader)

Institution: BI - Bioversity International

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Staver, Charles <c.staver@cgiar.org>	Activity 2014-335 *Leader*.

Partner #2

Institution: MUSALAC - Banana Research and Development Network for Latin America and the Caribbean

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Orozco, Mario <orozco_santos@yahoo.com>	Activity 2014-335 *Partner*.

Partner #3

Institution: BARNESA - Banana Research Network for Eastern and Southern Africa

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Niyongere, Celestin <cniyongere@yahoo.fr>	Activity 2014-335 *Partner*.

Partner #4

Institution: BAPNET - Banana Asia-Pacific Network

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Chao, Chih-Ping <cpchao_tbri@yahoo.com.tw>	Activity 2014-335 *Partner*.

Partner #5

Institution: University of Western Australia

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Turner, David <david.turner@uwa.edu.au>	Activity 2014-335 *Partner*.

Partner #6

Institution: Innovative Plantain

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Adiko, Amoncho <adikoam@yahoo.com>	Activity 2014-335 *Partner*.

Partnerships overall performance over the last reporting period: National banana country representatives were highly collaborative through either the regional banana networks or in individual country activities. This included willingness to share data, conduct collaborative research activities, complete electronic surveys and organize focus groups in distince production localities. Greater difficulties resulted from the uncertainty of funds from CCAFS with cuts both at the beginning of the year and at the end of the year which affected

available staff time and operating funds to complete activities.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Additional funding will be needed to complete the full scope of tools under development and validate and adapt them to different agroclimatic and production contexts.

Submitted on 2016-03-04 at 08:16 UTC

3. Locations

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
By 2019, the global banana community employs learning tools at four levels, each with its own outcomes, to maintain and increase the resilience, production, productivity and profitability of smallholder banana production. At the level of the field, programs in support of smallholder banana production in 20 major banana producing countries deploy grower observation and decision tools for banana management in the face of climate variability drawing on an ever expanding global inventory of practices directed at specific moderate and extreme weather events. Growers actively test and adapt management practices and contribute to the global inventory. At the multi-farm scale, development organizations and community and banana organizations in 20 major banana producing countries deploy landscape and territorial and value chain strategies to maintain and strengthen the food and income potential of banana for rural communities and their urban clients building on homologue zones from agroclimate, production technology, market and policy and innovation contexts. At the national level, national banana sectors from 20 countries integrate climate change adaptation strategies for banana into their respective national climate change adaptation strategies. By 2019, regional and global banana innovation platforms reach diverse banana stakeholders in over 40 countries with climate change adaptation strategies at the field, territory and national levels.

Annual progress towards outcome (end of 2015): 8 banana zones and 2 national programs in Latin America pilot tools for characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; globally through electronic exchange on Promusa, 8 banana zones initiate characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; Latin American regional banana network reviews tools and proposes regional strategy for projects and funding to build regional adaptation capacity and identifies homologue regions in Africa and Asia and proposes a strategy to initiate collaborative exchange; Opportunities for funding at four levels in Latin America, Africa and Asia explored;

Annual progress towards project outcome in the current reporting cycle (2015): Banana growing countries convening in four regional banana networks are more aware and ready to engage in climate-change adaptation planning through testing of adaptation approaches to weather variability. This awareness resulted from presentations and discussions in six network meetings since 2011 and a summary research article available in three languages, a participatory banana mapping website with overlays of current and projected climate for 2050 and an electronic survey and focus groups on the effects of extreme weather events affecting banana.

Submitted on 2016-03-04 at 08:16 UTC

Communication and engagement activities have contributed to achieving your Project outcomes: Communication and engagement had four channels: face to face sessions during biennial banana network meetings, presentations to congresses held in conjunction with regional network meetings and other congresses in other venues, websites and a banana mapping web site with a climate change overlay, focus groups and electronic surveys and written publications including a chapter on climate change in banana. The limitations in funding precluded the proposed work bringing together the banana stakeholders and the national climate change planning process in target countries.

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): (pending funding) 5 additional banana zones and 3 national programs in Latin America and 5 zones and 2 national programs in Africa adapt tools for characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; globally through electronic exchange on Promusa, an additional 5 banana zones initiate characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; Latin American regional banana network operates electronically to expand use of tools and build exchange with Africa; Opportunities for funding at four levels in Latin America, Africa and Asia ongoing;

Annual progress towards outcome (end of 2017): (pending funding) 5 additional banana zones and 3 national programs in Latin America, 5 zones and 2 additional national programs in Africa and 4 zones and two countries in Asia adapt tools for characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; globally through electronic exchange on Promusa, an additional 10 banana zones initiate characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; Latin American and African regional banana networks operate electronically to expand use of tools and build exchange and to incorporate Asia; Opportunities for funding at four levels in Latin America, Africa and Asia ongoing;

Annual progress towards outcome (end of 2018): (pending funding) 5 zones and 2 additional national programs in Africa and 4 additional zones and two countries in Asia adapt tools for characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; globally through electronic exchange on Promusa, an additional 10 banana zones initiate characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; Latin American, African Asian regional banana networks operate electronically to expand use of tools and build exchange; Opportunities for funding at four levels in Latin America, Africa and Asia ongoing;

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: no addtional work will be undertaken through CCAFS after 2015, since this grant was only a bridge fund.

4.2 Contribution to CCAFS Outcomes

FP1 - Outcome 2019: National and subnational development initiatives and public institutions prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools.

Indicator #1: 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: <Not defined>	**Cumulative target to date:** Cannot be Calculated
Target narrative: <Not defined>	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: • 2 national programs in plan to incorporate banana climate change adaptation in national plan. • 10 countries in the Latin American regional banana network review CSA tools applied to banana and propose regional strategy in conjunction with national strategies; • 200 banana scientists and field technicians (in the field and electronically PROMUSA and regional websites) collaborate in CSA tools to match banana management practices to most common moderate and extreme weather events in key banana growing areas	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 70.0

2015
Target narrative: • 2 national programs in Latin America pilot tools for characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity; • 10 country members of Latin American regional banana network review tools and proposes regional strategy for projects and funding to build regional adaptation capacity and identifies homologue regions in Africa and Asia and proposes a strategy to initiate collaborative exchange; Opportunities for funding at four levels in Latin America, Africa and Asia explored; • Globally through electronic exchange on Promusa and regional networks in the field in 5 countries, 200 banana specialists and field technicians initiate characterization of frequency of weather variability and corresponding management practices for greater resilience and productivity
Narrative for your achieved targets, including evidence: Regional banana network Musalac reviewed climate change adaptation approach in meeting in August 2015 in Corupa Brazil with participation of 12 countries participating. Representatives agreed to undertake actions to integrate banana into national climate change planning. Of 689 banana experts globally who were invited to respond, 137 completed a survey on important weather events affecting bananan production. A chapter on the global impact of climate change on banana published through FAO was made available in three languages and was the subject of Bioversity webpage news with 863 views. A climate overlay on the electronic banana mapper received 337 visits.
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: participation in regional network meetings and global surveys were reported with data disaggregated by sex. Focus groups conducted in to capture perspectives from technicians and leading banana growers were held in Colombia, Brazil and Dominican Republic.

2016	
Target value: <Not defined>	**Cumulative target to date:** Cannot be Calculated
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
Activity 2014-335: none anticipated

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Banana experts access tools which project global climate-change effects and help manage local weather variability
Outcome statement: Banana growing countries convening in four regional banana networks are more aware and ready to engage in climate-change adaptation planning through testing of adaptation approaches to weather variability. This awareness resulted from presentations and discussions in six network meetings since 2011 and a summary research article available in three languages, a participatory banana mapping website with overlays of current and projected climate for 2050 and an electronic survey and focus groups on the effects of extreme weather events affecting banana
Research Outputs: - Chapter in FAO book: available in English (http://www.fao.org/3/a-i4332e/i4332e09.pdf), translated into Spanish (http://banana-networks.org/musalac/files/2016/03/FAO-Cap%C3%ADtulo-9_SPA_final.docx.pdf) and French (http://banana-networks.org/innovate-plantain/files/2016/03/FAO_Report_Chapitre-9_FRE_final.pdf) - Study of Ecuador banana sector: Spanish (http://www.fao.org/3/a-i5116s.pdf) - Global Survey: Importance and management of moderate and extreme weather events for banana (annex) - Local focus groups to identify current status and knowledge gaps for practices to avoid, buffer and recover from extreme weather events (annex) - Tools to quantify frequency and intensity of extreme and moderate weather events of significance for banana, from weather station records and in real time (pending) - Role of weather events in global banana export markets (annex) - Banana mapper with overlays of current climate and projected climate for 2050 (http://www.crop-mapper.org/banana/) - Poster in CSA 2015, Montpellier (https://ccafs.cgiar.org/publications/building-global-framework-banana-resilience-and-adaptation-under-increased-weather#.Vq_oC7IrLIU) Research products incomplete at the end of 2015 due to budget cut of 33%. Resulted in reduced time for scientist by five months
Research Partners: Country representatives from national research institutes in 40 banana countries in four regional banana networks who participated in survey on the effects of moderate and extreme weather events on banana (www.banana-networks.org); Lists of banana experts identified by country representatives who participated in surveys on extreme and moderate weather events; Banana scientists in INIAP Ecuador, IDIAF Dominican Republic, CENIBANANO Colombia who validated focus group method and co-facilitated focus groups in key banana localities; CIRAD FruiTrop – fruit market observatory – provided access to weekly and monthly reports on markets and weather events as well as orientation on data interpretation and advice on methodology

Activities that contributed to the outcome: - Climate change discussion with banana country representatives in Musalac in August 2015, June 2013 and June 2011, in Barnesa in October 2013, in Innovate Plantain in November 2013 and in BAPNET November 2012.
- Key note addresses on climate change impacts on banana in banana symposium in Taiwan with 400 participants in November 2012 (http://banana-networks.org/bapnet/files/2013/02/Calberto1.pdf), in Armenia, Colombia in June 2013 (http://bit.ly/1TP4iXi), in Guayaquil, Ecuador in January 2014 (http://bit.ly/1QOGa7X) and in Piura, Peru in June 2011 (http://banana-networks.org/musalac/files/2015/09/12-C-Staver-Bananeros-Cambio-Climatico.pdf) and in poster at III Latin American Congress on Banana and Plantain Corupa, Brazil 2015 (http://bit.ly/1WNCgup)
- Bioversity web news on FAO banana climate change chapter (web link see below)
- FAO news release on climate change book (http://www.fao.org/news/story/en/item/293954/icode/)
- Interviews on local university news channel Cali, Colombia
https://www.youtube.com/watch?v=PBCrN614G0E&feature=youtu.be
https://www.youtube.com/watch?v=uBqiYqto278&feature=youtu.be
- Preparation of country by country reports on status of banana mapping, climate change projects and variability (pending)

Non-research Partners: Nine focus groups involving leading banana growers, field technicians and banana specialists in Ecuador (Agroban, Fenaprope, Asprobanec, Asoguabo, Machala), Colombia (Cenibanao, Ministerio de Agricultura), in Dominican Republic (Coopasvega) and one subtropical zone in Brazil (Asbanco), who identified seasonal weather variability and fluctuation in banana yield, identified the characteristics of good and bad years in terms of weather events and discussed causes and possible management strategies to avoid, buffer and recover from extreme events.. (see annex)

Output Users: Scientists representing national research institutes in banana countries in four regional banana networks
687 banana experts on country lists compiled by banana country representatives
National climate change adaptation planning offices in banana producing countries contacted by banana country representatives to explore insertion of banana into national climate change adaptation plans

How the output was used: Primarily at awareness stage with follow up needed to identify mechanisms for banana tools to be used in national and local climate change adaptation planning

Evidence of the outcome: The process is ongoing:
750 views from 95 countries to Bioversity web news in English (http://www.bioversityinternational.org/news/detail/bananas-and-climate-change-what-is-going-to-happen-to-one-of-the-worlds-favourite-fruits/);
113 views from 22 countries to Bioversity web news in Spanish (http://www.bioversityinternational.org/news/detail/bananos-y-cambio-climatico-que-va-a-pasar-con-una-de-las-frutas-preferidas-en-el-mundo/);
337 visits from 63 countries to banana mapper in 2015:
downloads of FAO book chapter on climate change in banana

References: 2015. Calberto, G.A., Siles, P., Arguello, J., Staver, C., Sotomayor I., Bustamante, A. Capítulo 4: Evaluación del impacto del cambio climático en la producción y aptitud del banano en el Ecuador. En: Cambio Climático y sostenibilidad del banano en el Ecuador: Evaluación de impacto y directrices de política. Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO), Roma, Italia. (http://www.fao.org/3/a-i5116s.pdf)

2015. Calberto, G. A., Staver, C., Siles, P. Chapter 9: An assessment of global banana production and suitability under climate change scenarios. En: Climate change and food systems: global assessments and implications for food security and trade. Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO), Roma, Italia. http://www.fao.org/3/a-i4332e/i4332e09.pdf

2015. Calberto, G.A., Staver, C., Siles, P., Building a global framework for banana resilience and adaptation under increased weather variability and uncertainty. Climate-Smart Agriculture Conference. Montpellier, Francia. (https://ccafs.cgiar.org/publications/building-global-framework-banana-resilience-and-adaptation-under-increased-weather#.Vq_oC7IrLIU).

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

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

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

FP2 Indicator: Increase in research-informed demand-driven investments in climate services for agriculture and food security decision-making (millions)

FP3 Indicator: # millions of hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation

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

Year: 2015

Annexes uploaded: annex stakeholder tools banana CC adaptation.zip

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
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 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014

Submitted on 2016-03-04 at 08:16 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 # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

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

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

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

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

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

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

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

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

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

Submitted on 2016-03-04 at 08:16 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 # 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:
electronic survey of extreme weather events and management practices to avoid, buffer and recover from their effects links to the banana mapper with an overlay of climatic zones and climate proyection for 2050. this platform is designed to increase the range of options and provide a laboratory for CC adaptation

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 later phases of the work with other funding, management practices can be classified for their applicability for different household types, but this is still preliminary and at proof of concept.

Submitted on 2016-03-04 at 08:16 UTC

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 survey was sent to 689 experts with responses from 137 in different climates in Latin America, Africa, Asia. Banana mapper covers all banana growing countries. Innovative methods were also piloted to analyze weather event frequency from weather records. All are key elements in a global co-learning platform

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:
Focus groups were conducted to complement the global electronic survey bringing together banana growers and local banana experts to analyze the current response to weather variability, the possibility of analogue zones and the role of management changes to address most requent weather events. Local partners convened men and women.

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

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

Brief summary of your actual 2015 contribution towards the selected MOG:
global survey of management practices used to avoid, buffer and recover banana production for specific weather events builds on both technical and local knowledge. the identification of frequency of events in different banana zones facilitates a broader technical base for CSA

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:
although the potential exists to identify practices with gender specificity, we have not yet reached that point in the work.

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:
the framework based on ecological systems from plant to plant population to field, farm, multi-farm and regional ecosystem along with the climate and weather changes structured by increases in average temperature and changes in amount and distribution of rainfall provides a location specific approach to design improved banana management routines.

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:
an additional filter for household typologies, community vulnerability and gender could also be added, but will require addiitonal resources, time and human resources

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 defined>

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

FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

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

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

Submitted on 2016-03-04 at 08:16 UTC

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
<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: potential remains to advance much more with this platform including gender and social inclusion dimensions, but this will need to be the subject of RTB and bilateral funding

5.2 Deliverables

Deliverable #1

Main Information	
Title: Tools and learning platforms for managing smallholder banana under weather variability and climate change	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Reference material
Year of expected completion: 2015	
Status: Extended	**Justification for cancelling the deliverable:** initial budget of 200k was reduced by 35% both in the beginning of the year and at the end of the year, resulting in a reduction of scientist time, travel and field activities. Some additional work will be done writing up results, but there will only be made available through the banana network websites, unless some means are available to upload to CCAFS

Next-user
banana scientists and national climate change planners
Knowledge, attitude, skills and practice changes expected in next-user: knowledge: weather variablity as a factor in banana management and possible approaches attitude:adaptation to weather variability contributes to climate change adaptation skills and practices: how to analyze weather variabilty, to identify homologue and analogue zones,
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: documentation of experiences in different focal groups, experiences across continents to demonstrate relevance, workshops and meeting among scientists, cross site comparison

Partners contributing to this deliverable
Partner #1 (Responsible): Staver, Charles <c.staver@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	5

Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	4

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

Deliverable Metadata
Description: background studies, student reports, poster and other related studies which provided input into material used for outcome
Creator / Authors: <Not defined>
Author Identifier: <Not defined>
Publication / Creation date: <Not defined>
Language: <Not defined>
Coverage: <Not defined>

Deliverable Data sharing
stakeholder tools banana CC adaptation.zip

Deliverable #2

Main Information	
Title: case study of national climate change adaption planning with alternative procedures for including banana	
MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study
Year of expected completion: 2015	

Status: Cancelled	**Justification for cancelling the deliverable:** cancellation resulted from the budget cuts both at the beginning and end of the year resulting in a total reduction of 35%.

Next-user
banana scientists, climate change planners
Knowledge, attitude, skills and practice changes expected in next-user: knowledge: addressing the appropriate actions by the level in the socio-ecological regime atitudes: the importance of understanding and meeting the needs of planners skills and practices: use of agroclimatic zones, annual calendar of activiites and implications by socio-ecological level, link to stakeholders of different types
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: use of case study, workshop to discuss results, application of results to own situation, documentation on web site, monitoring of changes based on initial exposure

Partners contributing to this deliverable
Partner #1 (Responsible): Staver, Charles <c.staver@cgiar.org>, BI - Bioversity International

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

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

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

Submitted on 2016-03-04 at 08:16 UTC

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: public sector banana program leaders who serve as representatives of their banana producing country in 4 regional banana networks were not only co- researchers, but also next users. This is a research in development approach rather than a linear impact pathway delivery of global public goods from one actor to the next. All banana country members of the regional networks have signed international treaties on climate change and therefore have understaken a national climate change planning process. Banana program leaders have the opportunity to strategize the integration of banana into the process at the national level and also in important banana growing areas within the country. Our research products have aimed to increase knowledge about the effects of increase in temperature on banana, the projections for changes in temperature and rainfall amount and distribution and the dimensions of weather variability which is missing from climate change projections. in 2015 through an expert survey we began to build local knowledge into a global platform on the management of bananas to avoid, buffer and recover from specific weather events. this is considered a short term measure to strengthen capacity for climate change adaptation.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Banana country representatives were encouraged to identify potential entry points into the national climate change adaptation and mitigation planning process. The tools such as Banana Mapper with climate change overlay, the chapter on the global effects of climate change on bananas in three languages (available through the regional banana network websites) and country reports still in preparation with all available graphs and documents on climate change generated with CCAFS funding equip key next users to provide banana specific content form climate change adaptation planning. The expert survey also raised awareness about the variability dimension and initiated additional platform building.
Reported deliverables serve as evidence towards this achieved change: FAO book chapter on Bioversity, FAO and regional banana network web sites, with news blog; Banana Mapper with climate overlay available on line and documented through country reports in preparation; results of expert survey on weather events and management options available through regional banana web sites;
Lessons and implications for the next planning cycle: New sources of funding will be needed to expand the platform on weather events and management options, to complete preparation of scentific articles and to explore further the use of weather data bases to quantify weather events and their frequency. Collaboration with specific national initiatives on the incorporation of banana into national climate change planning will need to be undertaken as part of the CGIAR site integration efforts in key countries like Ghana, Nicaragua, Uganda, Peru.

5.4 Project highlights

Project highlight Information #1	
Title: Current and Future Banana Agroclimatic Zones Available through Web Mapping System	
Author: David Brown in collaboration with German Calberto	**Subject:** climate change effects on banana production suitability
Publisher: <Not defined>	**Year:** 2015
Project highlights types Participatory action research	
Start date: 2015-01-15	**End date:** 2015-12-15
Is global: Yes	
Country:	**Keywords:** Climate change, Banana, Plantain, Production System, GIS

Highlight description: Banana Agroclimatic Zones, as defined by Calberto, Staver and Siles (2015), were made available online using the Web Mapping System Crop-Mapper.org (http://www.crop-mapper.org). This new banana mapper overlays climatic zones onto the map of major production areas of bananas and plantains. The zones are defined based on significant banana response criteria for annual average temperature, the difference in winter and summer temperature, total annual rainfall and the length of the dry season. The Agroclimatic Zones were also mapped using projected climate data for 2050, allowing the comparison between the current production areas and agroclimatic zones against those projected for 2050. The base map is generated by data corresponding to a characterization of the production system contained in a database, adding the possibility to evaluate each production system in terms of the current climate vs the projected climate for 2050. A visual comparison to identify homologue and analogue sites is also possible.
The site offers two features for user interaction. The banana production zones are built on data from official sources where available and the knowledge of local banana experts. These data can be updated on a regular basis. The national banana sector in a country can also call for inputs from field experts in less well documented production areas to improve the quality of the map.
The category limits for the Agroclimatic Zones can also be modified in the system upon request by users based on other climate criteria. This is not a public feature, but allows the generation of maps and comparisons for targeted uses. This can be done by creating an offline version of the mapper accessible to experts requesting modified zones. The projections for climate scenarios for other time horizons are also possible, based on the same approach.

Introduction / Objectives: BananaMapper originated to provide information to quantify the effects of climate change on banana suitability. Banana maps generated using algorithms for short cycle crops do not approximate banana distribution and do not take into account the wide diversity of banana germplasm and the range of technologies used for banana production. The participatory mapping approach developed with CCAFS provided an alternative which harnesses local knowledge in conjunction with official statistics. As part of financing to provide banana stakeholders with tools for climate change adaptation, BananaMapper provides a useful platform to make available maps of current and projected future climates.

Submitted on 2016-03-04 at 08:16 UTC

Results: The development of the Agroclimatic Zones which reflect significant banana production parameters, was proposed to provide a useful approach to quantify the effects of climate change on the suitability of growing conditions across the globe. These results were written up in a chapter for an FAO-published book on climate change and global commerce. To make these results available to a wider audience, the overlay of current and projected future climate change onto BananaMapper was proposed. This feature was designed to allow banana specialists collaborating in national climate change adaptation planning to provide specific input on banana to national and sub-national commissions. The use of the electronic banana mapper as a platform offered the opportunity to banana program leaders to use both official statistics on crop production and the site-specific knowledge of banana specialists to develop more accurate maps of banana production and the relevant production and phytosanitary characteristics. The contrast of current and projected climate for 2050 as two overlays, links specific production areas to the effects of climate change. These two layers can also be used to identify homologue and analogue sites for any banana growing region in the world. While the proposed parameters for the Agroclimatic Zones are based on banana relevant features, the parameters of the overlays can also be modified based on specific requests from users of the mapper. Individual country reports are being prepared to guide national banana leaders in the advanced use of the overlays and in the upgrading of their banana production zones. The climate change overlays are also being further validated using a leaf emission index which will be compared to banana field trials in sites across the globe. Many of these data bases are available in AgTrials.

Partners: All banana producing countries globally form part of the mapping effort, but outreach to complete the banana production data was done through the regional banana networks (www.banana-networks.org). Over 40 countries are joined in these networks. Country representatives are usually from the national research institutes. Each country representative has an initial list of banana experts who also provide information to improve the mapper. These experts have included university experts, such as Universidad de Nicaragua León and Universidad Autonoma del Occidente en Colombia. The mapping process provides a training opportunity in mapping and also expands the audience of the agroclimate and climate change overlaps. Each country is being provided with a report summarizing available information and the opportunities to improve the quality of their information.

Links / Sources for further information: http://www.crop-mapper.org
http://www.banana-networks.org

6. Activities

Activity #1	
Title: Tools, procedures and learning platforms for national banana sector climate change adaptation planning	
Description: The proposed activity includes two groups of actionsl. I. The learning platform of strategies, tactics and practices for managing smallholder banana under weather variability and climate change, including: a) tools to identify homologue/analogue zones with banana specificity, b) tools for profiling type and frequency of moderate/extreme weather events, c) inventory of banana management practices (field, farm, community) in response to 20 moderate and extreme weather events based on proposed practices by grower focal groups in 5 countries and on an electronic consultation in LAM, Africa and Asia. II. Activities focused on model procedures for national sector climate change adaptation planning, consisting of: a) identification of data and other input needed by national climate change adaptation initiatives to incorporate banana into their studies (most likely Colombia, but also possibly Dominican Republic) and b) review of proposed procedures with banana country representatives from over 10 countries in LAM regional banana network.	
Start date (dd-MM-yyyy): 05-01-2015	**End date (dd-MM-yyyy):** 15-12-2015
Leader: Staver, Charles <c.staver@cgiar.org>, BI - Bioversity International	
Status: Extended	**Justification:** of the three activities mentioned, the first two have been completed, although other options will continue to be explored through RTB. the third activity still has pending additional focus groups in other climatic zones, more extensive on line surveys and the completion of an electronic platform laying out the approach to match management practices to weather events with different characteristics. Funding for this bridge grant was cut by 35% which of course affects the possiblity of delivery of proposed activities.

Activity #2
Title: Role of weather events and other factors in volumes exported and reference price for bananas
Description: an earlier rapid review of the link between banana exports and extreme weather events was followed up by a more detailed study which traced events in weekly and monthly trade bulletins. The news of events was linked to the reference price of bananas in France and in the USA. The international banana market, perhaps unlike national banana markets, has a great deal of adaptability in volume, price and quality. Many other factors also intervene in the price of banana, suggesting that the market has some resilience to deal with increasing frequency of weather events. Individual countries will suffer shocks due to these events, although consumer prices may not be so volatile.

Submitted on 2016-03-04 at 08:16 UTC

Start date (dd-MM-yyyy): 01-02-2015	**End date (dd-MM-yyyy):** 15-12-2015
Leader: Staver, Charles <c.staver@cgiar.org>, BI - Bioversity International	
Status: Complete	

Lessons regarding your project activities and possible implications for the coming planning cycle: The follow up work and any additional advances on the role of abiotic stresses on banana will need to be addressed through bilateral funds linked to RTB. Due credit will be given to CCAFS which has provided a substantial basis for climate change and variability planning for bananas and other perennial commodity crops

7. Leverages

<Not defined>

Submitted on 2016-03-03 at 14:25 UTC

CCAFS COFUNDED W1_W2_W3

Title: (GLO-EA-LAM-SA BIOVERSITY) Outscaling a citizen science approach to test climate adaptation options on farms

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2018
Management liaison	F1 - Flagship 1	**Mgmt. liaison contact**	Jarvis, Andy <a.jarvis@CGIAR.ORG>
Lead organization	BI - Bioversity International - Italy	**Project leader**	van Etten, Jacob <j.vanetten@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP1: Climate-smart practices	RP EA: East Africa
	Global: Global
	RP LAM: Latin America
	RP SAs: South Asia

Bilateral project(s) contributing to this project
134 - Crowdsourcing Crop Improvement: Evidence base and outscaling model
136 - Mainstreaming agrobiodiversity conservation and utilization in agricultural sector to ensure ecosystem services and reduce vulnerability
178 - Bioversity GRDC Partnership in Vavilov-Frankel Fellowships
180 - Use and conservation of agrobiodiversity for increased agricultural sustainability, smallholder wellbeing and resilience to climate change in India
201 - Strengthening cultivar diversity in Ethiopian seed systems to manage climate related risks and foster nutrition
138 - Linking agrobiodiversity value chains, climate adaptation and nutrition: empowering the poor to manage risk
205 - Promoting opensource seedsystems for beans, forage legumes, millet & sorghum for climate change adaptation in Kenya, Tanzania and Uganda

Submitted on 2016-03-03 at 14:25 UTC

Summary
Climate adaptation in agriculture is not a one-time effort. CSA needs a quick-paced process of constant, massive discovery of locally appropriate solutions. As mobile telephone coverage expands in rural areas, simpler, more cost-efficient and information-rich ICT-based systems become possible.

This project aims to outscale a novel “farmer citizen science” approach, building on successful pilots by Bioversity and partners. In this approach, each farmer tries and ranks a small number of technologies, characterizes local conditions with cheap, reliable weather sensors, and shares information by mobile phone. The resulting information serves to create empirical, location-specific advice on climate-smart practices for farmers, helping them to constantly adapt to shifting climatic and social conditions. Activities include:

(i) training organizations in its implementation,
(ii) embedding the approach in extension services and agro-dealer networks
(iii) improving and expanding the methodology using ICT-based solutions.

2. Partners

Partner #1

Institution: CIAT - Centro Internacional de Agricultura Tropical

Contacts

Type	Contact	Responsibilities and contributions
Partner	Eitzinger, Anton <a.eitzinger@cgiar.org>	Online mapping and data visualization/analysis tools Activity 2014-57 *Leader*. Cancelled for 2016.

Partner #2 (Leader)

Institution: BI - Bioversity International

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	van Etten, Jacob <j.vanetten@cgiar.org>	Activity 2014-58 *Leader*. Activity 2014-59 *Leader*. Activity 2014-81 *Leader*.
Partner	Mathur, Prem Narain <p.mathur@cgiar.org>	Activity 2014-68 *Leader*. Activity 2014-248 *Leader*.
Partner	Fadda, Carlo <c.fadda@cgiar.org>	Activity 2014-66 *Leader*.
Partner	Padulosi, Stefano <s.padulosi@cgiar.org>	Activity 2014-360 *Leader*.

Partner #3

Institution: Pennsylvania State University

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions

Partner	Zimmerer, Karl <ksz2@psu.edu>	Activity 2014-58 *Partner*.

Partner #4

Institution: CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mercado, Leida <lmercado@catie.ac.cr>	Activity 2014-59 *Partner*. Activity 2014-81 *Partner*.

Partner #5

Institution: Escuela Agricola Panamericana Zamorano

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rosas, Juan Carlos <jcrosas@zamorano.edu>	Activity 2014-59 *Partner*. Activity 2014-81 *Partner*.

Partner #6

Institution: Mekelle University

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kassahun, Dejene <dejenekmh@gmail.com>	Activity 2014-66 *Partner*. The partner used a citizen science approach for variety released and pioneered crowdsourcing in Tigray region. They helped reaching out to other boundary partners, such as the bureau of agriculture and the Tigray Agricultural Research Institute. Additionally, they used citizen science approach in one of their own funded PhD program.

Partner #7

Institution: SARC - Sirinka Agricultural Research Centre

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kidane, Yosef <coolyosef@yahoo.com>	Activity 2014-66 *Partner*. The partner used a citizen science approach for variety released and pioneered crowdsourcing in Amhara region. They helped reaching out to other boundary partners, such as the bureau of agriculture. This partner was very active in understanding and monitoring farmers' perception of the project.

Partner #8

Institution: Scuola Superiore S. Anna

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Pe, Enrico <m.pe@sssup.it>	Activity 2014-66 *Partner*. This partner was leading the molecular part of the work and helped with field trials. It has a unique role as it provides PhD funding through the international agrobiodiversity PhD program. So far 5 PhD students have been attached to the larger seeds for needs program in Ethiopia. THey have been involved in all project activities.

Partner #9

Institution: IBC - Institute for Biodiversity Conservation

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Fantahun, Basazen <basofaddis@yahoo.com>	Activity 2014-66 *Partner*. The partner used a citizen science approach for variety released and pioneered crowdsourcing in Tigray region. They helped reaching out to other boundary partners, such as the bureau of agriculture and the Tigray Agricultural Research Institute.

Partner #10

Institution: Hivos

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Douma, Willy <wdouma@hivos.org>	Activity 2014-66 *Partner*. With a mandate on conservation and use of plant genetic resources, this partner was providing all planting material used in the project and pioneered crowdsourcing in Oromiya region. They helped reaching out to other boundary partners, such as the minister of agriculture and they included the seeds for needs approach in the newly released national biodiversity strategy and actin plan.

Partner #11

Institution: ERMCSD - Environmental Resource Management Center for sustainable development

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mmboyi, Felix <director@cerdsconsult.com>	Activity 2014-66 *Partner*. The partner will be involved in the project as of 2016 due to late beginning of a bilateral benefit sharing grant

Partner #12

Institution: ICAR - Indian Council of Agricultural Research

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Gogoi, A.K <icarzcu3@gmail.com>	Activity 2014-68 *Partner*.
Partner	Ayyappan, S. <dg.icar@nic.in>	Activity 2014-248 *Partner*.

Partner #13

Institution: PPV&FRA - Protection of Plant Varieties and Farmers' Rights Authority

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Hanchinal, R.R <chairperson-ppvfra@nic.in>	Activity 2014-68 *Partner*. Activity 2014-248 *Partner*.

Partner #14

Institution: Gene Campaign

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mathur, Prem Narain <p.mathur@cgiar.org>	Implementing the approach in the field

Partner #15

Institution: Humana People to People India

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Moeller, Anne Marie <annemariemoeller@gmail.com>	Implementing the approach in the field.

Partner #16

Institution: NBPGR - National Bureau of Plant Genetic Resources

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Bansal, K.C. <director@nbpgr.ernet.in>	Activity 2014-68 *Partner*. Activity 2014-248 *Partner*.

Partner #17

Institution: IARI - Indian Agricultural Research Institute

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Prabhu, K.V. <jd_research@iari.res.in>	Activity 2014-68 *Partner*. Activity 2014-248 *Partner*.

Partner #18

Institution: CAZRI - Central Arid Zone Research Insitute

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Roy, M.M <director@cazri.res.in>	Activity 2014-68 *Partner*.

Partner #19

Institution: VPKAS - Vivekananda parvatiya krishi anusandhan sansthan

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Bhatt, J.C <vpkas@nic.in>	Activity 2014-68 *Partner*.

Partner #20

Institution: CRIDA - Central Research Institute for Dryland Agriculture

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rao, Srinivasa <director@crida.in>	Activity 2014-68 *Partner*.

Partner #21

Institution: RVSKVV - Rajmata Vijayaraje Scindia Krishi Vishwavidyalaya

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Singh, A.K <vcrvskvvgwl@gmail.com>	Activity 2014-68 *Partner*.

Partner #22

Institution: IGKVV - Indira Gandhi Krishi Vishwavidyalaya

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Patil, S.K <vcigkv@gmail.com>	Activity 2014-68 *Partner*.

Partner #23

Institution: ASA - Action for Social Advancement

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mondal, Ashish <ashis@asabhopal.org>	Activity 2014-68 *Partner*. Activity 2014-248 *Partner*. Activity 2014-360 *Partner*.

Partner #24

Institution: LCM - Lok Chetna Manch

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Bisht, Jogendra <jogendrabisht@yahoo.co.in>	Activity 2014-68 *Partner*.

Partner #25

Institution: HRG - Himalayan Research Group

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions

Partner	Singh, Lal <lalhrg@gmail.com>	Activity 2014-68 *Partner*.

Partner #26

Institution: BHALEI Society - Bhartiya Health, Horticuture, Agriculture, Animal Husbandry, Literacy, Environment Incorporation

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mandla, J.C <jcmandla@gmail.com>	Activity 2014-68 *Partner*.

Partner #27

Institution: INHERE - Institute of Himalayan Environmental Research and Education

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Maheshwari, Manoj <lnhere.masi@rediffmail.com>	Activity 2014-68 *Partner*.

Partner #28

Institution: FDI - Foundation for Development Integration

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Sarma, Rajib <RAJIBSARMA.ASSAM@GMAIL.COM>	Activity 2014-68 *Partner*.

Partner #29

Institution: MVDA - Mount Valley Development Association

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Singh Negi, Avtar <mvda_tehri@yahoo.co.in>	Activity 2014-68 *Partner*.

Partner #30

Institution: GRAVIS - Gramin Vikas Vigyan Samiti

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Tyagi, Dr. Prakash <prakash@gravis.org.in>	Activity 2014-68 *Partner*. Activity 2014-248 *Partner*.

Partnerships overall performance over the last reporting period: GLOBAL: Partnership with Penn State has delivered good results on visualization options. Recruitment of PhD students has been slow and is called into question by CCAFS budget for 2017. We will reassess this situation.
EAST AFRICA: All partners have performed as expected.
CENTRAL AMERICA: Partnerships with CATIE and Zamorano have been excellent, involving

very complex logistics to get seeds for 2000 households to 4 countries.
INDIA: Partnership with ICAR has led to fast geographic expansion of the project. In the 2016 meeting, ICAR has indicated that the approach is a "good idea" but that more policy evidence is needed.
https://library.cgiar.org/bitstream/handle/10947/4189/Minutes%20of%20the%20meeting%20CGIAR%20centres%20(19th%20Jan'16).pdf?sequence=1

Lessons regarding your partnerships and possible implications for the coming reporting cycle: An important lesson is to take a prudent approach to using W1W2 funds for partnerships.

3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Ethiopia
Country	Not applicable	Not applicable	India
Country	Not applicable	Not applicable	Kenya
Province	14.4526	14.4526	Trifinio
Province	13.2793	13.2793	NicaCentral
Province	14.4738	14.4738	Trifinio
Province	13.4717	13.4717	NicaCentral

4. Outcomes

4.1 Project outcome narrative

Project outcome statement

In 2019, 11 initiatives will be using the CSA citizen science platform ClimMob, delivering information resulting from CSA citizen science experiments to at least 500,000 households annually. 9 of these initiatives/organizations have been identified in 2014. Two additional organizations/initiatives will be identified in 2016 and will be using the approach in 2018.
- In India, ICAR will be adopting the approach to promote crop and varietal diversity as part of a wider policy effort to use diversity to increase resilience of smallholder agriculture, collaborating with other organizations in 5 state-level initiatives (of Rajasthan, Uttrakhand, Madhya Pradesh, Bihar, and Assam) will be mainstreaming the CSA citizen science approach across four agroclimatic zones.
- In Central America, the government of Guatemala (MAGA/ICTA) will be using the approach, e.g. 1 major initiative.
- In Ethiopia, 3 major initiatives in Amhara, Oromiya and Tigray will promote, test and disseminate CSA practices.

Annual progress towards outcome (end of 2015): - In India: we will engage with state government of Bihar to mainstream the CSA citizen science approach in its agricultural support programme. We will involve 15,000 households directly in the CSA citizen science experiments.
- In Central America: we will engage with MAGA/ICTA to mainstream the CSA citizen science approach in the extension programme. We will train CATIE and partners in Guatemala and Nicaragua and involve 2,000 households in CSA citizen science experiments.
- In Ethiopia, we will involve and train 3 bureaus of agriculture in Amhara, Tigray, and Oromiya in using the CSA citizen science approach.

Annual progress towards project outcome in the current reporting cycle (2015): CENTRAL AMERICA: Training of CATIE staff and 21 community organizations in CCAFS key areas. Agree with CIMMYT, ICTA, ASOCUCH to on citizen science methodology course in 2016. Agree with INTA in Costa Rica to organize a citizen science methodology course in PCCMCA 2016.
INDIA: In India, we have engaged more broadly with KVKs in several states, following request and support from ICAR. This has made the approach less specifically focused on Bihar.
EAST AFRICA: Training of citizen science methodology of 3 additional organizations (McKnight grantees). In Ethiopia 3 bureaus of agriculture for Amhara, Oromiya and Tigray region were exposed through field visits to crowdsourcing approach.

Communication and engagement activities have contributed to achieving your Project outcomes: Much of our activities concentrated on bilateral engagement activities.
- Conversations with McKnight Foundation science advisors and program managers, presentation in community of practice have led to adoption by 3 research organizations and interest from several other organizations.
- A high level field visit in Amhara with participation of IFAD, EU, GIZ and Norway delegations.
- Conversations with minister of agriculture in Costa Rica has led to agreement on PCCMCA course (and has opened a number of other doors).
- High-level conversations with ICAR, Ministry of Agriculture, minister of Environment, Forest and Climate
Change (including field visit).

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): - In India: engagement with government of Bihar to mainstream the CSA citizen science approach in its agricultural support programme.
- In Central America: strategy to mainstream the CSA citizen science approach in Guatemala; started the conversation with MAGFOR/INTA in Nicaragua.
- In Ethiopia, 3 institutions will use citizen science approach in their research outreach strategy.
- Positive user feedback on the ICT products/course materials developed in 2015.
- At least 2 additional high-potential users of the CSA citizen science approach identified.

Annual progress towards outcome (end of 2017): - At least 2 additional high-potential users of the CSA citizen science approach fully engaged and trained to use the approach.

Annual progress towards outcome (end of 2018): - At least 2 additional high-potential users have implemented the CSA citizen science approach successfully.

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: From new and potential users we have received feedback about our platform as well as indications that we could approach more commercial users, but only if we make it less labour-intensive by adding Interactive Voice Response technology to the platform. We are now doing this and preparing for more research on willingness-to-pay from commercial users.

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.

Submitted on 2016-03-03 at 14:25 UTC

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 initiatives	**Cumulative target to date:** Cannot be Calculated
Target narrative: In Ethiopia, at least 3 initiatives use a CSA citizen science approach in Amhara, Oromiya and Tigray to promote, test and disseminate CSA practices. About 150,000 households will benefit from participating in the CSA experiments or receiving information resulting from these experiments. In Amhara: collaboration between ARARI, Amhara Bureau of Agriculture, and farmers' cooperatives. In Tigray: TARI, Tigray Bureau of Agriculture, Mekelle University and farmers' cooperatives. In Oromiya, ORARI, Oromiya Bureau of Agriculture, farmers cooperatives. At the federal level in Ethiopia: federal EBI, EIAR, Ethiopian seed enterprises, ATA.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.	

2015		
Target value: 0	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 3.0
Target narrative: In Ethiopia, we will involve and train 3 bureaus of agriculture in Amhara, Tigray, and Oromiya in using the CSA citizen science approach.		
Narrative for your achieved targets, including evidence: In Ethiopia Minister of Agriculture started developing a CSA manual with a chapter on diversity based solutions largely building on the Seeds for Needs citizen science experience. The approach was also internalised by EBI who included it into the national biodiversity strategy and action plan, Mekelle University which is using on their own programs, and ARARI which is planning to use it as a standard. In the other countries, due to a delayed start of a new bilateral from FAO, no progress is to be reported.		
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: Data are all gender-disaggregated and varieties included in the released panel are balance between female and male preferences when differences exist. Teams in charge of site management are encouraged to have gender balance in their composition.		

2016	
Target value: 3	**Cumulative target to date:** Cannot be Calculated
Target narrative: In Ethiopia, Mekelle University, Ethiopian Institute of Biodiversity and Sirinka Agricultural Research Centre will use citizen science approach in their research outreach strategy.	

2016
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.

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

RP LAM - Outcome 2019: LAM's producers associations are choosing and promoting CSA context-specific practices through strengthened extension services rescuing ancient and traditional knowledge. Local governments develop equitable local agricultural development plans using CSA context-specific portfolios assessed economically to plan and prioritize their investments focusing on climate variability challenges. NARS develop demand-driven outputs with sufficient technological capacity to address agricultural sector needs to face climate challenges. Private sector works with producer's associations, local and national governments to implement and scale out CSA involving agricultural market agents through innovative approaches (incentives along value chain to access to certification schemes). National governments scale up CSA approach based on successful experiences developed at local level.

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

2019	
Target value: 1	**Cumulative target to date:** Cannot be Calculated
Target narrative: The CSA Citizen Science approach will be used by the extension service of Guatemala. About 50,000 households will benefit from participating in the CSA experiments or receiving information resulting from these experiments.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.	

2015		
Target value: 2 sub-national initiative	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 2.0
Target narrative: The CSA citizen science approach will be used by the CATIE MAP project (CATIE and subnational partners) in Guatemala and Nicaragua.		
Narrative for your achieved targets, including evidence: Two CATIE offices and their respective partners, working in the CCAFS areas of Trifinio and Nicaragua use crowdsourcing methodologies to reach approx. 2000 farmers directly and 50,000 beneficiaries indirectly. Evidence: project reports of USAID-DIV / CCAFS co-funded project "Crowdsourcing crop improvement".		
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: Data are gender-disaggregated; women participation is encouraged/ensured; specific studies on women's access to mobile phone and motivation to participate have been conducted, gender income control indicators have been included in the baseline.		

2016	
Target value: 2	**Cumulative target to date:** Cannot be Calculated
Target narrative: 2 initiatives use the citizen science approach: the CIMMYT Buena Milpa project in Guatemala and the regional Collaborative Participatory Plant Breeding Programme (led by Asocuch Guatemala with participation from across Central America).	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.	

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

RP SAs - Outcome 2019: Governments, private sector and farmer organizations increase their investments and develop incentive mechanisms to promote wide scale adoption of

improved climate-smart practices and technologies

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

2019	
Target value: 5 initiatives	**Cumulative target to date:** Cannot be Calculated
Target narrative: In India, we aim for ICAR adopting a citizen science approach to promote crop and varietal diversity as part of a wider policy effort to use diversity to increase resilience of smallholder agriculture and will engage with 5 state-level initiatives of Rajasthan, Uttrakhand, Madhya Pradesh, Bihar, and Assam to mainstream the CSA citizen science approach across four agroclimatic zones. About 250,000 households will benefit from participating in the CSA experiments or receiving information resulting from these experiments.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.	

2015		
Target value: 12	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 12.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: 32 KVKs, state universities and NGOs are using the CSA citizen science approach to test technological options locally.		
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: Gender inclusion is promoted through the active involvement of women self-help groups. We aim to do an analysis of women involvement as part of a seed diffusion survey in 2016.		

2016	
Target value: 25	**Cumulative target to date:** Cannot be Calculated
Target narrative: KVKs in India will be using the CSA citizen science approach.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The citizen science platform will deliver gender-disaggregated information for decision-making.	

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

-

Collaborating with other CRPs

Roots, Tubers and Bananas
Description of collaboration: Crowdsourcing will be used for banana variety evaluation.
The achieved outcome contributions: <Not defined>

Water, Land and Ecosystems
Description of collaboration: A watershed level project funded by WLE is using results and from this project to inform the productivity component of the project
The achieved outcome contributions: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Creating Geographical Software and Building Capacity for its Use Strengthens Climate Change Analysis in Agriculture
Outcome statement: To adapt agriculture to future climates, the ability to identify different options through geographic analysis is crucial. We have strengthened this ability by creating open-source software and documentation and by training many professionals in 21 countries in using these tools. Our products have been used in >8,500 scientific publications. Our tools have been downloaded >350,000 times. The use of these tools and datasets informs decisions around climate change adaptation.
Research Outputs: Van Etten, J. (2012). gdistance: distances and routes on geographical grids. (http://CRAN.R-project.org/package=gdistance) Open-source software. Citations: 57 R-SIG-Geo messages: 123 Used by other R packages (plug-ins): 5 Downloads: 25,400 Hijmans, R. J., & Van Etten, J. (2013). raster: geographic data analysis and modeling. (http://CRAN.R-project.org/package=raster) Open-source software. Citations: 511. R-SIG-Geo messages: 6201 Used by other R packages (plug-ins): 127 Downloads: >326,000 Hijmans, R. J., Guarino, L., Mathur, P. (2012). DIVA-GIS: A geographic information system for the analysis of species distribution data. Version 7.5. http://www.diva-gis.org/ Citations: 375. Hijmans, R. J., Cameron, S. E., Parra, J. L., Jones, P. G., & Jarvis, A. (2005). Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology, 25(15), 1965-1978. (http://www.worldclim.org/) Citations: 7554. Evert Thomas et al. 2016. Itzamna: Herramienta para Mejorar la Conservación y Uso de los Recursos Fitogenéticos Mesoamericanos y Adaptar la Agricultura al Cambio Climático. http://itzamna-mesoamerica.org/
Research Partners: University of California, Davis Centro Internacional de Agricultura Tropical, Cali, Colombia
Activities that contributed to the outcome: In 16 different courses, we have trained 256 professionals (34% women) from Bhutan, India, Nepal, Cambodia, Laos, Colombia, Guatemala, Argentina, Bolivia, Rwanda, Uganda, Kenya, Tanzania, Uganda, Ethiopia, Burkina Faso, Benin, Cote d'Ivoire, Madagascar, Zambia and Zimbabwe in the use of these tools in the period 2011-2015. We have supervised thesis students on work using these tools from universities in Germany, Sweden, Costa Rica, Colombia, Kenya. We have provided technical advice on request and actively contributed to user forums. We have created web resources that advice on software choice and relevance (http://www.seedsresourcebox.org).
Non-research Partners: A large number of NARS, Ministries of Agriculture, and regional organizations have supported capacity building activities in 21 countries.

Output Users: - Scientists
- Product developers, especially plant breeders

How the output was used: Around 90% of the published analyses done with these tools focus on climate, 70% focus on agriculture and 8% on food security applications. Our tools and data have also been used to create other tools and datasets, such as CCAFS Data Portal (ccafs-climate.org), India PGR Climate portal (http://www.nbpgr.ernet.in:8080/climate/).

Evidence of the outcome: Evidence of use presented above (citations, downloads, questions in user forums, use by other software) is based on information generated with free, online data sources (Google Scholar, R-Studio logs, CRAN). Data on trainings was extracted from Bioversity's training database and CCAFS reports. For the India example, see this report:
http://www.nbpgr.ernet.in:8080/climate/images/NBPGR_CCAFS_report.pdf

References: Vernooy R, Otieno G, Bessette G et al. 2015. A novel strategy to discover and use climate-adapted germplasm. Bioversity International, Rome, Italy.

Russell, J., van Zonneveld, M., Dawson, I. K., Booth, A., Waugh, R., & Steffenson, B. (2014). Genetic diversity and ecological niche modelling of wild barley: refugia, large-scale post-LGM range expansion and limited mid-future climate threats? PloS ONE, 9(2), e86021.

Van Etten, J. (accepted). R package gdistance: distances and routes on geographical grids. Journal of Statistical Software.

Bellon, M. R., & van Etten, J. (2014). Climate change and on-farm conservation of crop landraces in centres of diversity. Plant Genetic Resources and Climate Change, 137-150.

Leibing C, Signer J, van Zonneveld M, Jarvis A, Dvorak W (2013) Selection of provenances to adapt tropical pine forestry to climate change on the basis of climate analogs. Forests 4: 155-178.

The primary 2019 outcome indicator that this case study is contributing to:
FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools

Explanation of the link between your outcome story and the CCAFS indicators: This is an upstream outcome of research, providing the capacity at national level to prioritize and inform CSA strategy. It is not possible to trace for all uses given to our tools and datasets how they have precisely informed decision-making, but our own work with partners gives many examples.

Year: 2015

Annexes uploaded: <Not defined>

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** In 2019, ClimMob will function as an important knowledge management platform that enhances 2-way sharing of CSA information and testing CSA options. **Brief plan of the gender and social inclusion dimension of the expected annual output** Data collection is gender-disaggregated by default. New features and support materials are tested for gender and social inclusion.
FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** In 2019, ClimMob will contain information about a large number of CSA options, empirically tested on farms. Also for a number of areas, we will have quantification of the contribution of these options to the goals of this MOG. **Brief plan of the gender and social inclusion dimension of the expected annual output** Gender and social inclusion will be assessed usingsimple indicators for gender control, asset ownership and decision-making, as well as poverty, using RHoMIS.
FP1 - MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** RHoMIS analyses combined with citizen science results in a number of areas. **Brief plan of the gender and social inclusion dimension of the expected annual output** Trafe-offs between gender/social inclusion and other indicators will be assessed with RHoMIS.

Major Output groups - 2014

Submitted on 2016-03-03 at 14:25 UTC

FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Submitted on 2016-03-03 at 14:25 UTC

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
In 2015, ClimMob 2.0 has been made available.

Brief summary of your actual 2015 contribution towards the selected MOG:
ClimMob 2.0, an online platform for CSA citizen science, is now available online (www.climmob.net). It will be launched for the large public in April 2016.

Brief plan of the gender and social inclusion dimension of the expected annual output
Data collection is gender-disaggregated by default.
New features and support materials are tested for gender and social inclusion. For 2016, this includes a pilot with interactive voice response as to collect data from participants in the trials.

Summary of the gender and social inclusion dimension of the 2015 outputs:
We have done data collection in a gender-disaggregated way. We have devoted much attention to write a manual in gender-inclusive language, emphasizing the importance of participation by both women and men.

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
-

Brief summary of your actual 2015 contribution towards the selected MOG:
We have started the testing of a large set of beans, including drought-tolerant, locally adapted varieties. Results will be available in 2016.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
We have done data collection in a gender-disaggregated way. A refined gender analysis will become available in 2016.

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
-

Brief summary of your actual 2015 contribution towards the selected MOG:
We have collected extensive data using the RHoMIS format, which will facilitate this analysis.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
Rural Household Multiple Indicator Survey (RHoMIS) data are collected in a gender-disaggregated way and include an indicator on gender-specific control of livelihood activities / income streams.

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
In 2016 we will launch ClimMob.net, a two-sided platform for crowdsourcing climate-smart agriculture.

Brief plan of the gender and social inclusion dimension of the expected annual output
Data collection is gender-disaggregated by default.
New features and support materials are tested for gender and social inclusion. For 2016, this includes a pilot with interactive voice response as to collect data from participants in the trials.

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
- Crop varieties and other options identified according to performance in farmers' fields and preferences of rural households
- Analysis of possibilities of ex ante assessment of technology needs and preferences of rural households

Brief plan of the gender and social inclusion dimension of the expected annual output
For both points gender is taken into account through gender-disaggregated data collection and data collection about gendered control of assets and income streams.

Submitted on 2016-03-03 at 14:25 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
In 2016, we will have intermediate data to assess these tradeoffs using RHoMIS results.

Brief plan of the gender and social inclusion dimension of the expected annual output
RHoMIS indicators will be used to analyze tradeoffs between gender/social inclusion and other goals.

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: In 2016, we will yield many of the results from 2015. Human capacity is in place to follow up with all MOGs.

5.2 Deliverables

Deliverable #1

Main Information	
Title: ClimMob 2.0 - tool to design and analyze citizen science trials (triadic ranking)	
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: Tools and Computer Software	**Sub Type:** Tools
Year of expected completion: 2015	
Status: Complete	

Next-user
Researchers at NARS
Knowledge, attitude, skills and practice changes expected in next-user: Agricultural researchers gain knowledge about the crowdsourcing methodology. Ag researchers gain a new attitude towards engaging smallholder farmers actively in research through crowdsourcing Ag researchers gain skills to implement crowdsourcing in their particular context Ag researchers implement crowdsourcing in their own projects
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will teach courses on the approach and incorporate it in capacity development programmes (see course deliverable below) We will actively promote the tools online.

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

Deliverable dissemination
Open access restriction: Yes
License adopted: GPL 3 / GNU

Dissemination Channel: other

Dissemination URL: www.climmob.net

Deliverable Metadata
Description: ClimMob online platform
Creator / Authors: Bioversity International
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English, Spanish, French
Coverage: Global

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #2

Main Information	
Title: Crowdsourcing capacity building Central America	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2015	
Status: Complete	

Next-user
Farmers and community leaders in Trifinio and Nicaragua
Knowledge, attitude, skills and practice changes expected in next-user: Ability to implement crowdsourcing experiments on farms Increased interest in experimenting with CSA options Increased capacity to execute and interpret on-farm experiments

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will train 1800 households directly in using the approach within the project.

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	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
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: This deliverable is not digital.

Deliverable Metadata
Description: Training in using the crowdsourcing approach
Creator / Authors: Bioversity International
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: Spanish
Coverage: Central America

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #3

Submitted on 2016-03-03 at 14:25 UTC

Main Information	
Title: Learning on design of crowdsourcing experiments	
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Agricultural researchers
Knowledge, attitude, skills and practice changes expected in next-user: Knowledge of locally validated principles to design crowdsourcing experiments with smallholder farmers Interest/inspiration to implement crowdsourcing
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Social media effort to draw attention to the publication(s) Targeting distribution to Commodity CRPs (possibly through Gender leader at Consortium level) Presentations in regional agricultural research conferences

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information	
Title: Training course in Citizen Science for CSA	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2017	
Status: <Not defined>	

Next-user #1
Researchers at NARS
Knowledge, attitude, skills and practice changes expected in next-user: * Knowledge of the CSA citizen science methodology * Positive attitude to implementing the approach * Skills to take methodological design decisions in CSA citizen science * Adoption of the approach in research activities
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: * Announcement of the course and a number of scholarship through regional channels and by approaching NARS directly * Certification of successful course participants and membership of an online platform to share experiences (mailing list + Facebook page)

Next-user #2
5-8 universities (Zamorano, CATIE, Mekelle, Indian state universities)
Knowledge, attitude, skills and practice changes expected in next-user: Knowledge and willingness to teach CSA citizen science methodology in university level courses. Implementation of CSA citizen science elements in courses, practicals, etc.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Certification of successful course participants and membership of an online platform to share experiences (mailing list + Facebook page)

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #5

Main Information	
Title: Learning on design of crowdsourcing experiments -- outscaling model	
MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2017	
Status: <Not defined>	

Next-user
Managers in NGOs, service organizations, ministries of agriculture in Central America
Knowledge, attitude, skills and practice changes expected in next-user: Managers know how to outscale citizen science efforts by subcontracting activities Managers feel confident that this is possible in an accountable way
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Report on experiences with subcontracting using existing training materials, platform, etc.

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information	
Title: Establishment of global or regional consortium/platform for Citizen Science for CSA	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2018	
Status: <Not defined>	

Next-user
Agricultural researchers
Knowledge, attitude, skills and practice changes expected in next-user: Agricultural researchers are aware of the existence of Citizen Science for CSA methodology Ag researchers are engaged in a community of practice around Citizen Science for CSA Ag researchers maintain existing tools and methodologies keep developing new methodologies and share these with peers

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: At the level of each region, we will engage users to participate through other networks, such as regional agricultural research networks and garner support for maintaining the infrastructure for citizen science in CSA.

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #7

Submitted on 2016-03-03 at 14:25 UTC

Main Information	
Title: Data collection app	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Tools and Computer Software	**Sub Type:** Tools
Year of expected completion: 2015	
Status: Complete	

Next-user
Extensionists
Knowledge, attitude, skills and practice changes expected in next-user: Extensionists are able to enter information in a reliable way using an Android app Extensionists have skills and awareness to obtain information in a sex-disaggregated way Extensionists use the app as a part of their daily routine
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Teach course on using app (separate deliverable) Engage with universities and others to promote use

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

Deliverable dissemination
Open access restriction: Yes
License adopted: GNU (GPL 3)
Dissemination Channel: other
Dissemination URL: https://github.com/BioversityCostaRica

Deliverable Metadata
Description: Android app for data collection linked to the ClimMob platform. https://play.google.com/store/apps/details?id=com.climmob.app&hl=en
Creator / Authors: Bioversity International
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: <Not defined>
Coverage: Global

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #8

Main Information	
Title: Database for CSA Citizen Science data using appropriate data standards	
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: Data and information outputs, including datasets, databases and models	**Sub Type:** Data
Year of expected completion: 2017	
Status: <Not defined>	

Next-user
Extensionists, input suppliers, scientists
Knowledge, attitude, skills and practice changes expected in next-user: The database will be used by the applications for the next users in order to ensure data a stored in a consistent way and can be analyzed in aggregate.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Users will be asked to share their information and incentives will be in place to make sharing beneficial to them -- enhanced analytical capacity, sharing of information from other groups of farmers. Anonymity will be maintained for all data to preclude privacy concerns.

Partners contributing to this deliverable
Partner #1 (Responsible): van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #9

Main Information
Title: Crowdsourcing training in Ethiopia

MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Capacity	**Sub Type:** Capacity
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** Training given to all next-users mentioned below, except Addis Ababa University, ORARI.

Next-user
Mekelle University, SARC, ARARI, TARI, Bahir Dar University, Addis Ababa University, EIAR, ORARI
Knowledge, attitude, skills and practice changes expected in next-user: We expect that with the knowledge gained and the example provided by local organizations involved in the design of the training, there will a positive attitude towards citizen science as a way to diffuse CSA technologies. We expect that these approach will be mainstreamed into other national institutions
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: We will invite the national organizations involved in the design of the modules to deliver most of the training so that it becomes more horizontal and easier to be adopted by the national systems

Partners contributing to this deliverable
Partner #1 (Responsible): Fadda, Carlo <c.fadda@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information	
Title: Crowdsourcing training in East Africa	
MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Bureau of Agriculture, etc.
Knowledge, attitude, skills and practice changes expected in next-user: Extension officers will appreciate the role of citizen science in performing their duties. At the regional and district level extension and crop departments as well gender office will appreciate the role of citizen science.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Mekelle University, EBI and SARC will organize training for extension officers on using citizen approach in practice. This will give extension officers the skills to implement citizen science project and they will earn a certificate which will positively affect future career.

Submitted on 2016-03-03 at 14:25 UTC

Partners contributing to this deliverable
Partner #1 (Responsible): Fadda, Carlo <c.fadda@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Our key next users were a large collection of research centres and NGOs. Getting to work with the citizen science approach makes it possible for them to scale their participatory research activities. Attitudes have shifted in some cases from initial skepticism to trying to make it the new standard. A key game changer is the McKnight Foundation who has invited us to present the project to an audience of around 60 crop researchers. The project fits very well into McKnight's own impact pathway, which focuses on the expansion of farmer research networks. We have now 3 additional organizations that are McKnight grantees who are using the platform. Many more interested in using it in upcoming research cycles. In India, the Krishi Vigan Kendra (KVK) have proven to be key next users. KVKs are located in each state of India. Presently 646 KVKs in India. Their staff are directly working with farmers an communities which facilitates massive outscaling. ICAR is supporting a strategy in which Bioversity works with KVKs directly to build their capacity on CSA citizen science and complementary activities.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: We have done hands-on training and accompaniment of experiments with new users, policy engagement at several levels in India, East Africa and Central America. We have approached new next users (KVKs) through strategic contacts within the ICAR national system in India. We have used our personal networks to access players such as McKnight Foundation, Syngenta Foundation and a number of others to garner support for this project. We have "advertised" broadly: - CSA conference Montpellier (presentation) - Our Common Future under Climate Change (poster, blog post) - Tropentag (presentation) - Dubai conference - CGIAR DGs at WB (Ann Tutwiler)
Reported deliverables serve as evidence towards this achieved change: The project deliverables that were planned do not serve as very clear evidence on this, but we can show how numbers of users are increasing through statistics derived from our platform. We are making a dashboard to be able to show this in the near future.
Lessons and implications for the next planning cycle: A major lesson has been that outscaling is facilitated very much by accessing platforms of users that already exist, such as the McKnight community of practice. We are going to follow this strategy of identifying active platforms, present the approach and start to work with pioneers who can then make others also enthusiastic.

5.4 Project highlights

Project highlight Information #1	
Title: How much local is local? Working with Ethiopian farmers to adapt to climate change	
Author: Carlo Fadda	**Subject:** climate adaptation, crop varieties, participatory research, citizen science
Publisher: CGIAR	**Year:** 2015
Project highlights types Successful communications	**Start date:** 2016-02-24
End date: 2016-02-24	**Is global:** No
Country: Ethiopia	**Keywords:** climate adaptation, crop varieties, participatory research, citizen science
Highlight description: This blog entry won the first jury prize in the "Talking Science" blog competition around the CGIAR Development Dialogues.	
Introduction / Objectives: This blog post was submitted in the "Talking Science" blog competition.	
Results: Blog post won the first prize.	
Partners: -	
Links / Sources for further information: https://ccafs.cgiar.org/blog/how-much-local-local-working-ethiopian-farmers-adapt-climate-change http://dialogues.cgiar.org/blog/working-with-ethiopian-farmers-to-adapt-to-climate-change/ http://dialogues.cgiar.org/blog/announcing-talking-science-blog-competition-winners/	

6. Activities

Activity #1	
Title: Digital tools for data collection, storage, analysis and visualization	
Description: This activity will create an online database and tools to analyze and visualize citizen science data, including reports, online maps and graphics. These tools will be constantly improved through user feedback.	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018
Leader: Eitzinger, Anton <a.eitzinger@cgiar.org>, CIAT - Centro Internacional de Agricultura Tropical	
Status: Cancelled	**Justification:** The activity was cancelled due to budget constraints. A report was delivered to round off this activity.

Activity #2	
Title: Citizen science platform: methodology, training materials, capacity building, and sustainability plan	
Description: The activity exists of the following components: - Improvement of tools to create citizen science experiments based on farmer ranking of CSA options. We will improve an existing tool, ClimMob, a user-friendly tool to design experiments and analyzed the results. - Creation of training materials to make it easy to adopt the methodology in NARS, universities, etc. These training materials form the basis for courses to be taught online or in blended formats. - Capacity building to involve a large number of professionals and train them to use the methodology. We will teach the methodology to NARS researchers, university professors / researchers, and NGO technical personnel. - Procure the incorporation of the approach into major initiatives through active engagement. - Creating a consortium to maintain a platform to exchange experiences and coordinate continued training efforts and maintain software	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018
Leader: van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
Status: On-going	**Justification:** An online version of ClimMob was made available (www.climmob.net). A training manual was written and translated into Spanish and French. Several high-quality instructional videos were produced.

Activity #3
Title: Implementation in Central America
Description: In this activity, we will implement the approach in Central America, create policy evidence about its effectiveness and engage extension services to adopt the approach. To create policy evidence the project will use a randomized control trial design and focus on the MAPNoruega areas of CATIE, which include the CCAFS sites for Central America. Also, we will engage with ministries of agriculture and NARS to have the approach adopted in existing extension systems.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018
Leader: van Etten, Jacob <j.vanetten@cgiar.org>, BI - Bioversity International	
Status: On-going	**Justification:** Implementation is going well. We did a baseline for a Randomized Control Trial with more than 1500 households in order to be able to monitor impact in detail. These data will serve in two different CCAFS activities. We handed out seeds to 1500 households to evaluate the approach as part of the RCT. We made arrangements to organize a course for 50 agricultural scientists in PCCMCA 2016, the major agronomy conference in the region. We made arrangements to introduce the approach into the extension system in Costa Rica. We made preparations to incorporate the approach in a regional participatory plant breeding programme. We made preparations to incorporate the approach into a CIMMYT-led project in Guatemala.

Activity #4

Title: Implementation in East Africa	
Description: Building on previous efforts under CCAFS to identify new technologies for adaptation to climate change in Ethiopia and Kenya, this activity will move to the next level in order to upscale the technologies identified as useful for increasing resilience and in support of climate change by incorporating a citizen science approach and adapting it to the local context. In East Africa we will use the citizen science approach to further disseminate the material that has been already identified. We will liaise with other organizations, including research organizations and NGO's and we will train them in further use of the technology.	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2018
Leader: Fadda, Carlo <c.fadda@cgiar.org>, BI - Bioversity International	

Status: On-going	**Justification:** Significant progresses were made in Ethiopia, whereas in Kenya, Tanzania and Uganda activities are on hold because of a late start of bilateral project. They will resume in 2016. Crowdsourcing has been used in Ethiopia by Mekelle University to register varieties (the whole process will be completed next year). Also, farmers are now using crowdsourcing varieties over larger areas (up to 1 ha) either in mixtures or pure varieties. A small survey among farmers participating (75) and non participating (25) in the project showed a very large consensus: 97% of farmers who received seeds on first year are still sowing them. Some reasons given: These varieties are grow rapidly, early mature, has high productivity, drought resistant, suitable for land, resistant to disease like rust and frost, they are preferable and has high importance by consumers at market, have high price even expensive than teff, not only that but even for consuming, to make enjera mixed with teff and to make tela the new introduced varieties a best. We also want to diversify the crops to increase the production to better improve our life. Of the 25 farmers who did not participated in the project, they were all aware of the project and all wanted to be involved. From observing neighbors field they were convinced of the good qualities of those varieties. Among limitations is seed availability. Strengthening seed multiplication is a key activity from 2016 onward.

Activity #5

Title: Implementation in South Asia

Description: This activity is closely aligned with the GEF project and other bilateral projects in the pipeline for India. In these projects, a Citizen Science approach will be used, training a large number of scientists and extensionists (>1000) in using the methods. We will carefully evaluate the practical aspects of implementing the approach in a range of contrasting environments across India, documenting lessons and adapting the approach based on these lessons.

Through broad engagement with ICAR institutes, state universities and NGOs, we will create the capacity to implement Citizen Science approaches in India.

Through policy engagement, we will attempt to create acceptance for these methods as scientifically sound and socially valid methods in the Indian context and support for the use of these methods in agricultural science and extension.

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

Leader: Mathur, Prem Narain <p.mathur@cgiar.org>, BI - Bioversity International

Status: On-going	**Justification:** In 2015, based on request by ICAR, it was decided that focus should not be limited only to Bihar, but the programme should be tested across different agricultural systems of India before engaging State governments to mainstream the Citizen Science Approach in any state. In view of this, the program was extended to four more states of India which includes: Uttar Pradesh, Madhya Pradesh, Chhattisgarh and Odisha. It was also suggested that instead of more number of farmers provided with small quantity of seed, it will be useful to involve less famers with more seed for better estimates, if quantity of seed is a limitation. Outcome of farmer field trials was excellent compared to previous years and we have evidence of harvesting 15-20% higher yield by the farmers. The data analysis shows that 73% farmers saved their own seed for subsequent year's trial and also sharing the seed with relatives and friends. Based on excellent results from wheat and rice field trials, demand raised by farmers on crop diversification for pulses (pigeonpea, black gram, green gram, chickpea,, moth bean,), oilseed (sesame, mustard) and vegetable crops (green pepper, tomato, brinjal, cauliflower, cabbage, onion, radish, spinach, carrot, pea, fenugreek, coriander and garlic). Accordingly farmer' field trials were also undertaken for these crops. The details of these trials I have already provided. Replacement of wheat with mustard owing to less soil moisture due to poor rains in Kharif (Rainy cropping season) proved to be a good alternative and identified as climate smart crop. Partnership was established with Borlaug Institute for South Asia (BISA) for taking care of seed requirement of 22 varieties with the production of 311 quintal seed. BISA is expected to produce 50 tons of wheat seed during current year for 11 varieties.

Lessons regarding your project activities and possible implications for the coming planning cycle: We need to devote more attention to strengthening seed systems and seed availability as a complementary activity in order to achieve implementation of the CSA options identified.

7. Leverages

<Not defined>

Submitted on 2016-03-04 at 04:15 UTC

Title: Participatory planning and investment in climate smart agriculture to reduce risks for small-•scale farmers in Central American
coffee landscapes

Start date (dd-MM-yyyy)	01-01-2015	**End date (dd-MM-yyyy)**	31-12-2018
Management liaison	RP LAM - Latin America Region	**Mgmt. liaison contact**	Loboguerrero, Ana Maria <a.m.loboguerrero@cgiar.org>
Lead organization	BI - Bioversity International - Colombia	**Project leader**	van Etten, Jacob <j.vanetten@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

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

Bilateral project(s) contributing to this project
159 - Climate change analyses to support participatory investment plans in coffee-based landscapes

Summary

This project couples participatory planning for climate change adaptation with the development of incentive and investment plans in Central American coffee landscapes to 1) stimulate national and local governments and private institutions to invest in CSA; and 2) encourage women and men farm household members to adopt CSA practices. We test this approach with two high-level cooperatives with incentives from enabling public policies and private sector strategies, and with knowledge transferred about promising CSA practices.

The vision of success of this project is that farmer organizations, second level farmer cooperatives and local governments across Central American coffee landscapes develop and implement CSA plans corresponding to local needs and with support of GOs, NGOs, coffee sector and connected to financial initiatives in agriculture. Implementation of these plans increases the adaptive capacity of rural households who live in coffee landscapes to climate change; and assures food security of these rural households.

2. Partners

Partner #1

Institution: ICRAF - World Agroforestry Centre

Contacts

Type	Contact	Responsibilities and contributions
Partner	Ordoñez, Jenny <j.ordonez@cgiar.org>	The World Agroforestry Centre (ICRAF) has expertise in the role of trees in making coffee landscapes more resilient and developing a framework to idenfiy options by context. ICRAF contributes to the project activities: "Evidence and gaps of agroecological practices which are relevant as CSA options in coffee landscapes"; and "Identify farmer needs and corresponding CSA options across different scales in coffee landscapes". Activity 2014-49 *Partner*. Activity 2014-54 *Partner*.

Partner #2 (Leader)

Institution: BI - Bioversity International

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	van Etten, Jacob <j.vanetten@cgiar.org>	Complete reporting 2015.
Partner	Lopez, Isabel <i.lopez@cgiar.org>	Activity 2014-50 *Leader*.
Partner	Padulosi, Stefano <s.padulosi@cgiar.org>	Activity 2014-289 *Leader*.
Project Coordinator	Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>	Activity 2014-54 *Leader*. Activity 2014-49 *Partner*. Activity 2014-55 *Partner*. Activity 2014-413 *Leader*.

Partner #3

Institution: CEDECO - Corporación Educativa Para El Desarrollo Costarricense

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Fonseca, Francisco <jfrancisco@cedeco.or.cr>	Activity 2014-49 *Partner*. Activity 2014-54 *Partner*. Activity 2014-55 *Partner*.

Partner #4

Institution: Hivos

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Solís, Juan Pablo <jsolis@hivos.org>	Activity 2014-50 *Partner*. Activity 2014-54 *Partner*. Activity 2014-55 *Leader*.

Partner #5

Institution: UVM - University of Vermont

Contacts

Type	Contact	Responsibilities and contributions
Partner	Méndez, Ernesto <ernesto.mendez@uvm.edu>	Activity 2014-50 *Partner*. Activity 2014-54 *Partner*. Activity 2014-49 *Leader*.

Partnerships overall performance over the last reporting period: Very positive. The direct partners involved in this project, UVM, CEDECO, Hivos and ICRAF hold a high standard in their area of expertise. They have showed positive and dedicated attitude towards the content of the project –more than can be expected after the four subsequent budget cuts including the final cut resulting in the end of CCAFS support for this project. We have engaged with several next users to meet our indicators to progress. As a project team we are committed to deliver key products to these partners despite the complete cut of budget for this project.

Submitted on 2016-03-04 at 04:15 UTC

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Engaging with next users from the start is a good idea to accelerate the uptake of the results of the project. However it becomes complicated to deliver to next users when unexpectedly funds are reduced to zero. This not only damages the reputation of CCAFS, but also for the direct partners involved. Even though it slows down the progress towards outcomes, it is therefore important to be cautious when establishing partnerships with next users.

3. Locations

Project level	Latitude	Longitude	Name
Country	Not applicable	Not applicable	Guatemala
Country	Not applicable	Not applicable	Nicaragua
Province	13.1667	13.1667	Estelí, Nicaragua
Province	13.5	13.5	Madriz, Nicaragua
Province	13.7	13.7	Nueva Segovia, Nicaragua
Province	15.6667	15.6667	Huehuetenango, Guatemala

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
Governmental organizations, agricultural development organizations, farmer cooperatives and the private sector (including coffee buyers and financial institutions) invest actively to make Central American coffee landscapes more resilient to climate variability and future change with knowledge about existing enabling policies and appropriate CSA practices. They support CSA practices that are in line with different farm household members' interests. Farm household members from the targeted cooperatives know how to make their livelihoods more resilient to climate variability and change, and adopt corresponding CSA practices. Farmer cooperatives in the pilot sites monitor and evaluate the level of adoption and benefits of CSA practices and revisit their risk reduction strategies based on the evaluation results. CEDECO, Hivos and other development organizations are experienced to develop, with different actors, investment plans in other areas through the process of participatory planning.

Annual progress towards outcome (end of 2015): Agronomic technicians of first and second-level cooperatives ASOBAGRI (Guatemala) and PROODECOP (Nicaragua) and producer members have reviewed their level of knowledge on agroecological practices and learn about new agroecological and other CSA practices in coffee landscapes, through capacity strengthening with information on additional scientific evidence and technical observations on agroecological practices for CSA. On the basis of this information they prioritize agroecological practices for further on-farm evaluation of CSA practices and their implementation. PROODECOP and ASOBAGRI identify the potential in their organizations to incorporate investment plans that adopt climate smart agriculture practices, and accordingly, design such plans as appropriate to coffee landscapes. Coops, Governmental organizations and private companies in Nicaragua and Guatemala are consulted and/or engaged in an analysis of existing policies and governance systems, and learn about the constraints and opportunities to improve enabling environments that would stimulate investment and adoption of CSA practices.

Annual progress towards project outcome in the current reporting cycle (2015): To realize their ambition to establish a local biofertilizer processing plant in Esteli Nicaragua, the cooperative PRODECOOP developed in 2015 in collaboration with Hivos and CEDECO an investment plan named PASCAFEN, with the aim of attracting investors. With such an investment 2,300 affiliated organic coffee farmers can get access to affordable and organic fertilizer to improve soil and nutrient conditions, and enhance coffee productivity and disease resistance under climate change. The PASCAFEN case study will help understanding how cooperatives can develop CSA investment plans and attract investors. Hivos is developing a report in English and Spanish with lessons learned to share these experiences with other development agencies and cooperatives.
Technicians from PROODECOP learned how to develop an online survey and mobile data collection for their internal control and monitoring systems. In this project, we have developed a manual for PROODECOP staff as well as other cooperatives to institutionalize online data collection and analysis as part of their own monitoring systems.
More than 380 rural community members from Nicaragua and Guatemala participated in participatory vulnerability assessments of which the half women, in which they shared knowledge on adaptation practices. These workshops strengthened the awareness of small coffee growers on how to adapt to climate change and facilitated co-learning to discuss adaptation practices in the community.
The collected information on agroecological practices also allows the project to develop a manual on good adaptation practices and policy briefs for technicians and cooperatives in other areas. Reports are being developed and shared with participants in each community respectively. In addition, for more detailed recommendations, twenty-five smallholder families in Costa Rica, Honduras and Guatemala participated in intensive participatory crop evaluations for diversification and participatory soil assessments for climate change adaptation.

Communication and engagement activities have contributed to achieving your Project outcomes: During this year we have actively consulted possible investors and strategic partners on how to support adaptation in coffee landscapes. These included international organizations (IBD, Root Capital, Neumann foundation, SAFE) and national organizations in each country (ANACAFE, CAFENICA, IICA, Atlantic). We also engaged directly with the two cooperatives ASOBAGRI and PROODECOP covering 3,300 smallholder families to test the development of adaption plans. Advances of our project were presented during the Global Landscape Forum in Paris in a session on agroecology for coffee where the different actors –cooperatives, investors, strategic partners and research organizations- discussed together possible adaptation pathways.

Evidence documents of progress towards outcomes: <Not defined>

Annual progress towards outcome (end of 2016): PROODECOP and ASOBAGRI have the capacity to incorporate a CSA recomendations in their internal control systems and investment strategies. The cooperatives have further identified strengths and gaps in both public laws and their own institutional regulations to specifically implement the prioritized CSA practices. Relevant stakeholders in Nicaragua and Guatemala, including governmental organizations and private companies consider different policy options to create an enabling environment for CSA adoption in coffee landscapes.

Annual progress towards outcome (end of 2017): This project is being supported by CCAFS until 2016

Annual progress towards outcome (end of 2018): This project is being supported by CCAFS until 2016

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: -

4.2 Contribution to CCAFS Outcomes

RP LAM - Outcome 2019: LAM's producers associations are choosing and promoting CSA context-specific practices through strengthened extension services rescuing ancient and traditional knowledge. Local governments develop equitable local agricultural development plans using CSA context-specific portfolios assessed economically to plan and prioritize their investments focusing on climate variability challenges. NARS develop demand-driven outputs with sufficient technological capacity to address agricultural sector needs to face climate challenges. Private sector works with producer's associations, local and national governments to implement and scale out CSA involving agricultural market agents through innovative approaches (incentives along value chain to access to certification schemes). National governments scale up CSA approach based on successful experiences developed at local level.

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

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

2019
Target narrative: Targeted initiatives in Nicaragua are: El Ministerio de Economía Familiar, Comunitaria, Cooperativa y Asociativa (MEFFCA); La Secretaria del programa de cambio climático; MAGFOR, and El Instituto Nicaragüense de Fomento Municipal (INIFOM). In Guatemala: El MAGA. Targeted multilateral organizations include SICA – Ruta, CAC, IFAD, IDB, IICA, BCIE. We provide a baseline of potential agroecological practices as CSA options and identify gaps for further research. Reviews will contribute to the dialogue by highlighting agroecological practices that are appropriate to the specific context of small-scale coffee production and that represent agroecological principles/approaches while also qualifying as climate smart agriculture. The reviews provide technical professionals from governmental organizations and agricultural development organizations a scientific basis to support and implement CSA development projects in coffee landscapes. National and international scientists who work on CSA in Central America (re) focus their research to fill the gaps in evidence of promising agroecological practices as CSA options. We expect that the partnerships between farmer cooperatives and professionals from public, private and civil society spheres will make coordinated decisions to invest in CSA and adopt CSA practices after a process of participatory planning that incorporates the needs of small-scale farmers in coffee landscapes, through the application of a framework to define CSA options by context and with easy access to information about CSA practices though and online portal. National, subnational governments and coffee sector and private institutions are engaged from the beginning of the project to learn the value of area-specific investment plans that address the needs of rural households in their local context. The project tests the needs and options analyses with two second-level farmer cooperatives, one in Guatemala and one in Nicaragua. Guidelines will be developed to allow replication of the approaches by national and subnational governments with other farmer cooperatives in coffee landscapes and in other agricultural landscapes.
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: To fulfil with our progress indicators for 2015 and 2016 we have engaged directly with two cooperatives, ASOBAGRI and PROODECOP. These organizations are collaborators and next users in the development of tools and methodologies for climate change adaptation. Two cooperatives are adopting mobile collection technologies to improve internal control and monitoring systems of the cooperatives. PROODECOP developed an investment plan for an organic fertilizer processing plant. Vulnerability assessment workshops enabled men and women cooperative members to co-learn and strengthen their knowledge on practices for climate change adaptation of coffee landscapes.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		

2015
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The vulnerability assessment workshops were organized in each community with women and men participants. In the first workshops groups were mixed. But after evaluation of these events we considered it is better to organize two separate workshops per communities for women and men. This allows women more time and space for their opinions, which improves co-learning and strengthen their awareness. In the review on agroecological practices, we followed 11 principles, which includes a principle about social organization and inclusion. It serves as a social indicator to evaluate the effectiveness of a agroecological practice for climate smart agriculture.

2016	
Target value: 0	**Cumulative target to date:** 0
Target narrative: Contacts have been established with IICA and IBD and CATIE and governmental organizations in Guatemala to connect project recommendations to regional and national initiatives on coffee adaptation. In 2016, we will present the first results of the project activities to these organizations. However, the CCAFS budget for this project has been reduced by 80% for 2016, which disables the project partners to commit sufficient time to support these organizations in the implementation of the project results and recommendations in their policies and actions.	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: NA	

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>		

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

2019	
Target value: 6	**Cumulative target to date:** 8

2019
Target narrative: Targeted actors: the second/level coop PROODECOP in Nicaragua; the second-level coop ASOBAGRI in Guatemala; two Guatemalan cooperatives affiliated to AgExport; the Nicaraguan second-level cooperatives CECOCAFEN, SOOPPEXCA; financial institutions like those from the Finance Alliance for Sustainable Trade (FAST); certification organizations like those from the Sustainable Commodity Assistance Network (SCAN). Farmer cooperatives and local governments in the pilot areas develop and implement CSA plans corresponding to local needs and with support of GOs, NGOs, coffee sector and connected to financial initiatives in agriculture. Through the process of social learning, CSA investors like GOs, national coffee sector and other private initiatives, as well as development organizations including Hivos and CEDECO are encouraged to repeat the planning and investment process with other farmer organizations and in other agricultural landscapes. I Investment plans will be presented to financial institutions like members of the Finance Alliance for Sustainable Trade (FAST). A specific financial model will be developed to analysis the risks and benefits of specific investment and identify which business models and corresponding financial institutions are most suitable to finance the implementation and adoption of different prioritized CSA practices. Knowledge transfer products that explain how to implement promising agroecological practices will be developed in coordination with the farmer cooperatives and local governments to strengthen the capacity of members of farmer cooperatives to implement promising agroecological practices as CSA options. These products include leaflets, podcasts, among others. Certification organizations as Utz, Rain Forest Alliance and Fair Trade, have being appointed as potential next users. They will be encouraged to incorporate and refer to agroecological practices as CSA options in certification schemes in coffee-based systems on the basis of the collected evidence. Financial institutions and certification organizations will be encouraged to incorporate the results and approaches of needs analysis and identifying options by context as part of social investment initiatives. We will investigate together with national and international coffee buyers and traders ways through which public policies can promote or institutionalize these best practices.
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: During this year we have actively consulted possible investors and strategic partners on how to support adaptation in coffee landscapes. These included international organizations (IBD, Root Capital, Neumann foundation, SAFE) and national organizations in each country (ANACAFE, CAFENICA, IICA, Atlantic).		
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: See above.		

2016	
Target value: 2	**Cumulative target to date:** 2
Target narrative: From 2015 we expect to work closely together with the farmer cooperatives Prodecoop and Asobagri. We expect that by 2016 they have incoorporated several results and knowledge products in their policies, management plans in and internal control systems. We reduced the initial target value from 3 to 2 cooperatives in 2016 because of the significant budget reductions in this project	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The cooperatives consider specific actions and indicators to respectively promote and monitor involvement of women household members in decision-making on coffee production and incorporation of good practices.	

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

Forests, Trees and Agroforestry
Description of collaboration: The development of an agroforestry tree climate suitability atlas to support farmer organizations and development agencies in best-bet shade coffee options in Central America under progressive climate change.
The achieved outcome contributions: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Climate smart investment to adapt coffee landscapes in Nicaragua
Outcome statement: To realize their ambition to establish a local biofertilizer processing plant in Esteli, Nicaragua, the cooperative Promoter of Cooperative Development in the Segovias (PRODECOOP) developed an investment plan named Sustainable Agriculture in Coffee Plantations in Nicaragua (PASCAFEN) in collaboration with Hivos and CEDECO, to attract investors. With such an investment 2,300 affiliated organic coffee farmers can get access to affordable organic fertilizer to improve soil and nutrient conditions, and enhance coffee productivity and disease resistance under climate change.
Research Outputs: Publication of PASCAFEN case study
Research Partners: Hivos, CEDECO
Activities that contributed to the outcome: CEDECO and Hivos developed with PRODECOOP innovative climate smart investment plan for the processing plant with leverage funds from a project managed by Hivos. The PASCAFEN study is being published in English. Thanks to support of CCAFS the publication is now also translated in Spanish to facilitate knowledge sharing with next users and strategic partners in Nicaragua and Guatemala and other countries in Latin America.
Non-research Partners: PRODECOOP
Output Users: PROODECOP and its members benefit directly from the investment plan because it helps them to find and convince investors. The publication is intended for other cooperatives, development agencies, government agencies, private companies and research organizations to show how a climate smart investment plan can be set up.
How the output was used: The publication on lessons learned is being finalized. The investment plan is being used to attract investors.
Evidence of the outcome: The terrain for the processing plant is ready. The investment plan is a useful tool for the cooperative to find the required money to make this investment.
References: Porras I. Coffee and carbon offsets for smallholders. pubs.iied.org/16599IIED.html?b=d CEDECO (2015) Modelo de negocio – implementación de una planta de insumos agrícolas. Working paper
The primary 2019 outcome indicator that this case study is contributing to: FP1 Indicator: # of national and subnational development initiatives and public institutions that prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools
Explanation of the link between your outcome story and the CCAFS indicators:
Year: 2015
Annexes uploaded: <Not defined>

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP1 - MOG # 5: Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 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 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP1 - MOG # 1: Context specific (targeted) suitable CSA options and portfolios that build on traditional knowledge, meet the needs of farmers and enhance productivity, adaptive capacity, food security and social equity (LAM, WA, EA, SA, SEA) **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Submitted on 2016-03-04 at 04:15 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 2019 contribution towards the selected MOG
<Not defined>

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

Major Output groups - 2014

FP1 - MOG # 5: Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

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

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

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

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

FP1 - MOG # 3: Approaches, strategies and scaling up/out mechanisms (e.g CSV), for enhanced adaptive capacity and resilience from the field to the sub-national level (LAM, WA, SA, EA, SEA)

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

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

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

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

Submitted on 2016-03-04 at 04:15 UTC

FP1 - MOG # 4: Innovative knowledge management systems (ICT, information network, multi-stakeholder platforms, learning alliances, fora etc) and strategic engagements approaches and partnerships that promote access, co-creation, capacity building, learning, 2 ways sharing and dissemination of CSA information and tools to farmers, extension services, agro-dealer networks, local governments, private sector, academia etc. (LAM, WA, EA, SA, SEA)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Submitted on 2016-03-04 at 04:15 UTC

Major Output groups - 2015

FP1 - MOG # 5: Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

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

Brief summary of your actual 2015 contribution towards the selected MOG:
This year CCAFS hass support through this project the development of publication on a existing climate smart investment plan to share this experience with other cooperatives.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
This investment plan is a first step towards a fertilizer processing plant for these regions, which allows poor farmers to have access to more affordable fertilizer. Many poor farmers cannot afford biochemical fertilizer. Moreover organic fertilizer is a climate smart practice in contrast to the application of biochemical fertilizer.

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:
Information has been collected on agroecological practices for climate change adaptation of systems of small scale coffee farmers. The collected information is the basis for a manual on good adaptation practices and policy briefs for technicians and cooperatives in whole Latin America.

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:
Participatory vulnerability assesments considered gender dimensions explicitly. Where possible separate women and men farmer workshops were organized. The literature review on CSA practices is structured following agroecological principles including social organization and inclusion. The household surveys included specific questions about women participation in organizational activities.

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:
Technicians from PROODECOP learned to develop online surveys and mobile data collection to strengthen their internal control systems and to include CSA indicators in these systems. We are finalizing a manual for PROODECOP staff and other cooperatives in Latin America to institutionalize online data collection and analysis for monitoring systems.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
Monitoring systems include gender-specific and gender-related indicators, as part of the agro-ecological approach followed in this project.

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:
The participatory vulnerably assessments are platforms of co-learning and sharing traditional knowledge and to identify CSA options most suited to their contexts. The information shared by the farmers will be compared with scientific literature in a gap analysis on agroecological practices for climate smart coffee landscapes.

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:
When possible, vulnerability assesments were organized seperately for women and men farmer workshops. This allows to capture both the views of men and women coffee farmer on climate change adaptation. This also gives space and time for women to participate and present their knowledge to fellow women and men farmers.

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:
An atlas is being developed to support coffee cooperatives and their members in prioritizing fruit and shade species to sustain shade in agroforestry coffee systems under climate change.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
This output has no specific social gender element. Trees were selected on the basis of several agroforestry references that take into account agronomic and biodiversity criteria. Subsequent selection of tree species should take into account gender and social inclusion dimensions.

Major Output groups - 2016

FP1 - MOG # 5: Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
- Policy diagnosis on incentives and limitations of CSA investment in coffee landscapes published and presented at workshops in Nicaragua and Guatemala to key stakeholders
-CSA investment strategies developed with farmer cooperatives Asobagri and PRODECOOP

Brief plan of the gender and social inclusion dimension of the expected annual output
Policy diagnosis include gender and social inclusion dimensions in examining the enabling environment for investment and adoption by women, men and/or youth of agroecological practices to build climate-resilient coffee landscapes.

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
-Evidence of agroecological practices for climate-resilient coffee landscapes in relation to women and men farmer interest and limitations and policy diagnosis discussed with key actors to identify key next steps in CSA investment at national level in Guatemala and Nicaragua and at subnational level with farmer organizations in pilot sites.

Brief plan of the gender and social inclusion dimension of the expected annual output
-Agroecological principles for climate-resilient coffee landscapes on strengthening local organizations and integrating farmer and scientific knowledge have a strong gender and social component. Sex-disaggregated data collection on women and men farmer interests enables to consider gender in providing recomendations on adoption and investment of agroecological practices.

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
-Manual developed for farmer cooperatives in Latin America to develop mobile collection data surveys to make more effective use of internal control system
-Online monitoring data collection system with CSA variables co-developed with farmer cooperative PROODECOP

Brief plan of the gender and social inclusion dimension of the expected annual output
-Gender and social inclusion indicators are included in cooperatives´ monitoring tool

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
-Lessons learned from participatory evaluation approach to prioritize agroecological practices for climate change adaptation with coffee farmers

Brief plan of the gender and social inclusion dimension of the expected annual output
Sex-segregated farmer family vulnerabillity assesments and prioritization exercises allow to understand possible differences and complementarities between women and men household members in response capacity and adoption of agroecological practices for climate-resilient coffee landscapes.

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
-Model developed on adoption of agroecological practices for climate-resilient coffee landscapes, and it relationship to farmer familiy vulnerabillity and coffee productivity.
-Agroforestry tree suitabillity atlas published online to support farmer cooperatives and development organizations in Central American coffee landscapes to identify best-bet shade trees under progressive climate change.

Brief plan of the gender and social inclusion dimension of the expected annual output
Sex-dissagregated farmer family vulnerabillity assesments allow to understand possible differences and complementarities between women and men household members in response capacity and adoption of agroecological practices for climate-resilient coffee landscapes.

Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle: -

5.2 Deliverables

Deliverable #1

Main Information	
Title: scientific paper submitted about the potential of agroecological practices in coffee landscapes as CSA options	
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: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** Annotation is finished. Submission expected before July 2016.

Next-user
Scientists and technical professionals from agricultural development organizations l, as well as sustainable production and certification organizations
Knowledge, attitude, skills and practice changes expected in next-user: We expect technical professionals from governmental organizations and agricultural development organizations implement and recommendations to implement CSA practices in coffee landscapes. It direct scientists to target agroecological practices for research for which little evidence is yet found about their CSA potential.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The publication will be open-access, available in both English and Spanish, and promoted through the academic and professional networks of the project team to increase the use of this information by stakeholders throughout Latin America. The results will be presented in one or more CSA fora in Central America

Partners contributing to this deliverable
Partner #1 (Responsible): Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont

Deliverable Ranking	
Address gender and social inclusion aspect	3
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	5

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #2

Main Information	
Title: Initial and overall diagnosis on policy and institutional frameworks	
MOG # 5: Evidence on equitable CSA certification schemes, new agri-business models, financial incentive mechanisms and policy instruments to promote and mainstream CSA adoption at different levels of the value chain (LAM, WA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Research report
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Farmer cooperatives, national and local authorities, funding and investment organizations
Knowledge, attitude, skills and practice changes expected in next-user: Coops will gain knowledge on how public and private policies and governance systems influence their capacity to make use of, and benefit from CSA and will develop strong and founded arguments to defend preferred policy options to receive support for CSA adaptation. .

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: During the development of the report we will identify and consult with relevant stakeholders. Once the report is finalized, we will make it available online and distribute it widely in the form of policy briefs and present it during policy seminars and meetings with key actors.

Partners contributing to this deliverable
Partner #1 (Responsible): Lopez, Isabel <i.lopez@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #3

Submitted on 2016-03-04 at 04:15 UTC

Main Information

Title: Initial policy diagnosis presented to relevant actors at local and national 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:** Policy briefs - Briefing paper

Year of expected completion: 2016

Status: <Not defined>

Next-user

National and local authorities like MEFFCA, MAGFOR, INIFOM and MAGA, Multi-lateral organizations like IFAD, CAC, IBD and BIE

Knowledge, attitude, skills and practice changes expected in next-user: Coops will gain knowledge on how public and private policies and governance systems influence their capacity to make use of, and benefit from CSA and will develop strong and founded arguments to defend preferred policy options to receive support for CSA adaptation.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Once the report is finalized, we will make it available online and distribute it widely in the form of policy briefs and present it during policy seminars and meetings with key actors. Results will be communicated to the management of cooperatives through a management brief.

Partners contributing to this deliverable

Partner #1 (Responsible): Lopez, Isabel <i.lopez@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information	
Title: M & E protocols of farmer cooperatives strengthened to include indicators related to CSA practices	
MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Case Study
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Farmer cooperatives
Knowledge, attitude, skills and practice changes expected in next-user: We expect that farmer cooperatives will institutionalize the adoption of CSA practices by their farmers through the incorporation of CSA concepts in their Internal Control Systems and because of the observed evidence of the benefits for production and livelihoods when CSA practices are adopted.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory methods will be used in workshops to support farmer cooperatives in developing and operationalizing M & E protocols. Collaborative development of the tools and analysis of resulting data in partnership with coop representatives will promote peer-to-peer training and information exchange.

Submitted on 2016-03-04 at 04:15 UTC

Partners contributing to this deliverable
Partner #1 (Responsible): Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International
Partner #2: Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont
Partner #3: Fonseca, Francisco <jfrancisco@cedeco.or.cr>, CEDECO - Corporación Educativa Para El Desarrollo Costarricense

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #5

Submitted on 2016-03-04 at 04:15 UTC

Main Information

Title: Main problems and needs reported back to community leaders and farmer cooperatives.

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

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

Year of expected completion: 2016

Status: <Not defined>

Next-user

Agronomic technicians of farmer cooperatives, local communities and local governments.

Knowledge, attitude, skills and practice changes expected in next-user: We expect that agronomic technicians of farmer cooperatives, coffee landscape communities and local governments will use this information to prioritize actions for adaptation plans that respond to the needs of the farmers in the coffee landscapes.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: A report and more specific knowledge transfer products like posters will be developed to report the results directly back to local communities, governments and farmer coops.

Partners contributing to this deliverable

Partner #1 (Responsible): Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International

Partner #2: Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information	
Title: Capacity generated in cooperative technicians and farmer leaders in CSA improved M & E protocols.	
MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)	
Main Type: Capacity	**Sub Type:** Capacity
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** Two trainings given. One manual draft for mobile data collection ready. Further training required. Manual needs to be finalized before publication.

Next-user
Community leaders and agronomic technicians of farmer cooperatives
Knowledge, attitude, skills and practice changes expected in next-user: Farmer cooperatives will be able to monitor and evaluate the effects of adoption of CSA practices on the livelihoods of their members and institutionalize M & E in their policies. We expect that farmer cooperatives will institutionalize the adoption of CSA practices by their farmers.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: CEDECO will strengthen the capacity of agronomic technicians of farmer cooperatives to carry out M & E activities and have an active advisory role during the process.

Submitted on 2016-03-04 at 04:15 UTC

Partners contributing to this deliverable
Partner #1 (Responsible): Fonseca, Francisco <jfrancisco@cedeco.or.cr>, CEDECO - Corporación Educativa Para El Desarrollo Costarricense

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #7

Main Information
Title: One manual for extententionists in coffee landscapes

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

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

Next-user
Agronomic technicians of farmer cooperatives and governmental organizations in coffee landscapes
Knowledge, attitude, skills and practice changes expected in next-user: We expect that agronomic technicians of farmer cooperatives as well as local governments will use these manuals to communicate respectively to their members and farmer families in their administrative units in a clear and consistent way about good CSA practices.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: This manual will be developed in close collaboration with agronomic technicians of PROODECOP and ASOBAGRI so as to systematize CSA practices that are already being implemented by these cooperatives.

Partners contributing to this deliverable
Partner #1 (Responsible): Fonseca, Francisco <jfrancisco@cedeco.or.cr>, CEDECO - Corporación Educativa Para El Desarrollo Costarricense
Partner #2: Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont
Partner #3: Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #8

Main Information	
Title: Analysis on organizational potential of farmer cooperatives PROODECOP and ASOBAGRI	
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: Data and information outputs, including datasets, databases and models	**Sub Type:** Datasets
Year of expected completion: 2015	
Status: Cancelled	**Justification for cancelling the deliverable:** Budget cut.

Next-user
Farmer cooperatives
Knowledge, attitude, skills and practice changes expected in next-user: Farmer cooperatives (PROODECOP and ASOBAGRI) learn about their organizational potential. We expect that this empowers them to make strategic decisions in the development of investment plans to adopt CSA practices.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: These analyses are being developed in collaboration with the next users. The cooperatives will socialize these analyses to their partners.

Partners contributing to this deliverable

Partner #1 (Responsible): Fonseca, Francisco <jfrancisco@cedeco.or.cr>, CEDECO - Corporación Educativa Para El Desarrollo Costarricense
Partner #2: Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International
Partner #3: Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #9

Main Information
Title: Map of actors involved in the coffee value chain in Guatemala and Nicaragua

MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2015	
Status: Complete	

Next-user
First and second level farmer cooperatives (ASOBAGRI, PROODECOP) ministries, local governments
Knowledge, attitude, skills and practice changes expected in next-user: The next users and project partners learn about their sphere of influence. We expect that this will be first step for the next users to establish a permanent communication with other relevant institutions.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: A workshop will be organized in each country. We will closely collaborate with other CCAFS project who carried out an institutional mapping or are planning to do so. This deliverable will remain confidential and only aggregate data will be used in subsequent deliverables.

Partners contributing to this deliverable
Partner #1 (Responsible): Solís, Juan Pablo <jsolis@hivos.org>, Hivos

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

Deliverable dissemination
Open access restriction: Intellectual Property Rights (confidential information)
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: <Not defined>

Deliverable Metadata
Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #10

Main Information

Title: Policy analysis focusing on different options that can support the adoption of preferred CSA practices.

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: <Not defined>

Next-user

Farmer cooperatives, national and local authorities, funding and investment organizations and sustainable production and certification organizations

Knowledge, attitude, skills and practice changes expected in next-user: Authorities at local and national level will gain a better understanding of the different policy options that can be adopted to support CSA in the project sites. They will be willing to discuss these options and interested in evaluating them according to different criteria in specific contexts.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: In meetings and roundtables, we will present the options coming out for the policy analysis and discuss them with relevant stakeholders. Continued communication with and technical support to actors that are in a position to instigate change in public policies, private strategies and in the institutional setting will be maintained.

Partners contributing to this deliverable

Partner #1 (Responsible): Lopez, Isabel <i.lopez@cgiar.org>, BI - Bioversity International

Partner #2: Solís, Juan Pablo <jsolis@hivos.org>, Hivos

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Presentation of policy analysis results and recommendations to relevant stakeholders in Guatemala and Nicaragua.
MOG # 2: Biophysical, socio-economical and tradeoffs analyses (incl. enabling environments and gender), innovative methods, engagement approaches and customized decision support tools for CSA prioritization, wide scale adoption, local adaptation and investment planning (LAM, WA, EA, SA, SEA)

Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2016	
Status: <Not defined>	

Next-user

National and local authorities like MEFFCA, MAGFOR, INIFOM and MAGA, Multi-lateral organizations like IFAD, CAC, IBD and BCIE

Knowledge, attitude, skills and practice changes expected in next-user: Authorities at local and national level will gain a better understanding of the different policy options that can be adopted to support CSA in the project sites. They will be willing to discuss these options and interested in evaluating them according to different criteria according to specific contexts.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: In workshops in each country respectively, we will present the options coming out for the policy analysis and discuss them with relevant stakeholders. Continued communication with and technical support to actors that are in a position to instigate change in public policies and in the institutional setting will be maintained.

Partners contributing to this deliverable

Partner #1 (Responsible): Lopez, Isabel <i.lopez@cgiar.org>, BI - Bioversity International

Partner #2: Solís, Juan Pablo <jsolis@hivos.org>, Hivos

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #12

Main Information	
Title: Session at Global Landscape Forum in Paris	
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)	
Main Type: Workshops	**Sub Type:** Workshop
Year of expected completion: 2015	
Status: Complete	

Next-user
Regional and Multi-lateral organizations like SICA, IFAD, FAO, CAC, IBD and BCIE
Knowledge, attitude, skills and practice changes expected in next-user: International actors will gain knowledge on policy options that can generate incentives for the adoption of CSA by smallholder farmers. They will become more interested in policy analysis and development for CSA and will integrate these elements in their regular activities.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Continued communication with international actors that are in a position to instigate change in public and private policies and in the institutional setting.

Partners contributing to this deliverable
Partner #1 (Responsible): Solís, Juan Pablo <jsolis@hivos.org>, Hivos
Partner #2: Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	3

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.landscapes.org/glf-2015/agenda-item/day-1-saturday-5-december-2/6-parallel-discussion-forums-2/the-role-of-agro-ecology-in-exploring-innovative-viable-adaptation-measures-for-resilient-smallholder-coffee-landscapes/

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

Deliverable Data sharing
Deliverable files <Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: PRODECOOP is a key next user because as a second level cooperative they are vital to develop adaptation plans for coffee landscapes at subnational level. Technical staff collaborated in development of vulnerability assessments, in data collection. We observed an improvement in skills to conduct these types of analysis for monitoring and evaluation for CSA activities by farmer families affiliated to their organization. In addition, they already co-developed a climate smart investment plan.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Creating ownership and strengthening skills by involving them in the development of surveys, methodologies.
Reported deliverables serve as evidence towards this achieved change: deliverable 464 Capacity generated in cooperative technicians and farmer leaders in CSA improved M & E protocols.
Lessons and implications for the next planning cycle: No next planning cycle.

Next user #2
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: ASOBAGRI is a key next user because as a second level cooperative they are vital to develop adaptation plans for coffee landscapes at subnational level. Technical staff collaborated in development of vulnerability assessments, in data collection. We observed an improvement in skills to conduct these types of analysis for monitoring and evaluation for CSA activities by farmer families affiliated to their organization.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Creating ownership and strengthening skills by involving them in the development of surveys, methodologies.
Reported deliverables serve as evidence towards this achieved change: deliverable 464 Capacity generated in cooperative technicians and farmer leaders in CSA improved M & E protocols.
Lessons and implications for the next planning cycle: Engaging with next users from the start is a good idea to accelerate the uptake of the results of the project. However it becomes complicated to deliver to next users when unexpectedly funds are reduced to zero. This not only damages the reputation of CCAFS, but also for the direct partners involved. Even though it slows down the progress towards outcomes, it is therefore important to be cautious when establishing partnerships with next users.

Next user #3
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Participatory horticultural crop evaluation exercises with farmers and school children allowed the CATIE genebank to evaluate and identify promising varieties for diversification of coffee-based and horticultural systems. Lessons learned include how to set up participatory exercises to evaluate new crops; improving access to the varieties that they conserve and multiply. Several promising varieties have been identified that can be tested in a wider area for evaluation and distribution.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Participatory and collaborative research

Submitted on 2016-03-04 at 04:15 UTC

Reported deliverables serve as evidence towards this achieved change: new deliverable on participatory horticultural crop evaluation for diversification options in three coffee and horticultural production areas in Costa Rica, Honduras, and Guatemala.

Lessons and implications for the next planning cycle: Participatory crop evaluation exercises are challenging, especially when introducing new crops for diversification and climate change adaptation. The research conducted allows improving and fine-tuning the experimental set up for participatory crop evaluation when introducing new crops.

5.4 Project highlights

6. Activities

Activity #1	
Title: Evidence and gap analysis of agroecological practices as CSA options in coffee landscapes	
Description: Desk reviews will be carried out about the potential of agroecological practices to make coffee landscapes in Central America more resilient to climate variability and future change, as well as to market fluctuations and other risks, and how these practices influence gender and age groups and the power relations between them. These will be combined with studies about existing agroecological practices and the application of traditional knowledge in the selected pilot areas of the Central American coffee landscapes. The exercises allow identifying several knowledge gaps that requires further research. The Agroecology and Rural Livelihoods Groups (ARLG) at the University of Vermont will lead this activity because they have more than 15 years of experience in participatory action and agroecological research with coffee cooperatives in Central America.	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016
Leader: Méndez, Ernesto <ernesto.mendez@uvm.edu>, UVM - University of Vermont	
Status: On-going	**Justification:** An outline on the basis of 11 agroecological principles developed, and further annotated bibliography after literature review. Two students have studied two agroecological principle in Huehuetenango for their master thesis, respecitvely on soil conservation and livelihood diversification.

Activity #2	
Title: Analyze public policies and identify and test options for enabling investment in climate adaptation	
Description: We will first conduct a general diagnosis of the policy scenario, analyzing existing public policy and legal frameworks, and their level of implementation, to understand if and how they generate incentives or obstacles for the development and adoption of CSA practices. Another set of studies will analyze the role of private institutions (national and international) in creating incentives for the development and adoption of CSA and will 1) identify those practices that are more conducive to CSA in coffee production in Central America; and 2) provide recommendations how public and private policies and incentives can encourage private institutions to support small-scale farmers in coffee landscapes to adopt CSA practices. Bioversity has a specific policy group which will be involved in the development of the studies in collaboration with national national experts and Hivos.	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2016
Leader: Lopez, Isabel <i.lopez@cgiar.org>, BI - Bioversity International	

Status: On-going	**Justification:** Relevant stakeholders at national and subnational level in Nicaragua and Guatmala have been interviewed in personal conversation. A desktop study has been carried out about the policies related to coffee and climate change in Nicaragua and Guatemala. The collected information will be used to prepare policy briefs at national and subnational level in each country.

Activity #3

Title: Identify farmer needs and corresponding CSA options in coffee landscapes

Description: Participatory methods will be used to understand local farmer needs and community-level potential for adaptation to climate change. We apply a vulnerability assessment toolbox developed by the International Development Studies (IDS) in collaboration with Bioversity.

We will geographically target potential management practices, trees in different geographic areas and under different current and future climate scenarios using statistical modelling. The results will be validated in the communities in the study areas. The knowledge generated will be presented in an online portal.

The Nicaraguan Farmer cooperatives will strengthen or improve monitoring and evaluation systems to measure the effects of implemented CSA practices on the livelihoods of farmer families. The protocols will focus on monitoring food security changes through conventional indicators (MAFP, HDDI, etc.) as well as farmer identified measures.

Bioversity will lead this activity.

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

Leader: Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International

Status: On-going	**Justification:** Household surveys have been developed and conducted with more than 500 farmer families. Data has been collected with open data kit software and is now being analysed. Participatory vulnerability assessments have been carried out with 380 participants. The results are now being analysed. An atlas is being developed to support cooperatives in selecting fruit and shade trees to sustain coffee agroforestry systems in Central America under progressive climate change. More than 50 trees are prioritized. Suitability maps are being developed for these species with niche modelling and climate projections to identify for each area which species are suitable or not.

Activity #4

Title: CSA investment and outscaling

Description: Hivos lead the development of investment plan of CSA practices for farmer cooperatives. They will provide tools of analysis in value chains, mainly financing value chain and gender toolkits. Additionally, Hivos will engage their partners and platform members in the region including Sustainable Food Lab, Landscape for Food People and Nature and FAST in the development of investment plans. Hivos will take the specific role of interlocutor between scientific research and the next users who include the farmer cooperatives, funders and representatives of the

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 30-04-2016
Leader: Solís, Juan Pablo <jsolis@hivos.org>, Hivos	
Status: On-going	**Justification:** Project partners have been actively engaged with relevant stakeholders for outscaling (e.g. IBD, Root Capital, SAFE, Neumann Foundation). During the Global Landscape Forum a session was organized on agroecology for coffee to connect different stakeholders on this topic. In a separate project, the CCAFS project partners Hivos and CEDECO and PRODECOOP have finalized a climate smart investment plan for a biofertilizer processing plant. With the support of CCAFS the lessons learned are analysed and published as a case study to share these experiences with other organizations in Latin America. An actor map exercise has been carried in each country.

Activity #5

Title: (BILATERAL) Linking agrobiodiversity value chains, climate adaptation and nutrition - Guatemala component

Description: This activity is part of a larger multi-lateral EC-IFAD project. It aims to empower local women and men farmers (including indigenous people) to build resilient livelihoods through agrobiodiversity-based solutions. The activity will build capacities of local, community-based organizations (CBO) and Self Help Groups (SHG) to collect information, share experiences and make self-directed decisions to foster knowledge building and local innovation. Beneficiary groups, particularly the most vulnerable, will be able to exchange data regarding weather, performance of varieties of crops, nutritional benefits and market information. Data generated through the mechanisms established by the activity will enhance the preparedness of farmers for climate variability and will help them to manage associated risks. Data on crops and varieties (e.g. prices, demand) will guide farmers and other value-chain actors to make informed choices regarding production of crops more aligned to market needs and emerging trends.

Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 31-12-2015
Leader: Padulosi, Stefano <s.padulosi@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #6

Title: (BILATERAL) Climate change analyses to support participatory investment plans in coffee-based landscapes

Submitted on 2016-03-04 at 04:15 UTC

Description: Hivos provides this grant to Bioversity to complement the other coffee landscape activities in this project to identify which interventions hold most promise for climate change adaptation in Central American coffee landscapes. This will help local actors to determine what to prioritize at the local level. Furthermore, what is prioritized locally will inform the development of plans by national and local governments, and private sector incentives and investments.	
Start date (dd-MM-yyyy): 01-01-2015	**End date (dd-MM-yyyy):** 30-06-2016
Leader: Van Zonneveld, Maarten <m.vanzonneveld@cgiar.org>, BI - Bioversity International	
Status: Complete	

Lessons regarding your project activities and possible implications for the coming planning cycle: This project will not have a following planning cycle.

Submitted on 2016-03-04 at 04:15 UTC

7. Leverages

<Not defined>

Submitted on 2016-03-03 at 20:16 UTC

Title: Global policy support for biologically diverse, climate resilient agriculture

Start date (dd-MM-yyyy)	01-01-2013	**End date (dd-MM-yyyy)**	31-12-2018
Management liaison	F4 - Flagship 4	**Mgmt. liaison contact**	Thornton, Philip <p.thornton@cgiar.org>
Lead organization	BI - Bioversity International - Italy	**Project leader**	Halewood, Michael <m.halewood@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP4: Policies and Institutions for Climate-Resilient Food Systems	Global: Global

Bilateral project(s) contributing to this project
167 - Strengthening national capacities to implement the International Treaty of PGRFA: Genetic Resources Policy Initiative (GRPI) Phase II (DGIS)
177 - Mutually supportive implementation of the Nagoya Protocol and Plant Treaty (Darwin Initiative)
181 - Integrated Seed Sector Development - Africa - 'Global Policies and National Realities'
184 - Farmers' seed systems and community seed banks in South Africa: a baseline study of selected sites

Summary

The project will support development and implementation of international policies and laws affecting the availability and use of genetic resources and associated information for Climate-Smart Agriculture. The project will monitor and make technical contributions to international meetings of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture, the Commission on Genetic Resources for Food and Agriculture, and to the Conferences of the Parties to the Convention on Biological Diversity and the Nagoya Protocol on Access and Benefit-sharing, and to intergovernmental and expert working groups created by those bodies to undertake intercessional work/negotiations.

The project will also support research related to implementation of those international agreements in national and subnational contexts. Special emphasis will be given to the multilateral system of access and benefit-sharing (MLS) under the ITPGRFA, which

constitutes the global pool of plant genetic resources from the CGIAR, 132 countries and other organizations.

2. Partners

Partner #1 (Leader)

Institution: BI - Bioversity International

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Halewood, Michael <m.halewood@cgiar.org>	Activity 2014-46 *Leader*. Activity 2014-47 *Leader*. Activity 2014-140 *Leader*. Activity 2014-143 *Leader*. Activity 2014-144 *Leader*.

Partner #2

Institution: ONS - Oficina Nacional de Semillas

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Quiros Ortega, Walter Paulo <wquiros@ofinase.go.cr>	Activity 2014-46 *Partner*.

Partner #3

Institution: MAGA - Ministerio de Agricultura, Ganadería y Alimentación

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Ajquejay, Samuel <sammyajquejay@gmail.com>	Activity 2014-46 *Partner*.

Partner #4

Institution: IICA - Instituto Interamericano de Cooperacion para la Agricultura

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Villalobos, Victor M. <iicahq@iica.ac.cr>	Activity 2014-46 *Partner*.

Partner #5

Institution: CATIE - Centro Agronómico Tropical de Investigación y Enseñanza

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Solano Sánchez, William <wsolano@catie.ac.cr>	Activity 2014-46 *Partner*. Activity 2014-47 *Partner*.

Partner #6

Institution: MAG - Ministerio de Agricultura

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions

Partner	Elizondo Porras, Flor Ivette <fielizondo@gmail.com>	Activity 2014-46 *Partner*.

Partner #7

Institution: IICA-Guatemala - Instituto Interamericano de Cooperacion para la Agricultura (Guatemala)

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Andrews, Dr. Keith Leslie <keith.andrews@iica.int>	Activity 2014-46 *Partner*.

Partner #8

Institution: CATIE-Guatemala - Centro Agronómico Tropical de Investigación y Enseñanza (Guatemala)

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Say Chavez, Eduardo Rolando <esay@catie.ac.cr>	Activity 2014-46 *Partner*.

Partner #9

Institution: CBD - Convention on Biological Diversity

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Garforth, Kathryn <kathryn.garforth@cbd.int>	Activity 2014-47 *Partner*.

Partner #10

Institution: ITPGRFA - International Treaty on Plant Genetic Resources for Food and Agriculture (governing body)

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Bhatti, Shakeel <shakeel.bhatti@fao.org>	Activity 2014-47 *Partner*.

Partner #11

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

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Colette, Linda <linda.colette@fao.org>	Activity 2014-47 *Partner*.

Partner #12

Institution: CGIAR Consortium Office

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Ellul, Philippe <p.ellul@cgiar.org>	Activity 2014-47 *Partner*.

Partner #13

Institution: COMESA - Common Market for Eastern and Southern Africa

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mukuka, John <jomukuka@comesa.int>	Activity 2014-47 *Partner*. Activity 2014-143 *Partner*.

Partner #14

Institution: EAC - East African Community

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Wafula, David <dwafula@eachq.org>	Activity 2014-47 *Partner*. Activity 2014-143 *Partner*.

Partner #15

Institution: LI-BIRD - Local Initiatives for Biodiversity, Research and Development

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Chaudhary, Pashupati <pchaudhary@libird.org>	Activity 2014-47 *Partner*.

Partner #16

Institution: GIZ - ABS Capacity Development Initiative, Deutsche Gesellschaft for Internationale Zusammenarbeit

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Drews, Andreas <andreas.drews@giz.de>	Activity 2014-47 *Partner*.

Partner #17

Institution: AU - African Union

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Teshome Kebede, Mahlet <MahletK@africa-union.org>	Activity 2014-47 *Partner*. Activity 2014-143 *Partner*. Activity 2014-144 *Partner*.

Partner #18

Institution: NARC - Nepal Agricultural Research Council

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Raj Bhatta, Madan <madan_bhatta86@yahoo.com>	Activity 2014-140 *Partner*.

Partner #19

Institution: National Biodiversity Centre, Ministry of Agriculture

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Yangzome Dorji, Tashi <yangzome2011@gmail.com>	Activity 2014-140 *Partner*.

Partner #20

Institution: RAB - Rwanda Agriculture Board

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Nyirigira, Antoine <a_nyirigira@yahoo.fr>	Activity 2014-143 *Partner*.

Partner #21

Institution: NARL - National Agricultural Research Laboratories

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Mulumba Wasswa, John <curator@infocom.co.ug>	Activity 2014-143 *Partner*.

Partner #22

Institution: CNRA - Centre national de recherche agronomique

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Kouablan Koffi, Edmond <kofiedmond@yahoo.fr>	Activity 2014-144 *Partner*.

Partner #23

Institution: SP/CONAGREP - Secretariat Permanent Commission Nationale de Gestion des Ressources Phytogénétiques

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions

Partner	Balma, Didier <balma_didier@yahoo.fr>	Activity 2014-144 *Partner*.

Partner #24

Institution: SAGE - Service d'Appui à la Gestion de l'Environnement

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Rakotoniaina, Naritiana <naritiana.sage@blueline.mg>	The Madagascar national CBD/ABS focal point is a staff member at SAGE. As such, SAGE will be one of the two organisations co-chairing the Madagascar national project steering committee. (The other co-chairing organisation is the Ministry of Agriculture.) SAGE will ensure inclusivity of stakeholder representatives in the national steering committee. It will also jointly oversee all project activities, identify partners, approve budgets, monitor activities and co-submit progress reports.

Partner #25

Institution: MinAgri - Ministry of Agriculture Madagascar

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Andriamahazo, Michelle <michelle.andriamahazo@gmail.com>	Responsibilities: As the ITPGRFA National Focal Point is located in the Environmental Service of the Ministry of Agriculture, the Ministry will be one of the two organisations co-chairing the Madagascar national project steering committee. (The other co-chairing organisation is SAGE). As such, the Ministry of Agriculture will ensure inclusivity of stakeholder representatives in the national steering committee. It will jointly oversee all project activities, identify partners, approve budgets, monitor activities and co-submit progress reports.

Partner #26

Institution: Cesaren - ONG Cercle de Sauvegarde des Ressources Naturelles

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Bossou, Bienvenu <cesarenong@yahoo.fr>	The Benin CBD/NP National Focal Point has appointed CeSaReN as its agent for the purposes of this project (and several other functions in the country). CeSaReN will be one of two organisations responsible for co-chairing the Benin national project steering committee. (together with INRAB). CeSaReN will ensure inclusivity of stakeholder representatives in the national steering committee. It will jointly oversee all project activities, identify partners, approve budgets, monitor activities and co-submit progress reports. CeSaReN

Partner #27

Institution: INRAB - Institut National de Recherche Agricole du Benin

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	Aly, Dijma <aldjim5@yahoo.fr>	The Benin ITPGRFA National Focal Point is located in the Institut National des Recherches Agricoles (INRAB). Consequently, the Institute will be one of the two organisations co-chairing the Benin national project steering committee (the other organisation is CeSeReN, as appointed agent for the National CBD/NP Focal Point).

Partnerships overall performance over the last reporting period: Partners in Costa Rica, Guatemala, Ivory Coast, Burkina Faso, Uganda, Rwanda, Bhutan and Nepal have strongly engaged in proposing policies for the effective implementation of the multilateral system of the ITPGRFA and organizing meetings, roundtables, seminars, etc. for their presentation to, and discussion by relevant national authorities. Partners' efforts in Guatemala were affected by changes in key officers within the Ministry of Agriculture. In Burkina Faso, governmental changes after President Compaoré's resignation at the end of 2015 led to changes among

some of our key partner institutions and interrupted relevant policy processes. This resulted in delays in the project's activities.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Early engagement of key partners is crucial in the implementation of the activities and necessary to faciliate uptake of results by relevant decision makers. Usual changes in high level positions appointed by the government make it advisable to build a strong team of technical officers whose positions are normally not subject to frequent turnovers and who become the main experts within their ministries and departments, and the principal advisers to individuals in decision-making, political positions.

Submitted on 2016-03-03 at 20:16 UTC

3. Locations

4. Outcomes

4.1 Project outcome narrative

Project outcome statement
Global and regional intergovernmental bodies will develop international policies, laws, guidelines, practical mechanisms to promote increased availability and use of biological diversity for climate change adaptation and risk management. National governments will implement those policies and laws.

Annual progress towards outcome (end of 2015): 8 countries will adopt policies to facilitate participation in a globally coordinated system of PGRFA pooling, sharing under the ITPGRFA for use in climate change adaptation research and development. .The CGRFA will adopts guidelines for countries to follow to integrate increased use of genetic resources in NAPs. The African Union will start to provide technical assistance to African member states to implement the ITPGRFA in harmony with the CBD/NP focusing on climate change adoption capacity strengthening.

Annual progress towards project outcome in the current reporting cycle (2015): All eight countries have appointed national organizations to lead the national policy development processes to implement the ITPGRFA. In Guatemala, Costa Rica, Ivory Coast, Burkina Faso, and Bhutan formal regulations or executive orders were developed to officially appoint these organizations. Thereafter, country teams/partners proposed policies for the effective participation in the MLS of the ITPGRFA. These policies have taken the form of agreements between national authorities in charge of implementing the Treaty and the CBD and Nagoya Protocol (Costa Rica, Uganda), new draft laws or amendments to existing laws for the implementation of the CBD/NP and the Treaty in a mutually supportive manner (Ivory Coast, Bhutan, Nepal); and new draft laws focusing on the implementation of the Treaty (Burkina Faso). Some of these policies have already been adopted (Costa Rica, Uganda, Nepal) while others are being discussed by relevant ministries (Burkina Faso) and specialized parliamentary committees (Ivory Coast, Bhutan). Uganda and Rwanda sent formal notifications to the ITPGRFA governing body concerning their PGRFA that is available now under the ITPGRFA.

The project has contributed to reinforcing the capacities of the African Union to provide technical assistance to African member states to implement the ITPGRFA in harmony with the CBD and its Nagoya Protocol. The African Union Commission now counts on a person fully dedicated to this work. In November 2015 the project organized a workshop entitled "Embedding mutually supportive implementation of the Plant Treaty and the Nagoya Protocol in the context of broader national policy goals" where teams of 5 representatives from 11 African countries and the African Union Commission analyzed strategies to generate policy support for using PGRFA for climate change adaptation. The African Union Commission agreed in principle to developing draft guidelines for ITPGRFA implementation, linked to climate change adaptation, in 2016.

Communication and engagement activities have contributed to achieving your Project outcomes: National level: we worked closely with national teams, attending national and international workshops, commenting on policy drafts, research outputs, policy briefs, discussion papers that provide evidence base for policy development.

Regional level: we actively supported the participation of AU Commission in a number of meetings related to national implementation of the ITPGRFA, Nagoya Protocol and climate change adaptation. We have included them in small expert meetings to develop policy development tools We invited them to co-host the November meeting in Addis with 11 country teams and supported a one day session for participants to present to the AU Planning Commission.

Evidence documents of progress towards outcomes: Comms Report Treaty Nagoya Meeting Addis Dec 2015.docx

Annual progress towards outcome (end of 2016): The WG-EFMLS created by the ITPGRFA Governing Body will recommend changes to the MLS that will increase the diversity included in the global PGR pool created by the Treaty and also increase the amount of funds that are available through the benefit sharing fund to support climate-smart agriculture. The African Union and the Tri-partite COMESA-EAC-SADC and IICA will consider options for a regional policies to facilitate exchange of genetic diversity for climate change adaption.

Annual progress towards outcome (end of 2017): African Union and IICA adopts policy on facilitating access and benefit sharing for climate change adaptation. Reviews of lessons learned from national implementation experiences in previous 8 countries.

Annual progress towards outcome (end of 2018): Eight additional countries will adopt policies for the joint implementation of the ITPGRFA/MLS and the CBD/NP to increase their climate adaptation capacity.
The Conference of the Parties to the CBD/NP COP endorses program of work focusing on access and using biological diversity for climate change subject to benefit sharing arrangments.
UNFCCC COP acknowledges the importance of facilitated access to genetic resources for climate change responsiveness.
Increased financial support from the ITPGRFA Benefit Sharing Fund for projects promoting CSA.

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: Our experience during the current reporting cycle confirms our assumptions in relation to the factors that influence generation and uptake of policy relevant outputs. In particular, facilitating connections among individuals working in different governmental agencies on similar issues, but from different angles not only helps create a critical mass necessary to raise the awareness about the importance of agricultural biodiversity for climate change adaptation but also allows the development of comprehensive and inclusive policies with

chances to be adopted and observed by a wider number of stakeholders.

4.2 Contribution to CCAFS Outcomes

FP4 - Outcome 2019: Appropriately directed institutional investment of regional/global organisations and processes (e.g. IFAD, WB, FAO, UNFCCC) based on national/regional engagement to learn about local climate smart food system priorities

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

2019	
Target value: 3	**Cumulative target to date:** Cannot be Calculated
Target narrative: Revision of the terms and conditions of the multilateral system of access and benefit sharing created by ITPGRFA to enhance the amount of genetic diversity and information that is included in the common pool and available for climate smart research and development, and the quantum of financial resources that are directed by users to the international benefit sharing fund. International funding sources directed to support climate smart agricultural practices linked to development and exploitation of ABS policy CBD/NP COP endorses program of work focussing on mainstreaming biological diversity into sustainable, climate smart, agriculture	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: -	

2015		
Target value: 1 guideline adopted by intergovernmental policy making body	**Cumulative target to date:** Cannot be Calculated	**Target achieved:** 1.0
Target narrative: CGRFA adopts guidelines for countries to follow to integrate increased use of genetic resources in NAPs.		
Narrative for your achieved targets, including evidence: The CGRFA adopted the guidelines in January 2015. This is reported upon, as an outcome story, under P88.		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The guidelines adopted by the Commission recommend that gendered uses of GRFA should be taken into consideration when developing plans for integrating GRFA into national climate change strategies, and that women and marginalized social groups should be represented in processes for the development of those strategies.		

2016	
Target value: 1	**Cumulative target to date:** Cannot be Calculated
Target narrative: The tripartite COMESA-EAC-SADC climate change program endorses a strategy for facilitated exchanges of crop and tree genetic diversity	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: -	

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

FP4 - Outcome 2019: National/sub-national jurisdictions enact equitable food system policies and increase institutional investment that take into consideration climate smart practices/strategies, better articulated among themselves and in collaboration with private sector, civil society and researchers informed by CCAFS decision support tools

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

2019	
Target value: 6	**Cumulative target to date:** 11
Target narrative: Three countries will adopt two policy measures to implement the ITPGRFA/MLS in harmony with the CBD/Nagoya Protocol from the following list: Ministerial decrees confirming national crop diversity included in multilateral system of access and benefit sharing under the ITPGRFA; New/revised national decrees/regulations/legislation on access and benefit sharing under the CBD/Nagoya Protocol to make space of the operation of the ITPGRFA; New/revised national decrees/regulations/legislation empowering actors to share materials under the ITPGRFA; National multi-stakeholder platforms established for coordinated ABS policy development and capacity building; Guidelines issued by competent authorities on how to operate the ITPGRFA and NP for climate change adaptation.	

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

2015		
Target value: 4	**Cumulative target to date:** 4	**Target achieved:** 12.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: - Rwanda: Confirmation of PGRFA in MLS - Bhutan: Ministerial decree appointing competent authority (CA decree) - Costa Rica: Directriz Normativa consensuada entre el punto focal del TIRFAA y CONAREFI (Ministerio de Agricultura) y CONAGEBIO (Ministerio de Ambiente); confirmation of PGRFA in MLS; CA decree -Guatemala: CA decree; confirmation of PGRFA in MLS - Nepal: New Agrobiodiversity Policy; revised NBSAP - Uganda: Memorandum of Understanding, National Environment (Access to genetic resources and benefit sharing) Regulations, and Temporary procedure for accessing plant genetic resources for food and agriculture; confirmation of PGRFA in MLS; CA decree - Burkina Faso: CA decree		
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: Perspectives, interests and needs of various social actors in relation to the ITPGRFA/MLS and related policies and laws were identified and the degree of direct and active involvement of women/men farmers in national policy processes assesed. National decision makers made some efforts to take differences into consideration in policy/law formulation.		

2016	
Target value: 1	**Cumulative target to date:** 5
Target narrative: Adopt policy to create community seed banks as part of sustainable use and climate change adaptation strategy	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: N/A	

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

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

Activity 2014-46: This links to existing activities in flagship 1 related to participatory evaluation of crop diversity sourced from genebanks, farmers, breeders, companies in South Asia, South east Asia, East Africa, LAM

Collaborating with other CRPs: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: Nepalese government adopts two policies increasing availability and use of crop diversity for climate resilience
Outcome statement: CCAFS partners led the process to revise the National Agrobiodiversity Policy, 2007 so that it now it prioritizes identification and and use of genetic resources for climate-change adaptation and ensuring access to farmers. It also provides the authorizing environment for implementation of the ITPGRFA. It was approved by Cabinet. CCAFS partners also made substantial contributions to revising the NBSAP reflecting same priorities (as Agrobiodiversity Policy) and the need to integrate biodiversity into climate change strategies. Revised version approved by Cabinet.
Research Outputs: Draft National Agrobiodiversity Policy (2007) Revised 2014 Comments and suggested text for inclusion in the National Biodiversity Strategic Action Plan 2014-2020.
Research Partners: The research partners were Nepal Agricultural Research Council (NARC), Ministry of Agricultural Development (MoAD) and Local Initiatives for Biodiversity, Research and Development (LIBIRD). Madan Raj Bhatta, Chief, National Agriculture Genetic Resources Center (National Genebank) under NARC coordinated in the process of revising National Agrobiodiversity Policy 2007 and assembling comments and presenting them for revision of the NBSAP. LIBIRD participated in the revisions. MoAD organized the national level consultation meetings and created a forum to discuss and advance the processes. Other key personnel involved the process were Dr Devendra Gauchan, Dr Bal K. Joshi, Krishna H. Ghimire (NARC); Chiranjibi Bhattarai as independent legal expert, Dr Pashupati Chaudhary and Rachana Devkota (LIBRID), and Bidya Pandey and Ramita Manandhar (MoAD).
Activities that contributed to the outcome: In 2012, the CCAFS partners received approval from the Secretary, Ministry of Agricultural Development to coordinate a process to revise the 2007 Agrobiodiversity Policy, including a series of consultations with seed companies, community seed banks, farmers organizations, other Ministries, research organizations and CBD, UNFCCC and ITPGRFA focal points and the National Agriculture Biodiversity Conservation Committee. As part of those consultations, the CCAFS research partners shared information about how access to PGRFA from other countries will become increasingly important for Nepal to adapt to changing climatic conditions. The first draft was considered by the National Agrobiodiversity Conservation Committee, which is chaired by the Secretary of Ministry of Agricultural Development. CCAFS partners made revisions following the committee's recommendations, and the revised draft was submitted by the Secretary to the Nepalese cabinet. The lead CCAFS partner presented the draft policy to the Nepalese Council of Ministers in November, 2014, which approved the policy.
Non-research Partners: Jaya Mukunda Khanal, Secretary, MoAD; Udhay Chandra Thakur, National Focal Point for ITPGRFA provided authority for the process. MoAD played key role in finalizing and approving the agrobiodiversity policy and submitting it to Cabinet.
Output Users: National Agrobiodiversity Conservation Committee, the Secretary of Ministry of Agricultural Development, Nepalese Council of Ministers
How the output was used: The proposed draft policy was considered and adopted by the various nested layers of decision making authorities and bodies in the country.

Evidence of the outcome: This blog posts captures the earlier, mid-stage efforts made by our CCAFS partners and the Bioversity coordinated GRPI project to work towards these outcomes, when the teams were developing and submitting drafts for consideration by policy decision-makers.

https://grpi2.wordpress.com/2014/01/27/securing-crop-diversity-for-climate-change-adaptation-creating-policy-space-for-nepal-to-participate-in-the-multilateral-system-of-access-and-benefit-sharing/

References: Agro Biodiversity Policy, 2007 (First Amendment) 2014 available at https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBUEtHcWZQdFowSzg

Nepal's National Biodiversity Strategy and Action Plan, 2014-2020 at https://www.google.it/search?q=nepal+NBSAP+2014&sourceid=ie7&rls=com.microsoft:en-US:IE-Address&ie=&oe=&gfe_rd=cr&ei=TN3WVvWdHcLD8geKpqSoCA&gws_rd=ssl

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: <Not defined>

Outcome case study #2

Title: Uganda adopts two policies to increase availability and use of PGR for climate change adaptation

Outcome statement: National institutions/CCAFS partners (with the support of Bioversity) prepared Uganda's first list of crop accessions to be made available through the multilateral system and notified the ITPGRFA Secretariat accordingly, creating the opportunity for users in Uganda and around the world to access germplasm conserved in Uganda.

CCAFS partners negotiated an agreement between lead agencies across three sectors to define responsibilities and coordinate actions for regulating access to genetic resources and benefit sharing

Research Outputs: A memorandum of understanding was developed establishing a) that the National Council for Science and Technology (UNCST), is ultimately responsible for implementing both ITPGRFA and the CBD/Nagoya protocol in Uganda, but that b) delegation of responsibility to the Uganda national genebank (NARO-PGRC) for regulating access to PGRFA under the ITPGRFA, and c) delegation of responsibility to the National Environmental Management Agency (NEMA) for regulating access under the CBD/Nagoya Protocol. The overcomes a policy bottleneck that had existed for many years, whereby no organization was clearly recognized to have authority to provide access to PGRFA.

Notification to the Treaty Secretary including a list of PGRFA from Uganda that are included, and internationally available, through the ITPGRFA's multilateral system.

Research Partners: The National Agricultural Research Organization, the Uganda National Council for Science and Technology, the National Biosafety Committee, The National Environment Management Authority, the Ministry of Agriculture, the Uganda Wildlife Authority, Makerere University, CIAT.

Submitted on 2016-03-03 at 20:16 UTC

Activities that contributed to the outcome: A national research team consisting the national Treaty Focal Point, genebank staff, and researchers from government and non-government organizations, conducted research, awareness-raising and capacity-building activities to identify options for Uganda to implement the ITPGRFA and take advantage of it for climate change adaptation in particular. They conducted research on past levels of reliance on 'foreign germplasm,' and investigated case studies of potentially increased reliance based on climate changes. They coordinated country-wide consultations with organizations holding plant genetic resource collections, to identify those which are automatically, or could be voluntarily be, included in the MLS. They sought confirmation of the list with the competent national authority and followed up with notice being sent to the ITPGRFA Secretary. The ITPGRFA National Focal Point worked closely with the Nagoya National Focal Point and the NCST, to broker the MoU and the PGRFA list to create space for implementing the ITPGRFA.

Non-research Partners: The National Agricultural Advisory Services, Action Coalition for Development and Environment, the Uganda Farmers' Association, CARITAS, and the Kiziba Community Genebank all participated in consultations.

Output Users: The direct users of the MoU are the three relevant national institutions implementing the ITPGRFA, and CBD/Nagoya Protocol. The direct users of the notification is the Secretariat of the Treaty, and all PGRFA users around the world who will learn about availability of those materials from the ITPGRFA website.

How the output was used: The MoU and the PGRFA inclusion list provided the authorizing environment for the operation of the MLS under the ITPGRFA. In future, genebank managers, breeders, researchers and farmers from Uganda and around the world who want to provide or obtain access to genetic resources will benefit from it.

Evidence of the outcome: These blog posts -- the most recent co-authored by the Uganda National Focal Points for the ITPGRFA and CBD/Nagoya -- capture the early, mid-stage and recent contributions of our national CCAFS partners to these outcomes.

https://grpi2.wordpress.com/2016/03/02/climate-change-adaptation-and-mutually-supportive-implementation-of-access-and-benefit-sharing-policies-in-uganda/ Blog post co-authored .

https://grpi2.wordpress.com/2013/10/31/participatory-research-and-capacity-strengthening-in-east-africa-linking-farmers-scientists-and-policy-makers-to-use-crop-diversity-for-climate-change-adaptation/

https://grpi2.wordpress.com/2013/01/30/climate-analogues-rwanda-uganda/

References: Memorandum of Understanding between NCST, NARO and NEMA available at https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBUEtHcWZQdFowSzg

Notification from Ugandan national competent authority to the Secretary of the International Treaty available at https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBUEtHcWZQdFowSzg

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: <Not defined>

Outcome case study #3
Title: Two policy outcomes in Costa Rica for ensuring facilitated exchange of plant genetic resources
Outcome statement: National governmental agencies signed an agreement with measures for implementing the multilateral system in Costa Rica, providing facilitated access to Costa Rica PGRFA in harmony with other international conventions. The National Institute for Innovation and Transfer of Agricultural Technology coordinated consultations regarding PGRFA included in the MLS and notified the ITPGRFA Secretariat about the inclusion of those collections, now shared with all potential PGRFA users worldwide. CCAFS national partners facilitated communication among agencies and drafted and negotiated the agreement.
Research Outputs: CCAFS national partners published one journal article and one report on legal, policy and institutional recommendations for the implementation of the ITPGRFA (2013 and 2014, available at http://revistas.ucr.ac.cr/index.php/juridicas/article/view/21539/21789 and https://grpi2.files.wordpress.com/2015/04/identificacic3b3n-del-perfil-y-de-las-posibles-autoridades-nacionales_tirfaa-en-costa-rica.pdf). CCAFS national partners drafted and negotiated a memorandum of understanding among national agencies in charge of the implementation of the ITPGRFA, the CBD and the Nagoya Protocol for the implementation of the multilateral system of the ITPGRFA in line with the other international conventions. (2015, included as an annex) In support of these outputs, national partners produced also three reports on i) the importance of genetic resources for Costa Rica's production of food security crops; ii) the dependence of Costa Rica on other countries' genetic resources of these crops; and iii) the potential of genetic resources in allowing these crops' adaptation to climate change (2014 and 2015, a synthesis is available as at: https://cgspace.cgiar.org/handle/10568/71223)
Research Partners: National Commission on Plant Genetic Resources (CONAREFI), Centro Agronomico Tropical de Investigación y Enseñanza (CATIE), National Institute for innovation and transfer of agricultural technologies (INTA), Ministry of Agriculture.
Activities that contributed to the outcome: A national research team consisting the national Treaty Focal Point and researchers from various organizations conducted research, awareness-raising and capacity-building activities to identify and discuss options for the implementation of the ITPGRFA in Costa Rica, paying a particular attention its potential in supporting national efforts for agriculture adaptation to climate change. They conducted research on past levels of reliance on 'foreign germplasm,' and investigated case studies of potentially increased reliance based on climate changes. They also conducted legal and policy analyses of different implementation options. They coordinated consultations with relevant governmental organizations to agree on the most efficient and feasible way to implement the multilateral system in harmony with other related conventions like the CBD and its Nagoya Protocol and supported INTA in identifying the national collections included in the multilateral system. Interaction with Bioversity experts and national experts from other countries involved in the project contributed to the outputs.
Non-research Partners: National Commission on Biodiversity Management (CONAGEBIO, Ministry of Environment), National Seed Office (Ministry of Agriculture)
Output Users: The main users of the outputs have been the CONAGEBIO and the Ministry of Agriculture, who are the governmental agencies in charge of implementing the ITPGRFA, the CBD and the Nagoya Protocol.
How the output was used: Users have used the project outputs to develop a directive (Included in the MoU) which spells out the procedures and each agency's tasks in relation to the implementation of the multilateral system in Costa Rica. Outputs have also assisted and empowered the INTA to notify the collections included.

Submitted on 2016-03-03 at 20:16 UTC

Evidence of the outcome: The following blog-posts document early, mid-stage and recent contributions of our national CCAFS partners to the outcome:
https://grpi2.wordpress.com/2012/09/04/grpi-2-project-starts-in-the-americas-kick-off-workshop-in-costa-rica/
https://grpi2.wordpress.com/2014/04/02/sistemas-de-informacion-geografica-para-un-mejor-manejo-de-la-informacion-sobre-la-diversidad-genetica-de-nuestros-cultivos/
https://grpi2.wordpress.com/2015/04/17/hot-off-the-press-outputs-from-partners/

References: MoU: Carta de Entendimiento para la implementación del Sistema Multilateral de Acceso y Distribución de Beneficios del Tratado Internacional de Recursos Fitogenéticos para la Agricultura y la Alimentación y su relación con el régimen legal nacional de acceso y distribución de beneficios con miras a lograr una implementación sinérgica de ambos regímenes (in Annex)

Notice to Treaty Secretariat regarding materials included in the multilateral system, 14 October 2015, available at http://www.planttreaty.org/inclusions

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: MoU Costa Rica.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>
FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014
FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues **Brief bullet points of your expected annual 2014 contribution towards the selected MOG** <Not defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not defined>

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

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

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

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

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

Major Output groups - 2015

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

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Eight countries have made substantial progress on MLS implementation through analysis of the legal space for MLS implementation, identification of options for the revision of relevant policies and laws and development of amendments to the relevant instruments. National policy actor and network analysis was used to strengthen stakeholder engagement.

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:
Perspectives, interests and needs of various social actors in relation to the ITPGRFA/MLS and related policies and laws were identified and the degree of direct and active involvement of women/men farmers in national policy processes assesed. National decision makers made some efforts to take differences into consideration in policy/law formulation.

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

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

Brief summary of your actual 2015 contribution towards the selected MOG:
We sponsored/organized interactions between African Union Commission and key national level actors (engaged, cumulatively, in climate change adaptation, genetic resource conservation and sustainable use, and domestication of multilateral environmental agreements) from a number of African countries. This culminated in a decision that AU Commission/CCAFS will develop policy/guidelines in 2016/17.

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 policy/guidelines will, when drafted, highlight the importance of social inclusion and provide examples for how national programs can put inclusive systems in place to allow women and men, and socially marginalized people within countries, to take advantage of the ITPGRFA for climate change adaptation.

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
National partners engage in policy analysis and development, most of which to be finished in 2017 and 2018

Brief plan of the gender and social inclusion dimension of the expected annual output
State recognition of local community rights to participate in decision making regarding the conservation and exploitation of genetic resources. Local community develop access and benefit sharing protocols. Women included in local community committees to consider access applications.

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

Brief bullet points of your expected annual 2016 contribution towards the selected MOG
AU Commission works with Bioversity on guidelines on implementing ABS laws to support climate change adaptation based on consultations with national and local actors.

Brief plan of the gender and social inclusion dimension of the expected annual output
The guidelines will encourage African AU member states to put systems in place reflecting recognition of the right of local communities -- and wormen within those communities -- to participate in decision making concerning access to and management of genetic diversity and sharing benefits associated with their use by others.

Lessons regarding your major outputs groups (MOGs) and possible implications for

the coming planning cycle: <Not defined>

5.2 Deliverables

Deliverable #1

Main Information	
Title: National policies proposed re: implementation MLS, national diversity in MLS, empowerment of providers	
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:** Reference material
Year of expected completion: 2015	
Status: Complete	

Next-user
National competent authorities responsible for adopting/rejecting proposed policies
Knowledge, attitude, skills and practice changes expected in next-user: The national competent authorities will actively promote the consideration and acceptance of the proposed policies, shepherding the requisite consultations and final decision-making processes by relevant governmental bodies.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of competent authorities by securing appropriate roles for them in the project; engaging national researchers to develop background research papers and policy briefs. Meeting occasionally with the national focal point at international meetings of the ITPGRFA, CGRFA and/or the CBD.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International
Partner #2: Solano Sánchez, William <wsolano@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza
Partner #3: Ajquejay, Samuel <sammyajquejay@gmail.com>, MAGA - Ministerio de Agricultura, Ganadería y Alimentación

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: -1
Dissemination URL: http://www.planttreaty.org/sites/default/files/Notificaci%C3%B3n%20INTA%20al%20SML%20del%20TIRFAA.pdf

Deliverable Metadata
Description: 1) Costa Rica official notification to the Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture about the national collections of plant genetic resources that are included in the multilateral system of the Treaty and therefore fully available for plant researchers and breeders around the world. 2) Memorandum of understanding between the national focal point for the CBD (CONAGEBIO) and the national focal point for the ITPGRFA (CONAREFI and Ministry of Agriculture) creating space for the implementation of MLS in Costa Rica and defining the responsibilities of both organizations in relation to the MLS. 3) Proposals for modifications to the National Seed Law to recognize the authority of the National Seed Office (OFINASE) and the CONAREFI as the organizations in charge of coordinating the implementation of the multilateral system in Costa Rica.
Creator / Authors: Instituto Nacional de Innovación y Transferencia en Tecnología Agropecuaria; CONAREFI and CONAGEBIO; OFINASE
Author Identifier: <Not defined>
Publication / Creation date: 14-10-2015
Language: Spanish
Coverage: Costa Rica

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #2

Main Information
Title: 2 policy briefs - countries' current/future dependence on foreign germplasm to adapt to climate changes
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

Submitted on 2016-03-03 at 20:16 UTC

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper
Year of expected completion: 2015	
Status: Complete	

Next-user

Governmental and non governmental policy actors

Knowledge, attitude, skills and practice changes expected in next-user: Policy actors/stakeholders who previously were reluctant to promote participation in the ITPGRFA/MLS will understand how it contributes to the country's capacity to adapt to climatic uncertainties. They are expected to use this new knowledge in the formulation and implementation of new or revised policies, strategies, program and projects.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory methods for conducting the relevant research involving a range of stakeholders, including those who have been reluctant to endorse full participation in the ITPGRFA/MLS. Engaging researchers in projects to analyze down-scaled climate data, crop suitability models and passport data for germplasm.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

Deliverable dissemination

Open access restriction: Yes

License adopted: CC 3.0

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/71223

Deliverable Metadata

Description: One of the main considerations underlying the establishment of the International Treaty on Plant Genetic Resources for Food and Agriculture and its Multilateral System of Access and Benefit Sharing is the recognition of countries' high interdependence on the genetic resources of the crops and forages which they depend upon for their food security. A continued appreciation of how countries have benefited from facilitated exchange of germplasm in the past and are likely to continue doing so in the future is needed, in order to move forward the implementation of the Multilateral System and creating a truly global pool of genetic resources for countries' agricultural development and adaptation to climate change. Using Costa Rica as a case and rice and bean as key crops, the paper presents a picture of the dynamics of their genetic resources, both inside and outside of the country, over past years and into the future. It illustrates the extent to which Costa Rica is dependent upon germplasm from other countries for its food security, and how, in a complementary manner, other countries rely upon germplasm from Costa Rica. It is hoped that the information presented here may encourage and facilitate the implementation of the International Treaty and its Multilateral System in the country.

Creator / Authors: Estrada Garro F,Galluzzi G,Elizondo Porras FY

Author Identifier: <Not defined>

Publication / Creation date: 2016-02-26T10:44:05Z,2016-02-26T10:44:05Z,2016-02-26

Language: en

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #3

Main Information

Title: National policies proposed and possibly adopted re: creating space for operation of the MLS

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: Reference material

Year of expected completion: 2015

Status: Complete

Next-user

National competent authorities responsible for adopting/rejecting proposed policies

Knowledge, attitude, skills and practice changes expected in next-user: Confidence in knowledge that Rwanda's and Uganda's participation in the MLS will significantly increase their overall national capacity to adapt agricultural systems to increasing climactic variability. Confidence that the proposals being proposed are well suited to the countries-concerned, high quality, and with minimal vulnerability to public criticism.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of competent authorities by: securing agreement of the national ITPGRFA to be the titular head of the project steering committee; securing his/her approval of the initial letter of agreement transferring funds to the lead national organization clearly setting out the policy objectives; engaging competent authorities in national workshops

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Partner #2: Nyirigira, Antoine <a_nyirigira@yahoo.fr>, RAB - Rwanda Agriculture Board

Partner #3: Mulumba Wasswa, John <curator@infocom.co.ug>, NARL - National Agricultural Research Laboratories

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: <Not defined>

Deliverable Metadata

Description: The brief "climate change adaptation and mutually supportive implementation of access and benefit Sharing policies in Uganda' describes a strategy being developed and implemented for climate change adaptation through facilitated access to genetic resources by making use of the multilateral system of Access and Benefit Sharing (ABS) and the CBD Nagoya protocol. The strategy is currently informing the revision of the 2007 ABS law and regulations that aims to bring the implementation of the ITPGRFA in harmony with the provisions of the CBD and the Nagoya Protocol.

Creator / Authors: Gloria Otieno, John Wasswa Mulumba and Francis Ogwal

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Uganda

Deliverable Data sharing
https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBUEtHcWZQdFowSzg

Deliverable #4

Main Information	
Title: National policies proposed and possibly adopted re: creating space for operation of the MLS	
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:** Reference material
Year of expected completion: 2015	
Status: Complete	

Next-user
National competent authorities responsible for adopting/rejecting proposed policies in Burkina Faso.
Knowledge, attitude, skills and practice changes expected in next-user: The national competent authorities will actively promote the consideration and acceptance of the proposed policies, shepparding them requisite consultations and final decision-making processes by relevant governmental bodies.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of competent authorities by: securing agreement of the national ITPGRFA to be the titular head of the project steering committee; securing his or her approval of the initial letter of agreement transferring funds to the lead national organization clearly setting out the policy objectives.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4

Level of shared ownership (partnerships across org.)	5
What is your personal perspective of the importance of this product	3

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

Deliverable Metadata
Description: Draft law and accompanying explanatory note for the implementation of the multilateral system of the ITPGRFA in Burkina Faso. It has been submitted to the Ministries of Agriculture and Science, Technology and Innovation.
Creator / Authors: Institut de l'Environnement et de Recherches Agricoles
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: French
Coverage: Burkina Faso

Deliverable Data sharing
https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBUEtHcWZQdFowSzg

Deliverable #5

Main Information	
Title: National policies proposed and possibly adopted re: creating space for operation of the MLS	
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:** Reference material
Year of expected completion: 2015	

Status: On-going	**Justification for cancelling the deliverable:** An updated and revised Biodiversity Act was produced through a consultative process. The updated and revised Act will be submitted for government approval in 2016.

Next-user

National competent authorities responsible for adopting/rejecting proposed policies

Knowledge, attitude, skills and practice changes expected in next-user: The national competent authorities will actively promote the consideration and acceptance of the proposed policies, shepparding them requisite consultations and final decision-making processes by relevant governmental bodies.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of competent authorities by: securing agreement of the national ITPGRFA to be the titular head of the project steering committee; securing his/her approval of the initial letter of agreement transferring funds to the lead national organization clearly setting out the policy objectives; engaging competent authorities in national workshops;

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

Address gender and social inclusion aspect	2
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	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Description: Bioversity Act of the Kingdom of Bhutan, 2016, is the updated and revised Bioversity Act of 2003. The Act was updated and revised to take full account of Bhutan's obligations derived from becoming a signatory of the ITPGRFA and the Nagoya Protocol. The 2016 Act has eight chapters. It will be submitted for government approval in 2016.

Creator / Authors: National Biodiversity Center of Bhutan

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Bhutan

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #6

Main Information

Title: 2 policy briefs - countries' current/future dependence on foreign germplasm to adapt to climate changes

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

Governmental and non governmental policy actors in Burkina Faso

Knowledge, attitude, skills and practice changes expected in next-user: Policy actors/stakeholders, previously reluctant to promote participation in the ITPGRFA/MLS will understand how it contributes to countries' capacity to adapt to climatic uncertainties. They will add their voices to the growing number of organizations calling on government to put policy measures and institutional mechanisms in place to implement the MLS.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory methods for conducting the relevant research involving a range of stakeholders, including those who have been reluctant to endorse full participation in the ITPGRFA/MLS. Engaging researchers in projects to analyze down-scaled climate data, crop suitability models and passport data for germplasm.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

Open access restriction: Yes

License adopted: CC 3.0

Dissemination Channel: -1

Dissemination URL: https://cgspace.cgiar.org/handle/10568/71222

Deliverable Metadata

Description: Title: The importance of international PGRFA exchanges for national crop improvement: how past patterns and future needs support the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture in Burkina Faso

Abstract: This working paper analyses and discusses patterns of past, present and future interdependence on plant genetic resources for food agriculture in Burkina Faso, in the context of the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture.

The retrospective element traces back the history of domestication or introduction of key crops in Burkina Faso and their subsequent adoption/diffusion; the present-day dimension provides a snapshot of important achievements based on international PGRFA exchanges; the future perspective include an investigation of future potential germplasm needs to respond to the likely impacts of climate change on Burkinabe agricultural production. The paper should contribute to increased awareness among stakeholders about the extent to which Burkina Faso is dependent upon germplasm from other countries for its food security, and how, in a complementary manner, other countries rely upon germplasm from Burkina Faso. It is hoped that this will support and encourage national implementation of the International Treaty and its Multilateral System of Access and Benefit Sharing.

Creator / Authors: Ali Bougma, Gea Galluzzi, Mahamadou Sawadogo

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English and French

Coverage: Burkina Faso

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #7

Main Information	
Title: 2 policy briefs - countries' current/future dependence on foreign germplasm to adapt to climate changes	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** The article was finalized and submitted for journal review.

Next-user
Governmental and non governmental policy actors in Bhutan
Knowledge, attitude, skills and practice changes expected in next-user: Policy actors/stakeholders, previously reluctant to promote participation in the ITPGRFA/MLS will understand how it contributes to countries' capacity to adapt to climatic uncertainties. They will add their voices to the growing number of organizations calling on government to put policy measures and institutional mechanisms in place to implement the MLS.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory methods for conducting the relevant research involving a range of stakeholders, including those who have been reluctant to endorse full participation in the ITPGRFA/MLS. Engaging researchers in projects to analyze down-scaled climate data, crop suitability models and passport data for germplasm

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: An analysis of food crop germplasm flows into and out of Bhutan was carried out to determine the extent of reliance of Bhutanese agriculture on introduced germplasm. Methods used included literature review, key informant interviews, field visits and crop pedigree analysis. Bhutan has been introducing foreign germplasm since the 1960s. By December 2015, a total of about 300 varieties of 46 food crops including several non-traditional crops were introduced. Germplasm sources include CGIAR centres such as IRRI, CIMMYT and ICARDA, AVRDC, and countries such as Bangladesh, India, Japan, Korea, Nepal and Thailand. Pedigree analysis of rice varieties indicated that 74% of the released varieties originate in other countries. Bhutan has also contributed germplasm to several genebanks and countries. For example, IRRI has distributed about 3800 Bhutanese rice seed samples globally. Using imported germplasm, Bhutan has formally released over 180 varieties of cereals, fruit and vegetables. Prior to Convention on Biological Diversity, the outflow was largely unregulated, but the country is now developing formal exchange mechanisms with the creation of the National Biodiversity Centre in 1995. Bhutan's reliance on external germplasm is rated high, a reality not well known by many Bhutanese people.

Creator / Authors: Mahesh Ghimiray and Ronnie Vernooy

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: English

Coverage: Bhutan

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #8

Main Information

Title: 2 policy briefs - countries' current/future dependence on foreign germplasm to adapt to climate changes

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:** Book chapters

Year of expected completion: 2015

Status: On-going	**Justification for cancelling the deliverable:** The chapter was finalized and is currently being text edited.

Next-user
Governmental and non governmental policy actors in Nepal
Knowledge, attitude, skills and practice changes expected in next-user: Policy actors/stakeholders, previously reluctant to promote participation in the ITPGRFA/MLS will understand how it contributes to countries' capacity to adapt to climatic uncertainties. They will add their voices to the growing number of organizations calling on government to put policy measures and institutional mechanisms in place to implement the MLS.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Participatory methods for conducting the relevant research involving a range of stakeholders, including those who have been reluctant to endorse full participation in the ITPGRFA/MLS. Engaging researchers in projects to analyze down-scaled climate data, crop suitability models and passport data for germplasm

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International
Partner #2: Raj Bhatta, Madan <madan_bhatta86@yahoo.com>, NARC - Nepal Agricultural Research Council

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

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

Description: To effectively implement the multilateral system (MLS) and facilitate exchange of genetic materials it is important to generate empirical evidence of the extent to which Nepal is dependent on foreign-sourced plant genetic resources for food and agriculture for its agricultural research and development (including breeding) and ultimately to food security. It is also important to examine how the flow of plant genetic resources takes place, how the resources are used for agricultural research and development, and what the pedigree of varieties important for food security looks like. It is also important to understand the gap in understanding of stakeholders on constraints and opportunities of exchange of plant genetic resources through MLS. This chapter thus presents the patterns of germplasm flows and their contribution to crop breeding for developing modern varieties; analyzes pedigree of modern varieties of selected crops that are important for national food security; identifies the origins of ancestors of these modern varieties and documents key stakeholders' perceptions on the pros and cons of exchange of plant genetic resources through MLS in order to give policy feedback to improve policymakers' understanding of the subject.

Creator / Authors: Bal Krishna Joshi, Madan Raj Bhatta, Krishna Hari Ghimire and Deepa Singh

Author Identifier: <Not defined>

Publication / Creation date: 2016

Language: English

Coverage: Nepal

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #9

Main Information

Title: Discussion paper/policy brief - Analysis of ITPGRFA member states' interdepence on PGRFA

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

Main Type: Reports, Reference Materials and Other Papers

Sub Type: Discussion paper

Year of expected completion: 2015

Status: Complete

Next-user

Delegates to the Open-Ended Working Group to Enhance Functioning of the MLS (WG-EFMLS) and Governing Body of the ITPGRFA

Knowledge, attitude, skills and practice changes expected in next-user: Delegates will decide to recommend options for the reform of the multilateral system of access and benefit sharing that reflect a full appreciation of the value of access to genetic diversity for a variety of purposes, including climate change adaptation.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Submitted to Third meeting of the Ad Hoc Open-ended Working Group to Enhance the Functioning of the Multilateral System of Access and Benefit-sharing, Brasilia, Brazil, 01/06/2015 - 05/06/2015 (IT/OWG-EFMLS/Research Paper 9). The Global Crop Diversity Trust liked the paper and published (on-line) an author interview regarding main findings at http://www.planttreaty.org/inclusions

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Partner #2: Bhatti, Shakeel <shakeel.bhatti@fao.org>, ITPGRFA - International Treaty on Plant Genetic Resources for Food and Agriculture (governing body)

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/66627

Deliverable Metadata

Description: Galluzzi, G.; Halewood, M.; Lopez-Noriega, I.; Vernooy, R. (2015). Twenty five years of international exchanges of plant genetic resources facilitated by the CGIAR genebanks: a case study on international interdependence. Discussion Paper. Bioversity International.

This discussion paper, coordinated by Bioversity international and supported by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is submitted to the Ad Hoc Open-ended Working Group to Enhance the Functioning of the Multilateral System of Access and Benefit-sharing for its consideration.

See also blog post from the Global Crop Diversity Trust "Is the System of Germplasm Sharing Global Enough Yet?" available at:https://www.croptrust.org/blog/system-germplasm-sharing-global-enough-yet/

Creator / Authors: Galuzzi, Gea,Halewood, Michael,Lopez Noriega, Isabel,Vernooy, Ronnie

Author Identifier: <Not defined>

Publication / Creation date: 2015-06-04T10:04:44Z,2015-06-04T10:04:44Z,2015-05-01

Language: en

Coverage: 25 years of international exchanges of PGR by the CGIAR genebanks

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #10

Main Information	
Title: Journal article - Analysis of ITPGRFA member states' interdepence on PGRFA	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2015	
Status: Extended	**Justification for cancelling the deliverable:** The journal article was submitted to Biodiversity and Conservation (BIOC) in August 2015 and accepted for publication in January 2016. It will be published in early 2016. We will purchase the open access license option made available by the publisher.

Next-user
Policy actors in countries considering ratification of the Treaty and in countries that have ratified and are implementing it.
Knowledge, attitude, skills and practice changes expected in next-user: Same overall objective in terms of desired changes as for deliverable 1 above -- it is based on the same research. However, the journal article is aimed at a wider potential readership, far beyond those directly involved in the re-negotiations of the MLS.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The paper will be promoted through extant networks of policy actors involved in the subject matter; through national partners who have been involved in treaty implementation projects supported by Bioversity/CCAFS, and as an on-line, open access publication.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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: The journal article was submitted to Biodiversity and Conservation (BIOC) in August 2015 and accepted for publication. It has been through a peer-review process and is expected to be published early 2016. The article will be open access (paying an additional fee).
Creator / Authors: Galluzzi, G., Halewood, M., Lopez Noriega, I.
Author Identifier: <Not defined>
Publication / Creation date: 2016
Language: en
Coverage: 25 years of international exchanges of PGR by the CGIAR genebanks

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #11

Main Information
Title: Analysis of technology transfer, information sharing and capacity building supported through the International Benefit-sharing Fund

MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2015	
Status: Complete	

Next-user

WG-EFMLS and Governing Body of ITPGRFA

Knowledge, attitude, skills and practice changes expected in next-user: The delegates to these international meetings will consider more focused programmatic approach to the research and development projects that are supported by the International Benefit Sharing Fund. They will recommend increasing the amount of future support to climate-changed linked activities.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The paper is formally submitted to the Secretariat of the ITPGRFA who uses it to develop a synoptic paper with options to be considered by the WG-EFMLS, and possibly later, for the governing body.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: other

Dissemination URL: http://www.planttreaty.org/sites/default/files/files/Research%20Paper%206.pdf

Deliverable Metadata

Submitted on 2016-03-03 at 20:16 UTC

Description: Title: Non-monetary benefit sharing mechanisms within the projects funded by the Benefit Sharing Fund
Summary: This study presents an overview of the projects that have been funded by or proposed to the Benefit-sharing Fund (BSF) under the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPRFA). In particular, the study focuses on the technology transfer, capacity building and information exchange-related activities that are included in those projects. Through the analysis, we address the following issues:
- The geographic scope of projects, and the activities and partnerships within them
- The types of technologies, capacities and information being generated and transferred
- The actors involved in the co-development and transfer of technologies, capacities and information)
- Situations in which technology transfer, capacity building and information exchange are pursued or promoted together as part of a package and when they are pursued or promoted independently of each other.

The analysis confirms that the BSF can be a useful instrument to facilitate non-monetary as well as monetary benefit sharing. In addition the analysis suggests that there are opportunities to increase the proportion of support for projects where the spill-over non-monetary benefits would be useful for down-stream beneficiaries from subregional to global scales. This focus on spillover benefits would apply not only to PGRFA included in the MLS (which is always available to all parties) but also technologies, knowledge and capacities developed with support from the BSF. At the same time, to keep benefits on the ground and connected to national priorities, countries could be required to continue to demonstrate how support from the BSF will contribute to a nationally developed strategy, with complementary contributions from the country itself.
The study was submitted to the Ad Hoc Open-Ended Working Group to Enhance the Functioning of the Multilateral System of Access and Benefit-Sharing and presented and discussed at a Multistakeholder Workshop organized by the Swiss Delegation with the title "International Treaty on Plant Genetic Resources for Food and Agriculture: What Investment Strategy for the Benefit Sharing Fund?"

Creator / Authors: Gea Galluzzi, Isabel López Noriega, Michael Halewood

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Global

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #12

Main Information

Title: Decision-making-tool for national policy makers concering mutually supportive implementation of the ITPGRFA and Nagoya Protocol

MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Tools and Computer Software	**Sub Type:** Tools
Year of expected completion: 2015	
Status: Complete	

Next-user

Policy actors (governmental and non-governmental) considering mechanisms for implementing the ITPGRFA/MLS and the Nagoya Protocol

Knowledge, attitude, skills and practice changes expected in next-user: Governmental and non-governmental actors will overcome their aversion to either one or the other of the CBD/NP or the ITPGRFA/MLS (at present there is a lot of mutual distrust) and work proactively on mechanisms to implement both, together, so that they can simultaneously function to support the same objectives.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of lead agencies and stakeholders through a series of project-supported workshops in 2013, 2014 and 2015 in development of the tools/guidelines. Diffusion through the relatively dense network of organizations (local, national and global) working in this area. Introduction to regional intergovermental bodies for uptake and use,and possible endorsement.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Partner #2: Garforth, Kathryn <kathryn.garforth@cbd.int>, CBD - Convention on Biological Diversity

Partner #3: Bhatti, Shakeel <shakeel.bhatti@fao.org>, ITPGRFA - International Treaty on Plant Genetic Resources for Food and Agriculture (governing body)

Partner #4: Drews, Andreas <andreas.drews@giz.de>, GIZ - ABS Capacity Development Initiative, Deutsche Gesellschaft for Internationale Zusammenarbeit

Partner #5: Teshome Kebede, Mahlet <MahletK@africa-union.org>, AU - African Union

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/68387

Deliverable Metadata

Description: Halewood M, (ed.). (2015) Mutually supportive implementation of the Plant Treaty and the Nagoya Protocol: A primer for National Focal Points and other stakeholders. Discussion Paper. Rome, Italy: Bioversity International.

This discussion draft is based upon a structured set of interactions – a survey, a workshop, held 3-6 June 2014 and follow-up analysis – involving 'tandems' (the national focal points for the Nagoya Protocol (NP) of the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) from a single country working together as a team) and independent experts and stakeholders whose daily activities are affected by access and benefit-sharing (ABS) regulations. We hope this document will provide national policy actors with a tool to increase their ability and confidence to implement the CBD/NP and ITPGRFA/multilateral system of access and benefit-sharing in mutually supportive ways.

French version: Halewood, M. (ed.) (2015). Mise en œuvre concertee et solidaire du Traite sur les ressources phytogenetiques et du Protocole de Nagoya : Abecedaire pour points focaux nationaux et autres parties prenantes. Ebauche de discussion. Bioversity International 88 p. Available at: https://cgspace.cgiar.org/handle/10568/71062

Creator / Authors: Halewood, M

Author Identifier: <Not defined>

Publication / Creation date: 2015-10-01T08:38:58Z,2015-10-01T08:38:58Z,2015-10-01

Language: English

Coverage: Global

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #13

Main Information

Title: Inputs for the development of a national policy on community seedbanks in South Africa

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

Submitted on 2016-03-03 at 20:16 UTC

Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper
Year of expected completion: 2016	
Status: <Not defined>	

Next-user

Policymakers, development agents including NGOs.

Knowledge, attitude, skills and practice changes expected in next-user: Increased knowledge on 1) the value of community seedbanks in farming communities' adaptation to climate change; and 2) the public policy options for supporting the functioning of community seedbanks.
Interest in including community seedbanks in South Africa agricultural development and climate change agendas.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Meetings, consultations, roundtables, seminars involving policymakers.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #14

Main Information	
Title: Baseline surveys in Benin and Madagascar	
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: Data and information outputs, including datasets, databases and models	**Sub Type:** Datasets
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Partners involved in the project. Other scientists interested in agriculture and climate change.
Knowledge, attitude, skills and practice changes expected in next-user: Further analyses using datasets
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Datasets will be made available in open, accessible digital platforms

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #15

Main Information	
Title: Inputs to the negotiations for the enhancement of the MLS	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2016	
Status: <Not defined>	

Next-user
Representatives of countries attending the meetings of the WG-EFMLS under the ITPGRFA

Knowledge, attitude, skills and practice changes expected in next-user: Increased knowledge about countries' interdependece on PGRFA in the face of climate change and importance of ensuring flows of PGRFA for agriculture adaptation to climate change

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Presence of activity leaders in the meetings of the WG-EFMLS. Meetings, side events with countries' representatives.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #16

Main Information	
Title: Inputs for the development of African Union Guidelines	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Discussion paper
Year of expected completion: 2017	
Status: <Not defined>	

Next-user
African Union Commission
Knowledge, attitude, skills and practice changes expected in next-user: Increased knowledge and capacities to integrate the use of agricultural biodiversity in climate change adaptation guidelines.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Strong linkages with African Union Commission. Consultations, workshops, etc. with African Union Commission and countries' representatives in the AU

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #17

Main Information	
Title: Submission to the Governing Body of the Plant Treaty	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2017	
Status: <Not defined>	

Next-user
Governing Body of the Treaty on Plant Genetic Resources for Food and Agriculture
Knowledge, attitude, skills and practice changes expected in next-user: Countries' representatives present at the Governing Body of the ITPGRFA will be better informed about the importance of international flows of plant genetic resources as well as of their in situ and ex situ conservation in national and international efforts to adapt agriculture to climate change.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Presence of activity leaders in the GB meeting. Side events at GB meeting.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #18

Main Information	
Title: Submission to CBD-SBSTTA	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper

Year of expected completion: 2017

Status: <Not defined>

Next-user
Countries' representatives at the CBD-SBSTTA
Knowledge, attitude, skills and practice changes expected in next-user: Increased knowledge about actual and potential value of the use of biodiversity in climate change adaptation strategies, particularly in agriculture, and increased interest in developing a programme of work on the integration of biodiversity in national and international plans and actions on mitigation of and adaptation to climate change.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Side events in SBSTTA. Consultations, roundtables with selected countries' representatives.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #19

Main Information	
Title: Policy options for the integrated implementation of the NP and ITPGRFA in Benin	
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: 2018	
Status: <Not defined>	

Next-user
Policy makers in Benin
Knowledge, attitude, skills and practice changes expected in next-user: Increased knpwledge and capacities to adopt policy measures for the implementation of the Nagoya Protocol and the International Plant Treaty in the context of national efforts to adapt agriculture to climatic changes. Interest in implementing both treaties in a mutually supportive manner and strongly linked to climate change adaptation plans.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of officers in relevant ministries from initial stages of the activity. Roundtables, workshops with high level policy makers.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #20

Main Information	
Title: Policy options for the integrated implementation of the NP and ITPGRFA in Madagascar	
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: 2018	
Status: <Not defined>	

Next-user
Policy makers in Madagascar

Knowledge, attitude, skills and practice changes expected in next-user: Increased knowledge and capacities to adopt policy measures for the implementation of the Nagoya Protocol and the International Plant Treaty in the context of national efforts to adapt agriculture to climatic changes. Interest in implementing both treaties in a mutually supportive manner and strongly linked to climate change adaptation plans.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Engagement of officers in relevant ministries from initial stages of the activity. Roundtables, workshops with high level policy makers.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: <Not defined>

License adopted: <Not defined>

Dissemination Channel: <Not defined>

Dissemination URL: <Not defined>

Deliverable Metadata

Description: <Not defined>

Creator / Authors: <Not defined>

Author Identifier: <Not defined>

Publication / Creation date: <Not defined>

Language: <Not defined>

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #21

Main Information	
Title: A resource box for resilient seed sytems: on-line learning modules	
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:** Website
Year of expected completion: 2013	
Status: Complete	

Next-user
Plant breeders, researchers, genebank managers, policymakers; university lecturers and advanced students; others interested in resilient seed systems
Knowledge, attitude, skills and practice changes expected in next-user: Those using the resource box should be able to: conduct a situational analysis, plan an intervention, use data and software, conduct an analysis of climate change, select useful germplasm, acquire the germplasm, implement fieldtesting, conserve selected germplasm, use participatory evaluation, organize a communication strategy, and apply social and gender analysis
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Training of national partners; on-line support in the use of the resource box; involvement in field-level research activities; monitoring and evalation of field-level activities; production of knowledge products and their dissemination. See: http://bit.ly/seeds-resource-box for a series of blogs about these strategies being put in place.

Partners contributing to this deliverable
Partner #1 (Responsible): Quiros Ortega, Walter Paulo <wquiros@ofinase.go.cr>, ONS - Oficina Nacional de Semillas
Partner #2: Solano Sánchez, William <wsolano@catie.ac.cr>, CATIE - Centro Agronómico Tropical de Investigación y Enseñanza
Partner #3: Say Chavez, Eduardo Rolando <esay@catie.ac.cr>, CATIE-Guatemala - Centro Agronómico Tropical de Investigación y Enseñanza (Guatemala)
Partner #4: Chaudhary, Pashupati <pchaudhary@libird.org>, LI-BIRD - Local Initiatives for Biodiversity, Research and Development
Partner #5: Yangzome Dorji, Tashi <yangzome2011@gmail.com>, National Biodiversity Centre, Ministry of Agriculture

Partner #6: Kouablan Koffi, Edmond <kofiedmond@yahoo.fr>, CNRA - Centre national de recherche agronomique
Partner #7: Mulumba Wasswa, John <curator@infocom.co.ug>, NARL - National Agricultural Research Laboratories
Partner #8: Balma, Didier <balma_didier@yahoo.fr>, SP/CONAGREP - Secretariat Permanent Commission Nationale de Gestion des Ressources Phytogénétiques
Partner #9: Nyirigira, Antoine <a_nyirigira@yahoo.fr>, RAB - Rwanda Agriculture Board
Partner #10: Andriamahazo, Michelle <michelle.andriamahazo@gmail.com>, MinAgri - Ministry of Agriculture Madagascar
Partner #11: Aly, Dijma <aldjim5@yahoo.fr>, INRAB - Institut National de Recherche Agricole du Benin

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

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.seedsresourcebox.org/resource-box/

Deliverable Metadata

Submitted on 2016-03-03 at 20:16 UTC

Description: Bioversity International is helping various countries design and implement a comprehensive capacity-building strategy to access and use plant genetic resources more effectively in the context of climate change adaptation. This resource box aims to support these efforts.

Bioversity International's method for building more resilient seed systems includes the following eight steps:

1. Situational analysis and planning
2. Data preparation and selection of software
3. Climate change analysis and identification of germplasm
4. Germplasm acquisition
5. Field experimentation
6. Germplasm conservation
7. Participatory evaluation
8. Knowledge sharing and communication

This resource box includes a specific module for each of these steps.

Module 1, Situational analysis and planning, explains how to work with farmers and other stakeholders to determine baseline conditions in a community in terms of seed systems and climate change; how to set priorities and objectives; and how to plan research into development intervention.

Module 2, Data preparation and selection of software, introduces useful tools, such as DIVA-GIS, Maxent, and Climate Analogues, and explains how to prepare relevant data for a comprehensive climate change analysis.

Module 3, Climate change analysis and identification of germplasm, describes the steps in climate change analysis in the context of impact on agriculture and seed systems and how to identify germplasm suitable for the future climate.

Module 4, Germplasm acquisition, introduces the International Treaty on Plant Genetic Resources for Food and Agriculture, and explains how to acquire new germplasm while protecting traditional knowledge and taking into account the phytosanitary aspects of seed production and distribution.

Module 5, Field experimentation, presents a number of methods for participatory crop evaluation with the newly acquired germplasm in local environments and farmers' fields.

Module 6, Germplasm conservation, discusses specific aspects of the conservation of the newly tested germplasm and the various ways in which it can be multiplied.

Module 7, Participatory evaluation, presents a global method for evaluating the research process with farmers, genebank managers, extension agents, and other stakeholders.

Module 8, Knowledge sharing and communication, is about sharing research results with the participants as well as with others involved or potentially interested in the results.

Creator / Authors: R. Vernooy, G. Bessette, P. Rudebjer and G. Otieno (eds)

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: English

Coverage: Global

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #22

Main Information	
Title: Using and sharing plant genetic diversity to adapt to climate change	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Communication Products and Multimedia	**Sub Type:** Video
Year of expected completion: 2015	
Status: Complete	

Next-user
National focal points for climate change adaptation, domestication of international environmental agreements, finance and planning
Knowledge, attitude, skills and practice changes expected in next-user: Improved understanding of the need for key actors within countries to overcome policy-reinforced divisions to develop cross sectoral climate change adaptation strategies that rely on agricultural biological diversity
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Video will be circulated to the teams of participants from 11 African countries (Benin, Burkina Faso, Democratic Republic of the Congo, Cote d'Ivoire, Ethiopia, Kenya, Malawi, Mali, Senegal, Uganda), to the AU Commission, the Secretariats of the ITPGRFA and Nagoya Protocol to make available on their own websites.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International
Partner #2: Drews, Andreas <andreas.drews@giz.de>, GIZ - ABS Capacity Development Initiative, Deutsche Gesellschaft for Internationale Zusammenarbeit
Partner #3: Teshome Kebede, Mahlet <MahletK@africa-union.org>, AU - African Union
Partner #4: Bhatti, Shakeel <shakeel.bhatti@fao.org>, ITPGRFA - International Treaty on Plant Genetic Resources for Food and Agriculture (governing body)
Partner #5: Garforth, Kathryn <kathryn.garforth@cbd.int>, CBD - Convention on Biological Diversity

Deliverable Ranking	
Address gender and social inclusion aspect	2
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	4

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: https://www.youtube.com/watch?v=lQkppXJ41i0

Deliverable Metadata
Description: 9-minute video entitled "Using and sharing plant genetic diversity to adapt to climate change; embedding implementation of the Nagoya Protocol and Plant Treaty in broader policy goals"
Creator / Authors: Bioversity International
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English and French
Coverage: Climate change adaptation, national level implementation of multilateral environmental agreements in Africa

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #23

Main Information
Title: The roles of community seed banks in climate change adaption
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues

Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2015	
Status: On-going	**Justification for cancelling the deliverable:** This article was finalized in 2015 based on a review of case studies from around the world. It has been submitted to Development in Practice and is being reviewed.

Next-user

Researchers, policymakers and practitioners involved with climate change adaptation and the roles of farmer organizations.

Knowledge, attitude, skills and practice changes expected in next-user: Next users will be able to identify practical mechanisms in which community seedbanks can contribute to adaptation to climate change and take these mechanisms into consideration in policy, strategy, program and project development related to climate change adaptation.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The article will be shared with the more than 100 contributors to the case studies that were reviewed as well as through Bioversity's networks of policymakers, scientists and practitioners working on community seedbanks and climate change adaptation.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking

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

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: -1

Dissemination URL: <Not defined>

Deliverable Metadata

Description: Although community level seed-saving initiatives have been around for about 30 years, until recently they have received little attention in the scientific literature on climate change adaptation and plant genetic resources. Based on a literature review and a series of case studies it is argued that community seedbanks can enhance the resilience of farmers, in particular of communities and households most affected by climate change, through securing improved access to and availability of diverse, locally adapted crops and varieties and through enhancement of related indigenous knowledge and skills in planting management including seed selection, treatment, storage, multiplication and dissemination.

Creator / Authors: R.Vernooy, B. Sthapit, G. Otieno, P. Shrestha, A. Gupta

Author Identifier: <Not defined>

Publication / Creation date: 2016

Language: English

Coverage: Global

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #24

Main Information

Title: La importancia de los intercambios internacionales de recursos fitogenéticos en Guatemala

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

Main Type: Reports, Reference Materials and Other Papers

Sub Type: Working paper

Year of expected completion: 2015

Status: Complete

Next-user

see english version

Knowledge, attitude, skills and practice changes expected in next-user: see english version

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

Submitted on 2016-03-03 at 20:16 UTC

Partners contributing to this deliverable
Partner #1 (Responsible): Say Chavez, Eduardo Rolando <esay@catie.ac.cr>, CATIE-Guatemala - Centro Agronómico Tropical de Investigación y Enseñanza (Guatemala)

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	2

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/72439

Deliverable Metadata
Description: Una de las principales consideraciones para la creación del Tratado Internacional sobre los Recursos Fitogenéticos para la Alimentación y la Agricultura y de su Sistema Multilateral para el acceso y la distribución de beneficios es el reconocimiento de la interdependencia de todos los países sobre los recursos genéticos de los cultivos y forrajes más importantes para la seguridad alimentaria global. Para apoyar la implementación de un sistema global de acceso e intercambio de recursos fitogenéticos, contribuyendo al desarrollo agrícola y la adaptación al cambio climático de los países, es necesario apreciar los beneficios de los intercambios históricos de germoplasma y reconocer que es urgente que un sistema de intercambio facilitado siga en pie y se expanda en el futuro. Tomando el caso de Guatemala, y del maíz y frijoles como cultivos principales, el artículo describe la dinámica de los recursos genéticos de estos dos cultivos, tanto dentro como fuera del país, en el pasado y mirando hacia el futuro. Se ilustra así el grado en que Guatemala depende de germoplasma de otros países para su seguridad alimentaria, y cómo, de manera complementaria, otros países dependen de germoplasma procedente de Guatemala. Se espera que la información presentada aquí estimule y facilite la implementación del Tratado Internacional y del Sistema Multilateral en el país.
Creator / Authors: Mendez W,Galluzzi G,Say E
Author Identifier: <Not defined>
Publication / Creation date: 2016-03-03T13:46:04Z,2016-03-03T13:46:04Z,2016-03-03
Language: es
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #25

Main Information	
Title: L'importance des échanges internationaux des ressources phytogénétiques pour l'amélioration des cultures au Burkina Faso	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Working paper
Year of expected completion: 2015	
Status: Complete	

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

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	2
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	2

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

Submitted on 2016-03-03 at 20:16 UTC

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/72434

Deliverable Metadata

Description: L'interdépendance des pays sur les ressources génétiques des cultures et fourrages dont ils ont bessoin pour leur sécurité alimentaire est une des raisons de la mise en place du Traité International sur les Ressources Phytogénétiques pour l'Alimentation et l'Agriculture et de son système multilatéral d'accès et de partage des avantages. Une connaissance plus profonde de la façon dont les pays ont bénéficié de l'échange de matériel génétique dans le passé et continueront à bénéficier à l'avenir est nécessaire pour faire avancer la mise en oeuvre du Système multilatéral et la création d'une réserve mondiale des ressources phytogénétiques pour le développement agricole des pays et leur adaptation au changement climatique. En utilisant Burkina Faso comme un exemple et le millet, le riz et le maïs comme cultures principales, cet étude présente les mouvements de matériel génétique tant à l'intérieur et à l'extérieur du pays, au cours des dernières années et dans l'avenir. Il illustre le degré de dépendance du Burkina Faso du matériel génétique provenant d'autres pays pour sa sécurité alimentaire et aussi l'utilisation par des autres pays du matériel génétique burkinabé. L'information qu'on présente peut encourager et faciliter la mise en oeuvre du Traité international et de son Système multilatéral dans le pays.

Creator / Authors: Bougma A,Galluzzi G,Sawadogo M

Author Identifier: <Not defined>

Publication / Creation date: 2016-03-03T13:17:36Z,2016-03-03T13:17:36Z,2016-03-03

Language: fr

Coverage: <Not defined>

Deliverable Data sharing

Deliverable files
<Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Next users were decision makers in different organizations involved in the design and implementation of international and national policies dealing with the conservation and use of genetic resources. Next users range from research groups in national agricultural research institutes to relevant officers in ministries and governmental agencies, and country representatives in international policymaking fora. They are key game changers because they are in a position to initiate, push forward and in most cases influence the results of policymaking processes aimed to define the conditions under which genetic resources are used for agriculture adaptation to climate change. They have great responsibility in creating an enabling environment for the effective integration of agrobiodiversity in climate change mitigation and adaptation efforts. The changes that we have observed after this reporting period are: increased awareness about countries' interdependence on plant genetic resources; increased knowledge about the actual and potential value of crop and varietal diversity to respond to climate adaptation needs; better understanding of possible approaches and processes to implement the multilateral system of the ITPGRFA in line with the Nagoya Protocol; stronger sense of empowerment and appropriation over those processes and approaches; better collaboration among different governmental agencies.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: Involvement of key decision makers at early stages of activity definition and implementation; training workshops on the actual and potential value of genetic resources for crops' adaptation to climate change; national level meetings, seminars and workshops for presentation and discussion of policy implications; side-events in key negotiating meetings under the ITPGRFA and the FAO Commission on Genetic Resources for Food and Agriculture.
Reported deliverables serve as evidence towards this achieved change: The Memoranda of Understanding between the focal points for the Convention on Biological Diversity and the ITPGRFA in Costa Rica and Uganda are good examples of the following changes: 1) national agencies who have been historically in charge of regulating the movement and use of genetic resources recognize the particularities of plant genetic resources for food and agriculture and the need that their country implement the multilateral system of the ITPGRFA; 2) national agencies in charge of implementing the Treaty feel empowered to actually take measures for its effective implementation; 3) both agencies collaborate.
Lessons and implications for the next planning cycle: As mentioned in other sections of this report, early and continuous engagement of decision makers is key.

5.4 Project highlights

6. Activities

Activity #1	
Title: LAM National policy implementation to increase access and use of diverse biological resources for ClimateChangeAdaptation	
Description: The project will work with a range of partners in Latin American countries to a) understand the extent to which those countries are becoming dependent on genetic resources from other countries to adapt to climate change and b) develop appropriate policies, laws and guidelines to implement/use the MLS and Nagoya Protocol to be able to access and/or provide adapted germplasm and associated information both domestically and from other countries. Activities will be concentrated in Costa Rica and Guatemala up to 2016. Other CCAFS countries will be partners from 2016-2018.	
Start date (dd-MM-yyyy): 01-01-2013	**End date (dd-MM-yyyy):** 31-12-2015
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #2	
Title: Global policy development	
Description: Develop targeted interventions for international (regional and global) policy-making meetings related to availability and use of biological resources for agriculture research and development for climate change adaptation.	
Start date (dd-MM-yyyy): 01-01-2013	**End date (dd-MM-yyyy):** 12-12-2019
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #3	
Title: SA National policy implementation to increase access and use of diverse biological resources for ClimateChangeAdaptation	
Description: The project will work with a range of partners in South Asian countries to a) understand the extent to which those countries are becoming dependent on genetic resources from other countries to adapt to climate change and b) develop appropriate policies, laws and guidelines to implement/use the MLS and Nagoya Protocol to be able to access and/or provide adapted germplasm and associated information both domestically and from other countries. Activities will be concentrated in Bhutan and Nepal up to 2016. Other CCAFS countries will be partners from 2016-2018.	
Start date (dd-MM-yyyy): 01-01-2013	**End date (dd-MM-yyyy):** 31-12-2015
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #4	
Title: EA National policy implementation to increase access and use of diverse biological resources for ClimateChangeAdaptation	
Description: The project will work with a range of partners in East African countries to a) understand the extent to which those countries are becoming dependent on genetic resources from other countries to adapt to climate change and b) develop appropriate policies, laws and guidelines to implement/use the MLS and Nagoya Protocol to be able to access and/or provide adapted germplasm and associated information both domestically and from other countries.	
Start date (dd-MM-yyyy): 01-01-2013	**End date (dd-MM-yyyy):** 31-12-2015
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #5	
Title: WA National policy implementation to increase access and use of diverse biological resources for ClimateChangeAdaptation	
Description: The project will work with a range of partners in West African countries to a) understand the extent to which those countries are becoming dependent on genetic resources from other countries to adapt to climate change and b) develop appropriate policies, laws and guidelines to implement/use the MLS and Nagoya Protocol to be able to access and/or provide adapted germplasm and associated information both domestically and from other countries. Activities will be concentrated in Burkina Faso and Ivory Coast up to 2016. Other CCAFS countries will be partners from 2016-2018.	
Start date (dd-MM-yyyy): 01-01-2013	**End date (dd-MM-yyyy):** 31-12-2015
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Activity #6	
Title: National policy implementation to increase access and use of diverse biological resources for ClimateChangeAdaptation	
Description: The project will work with a range of partners in Madagascar and Benin to a) understand the extent to which those countries are becoming dependent on genetic resources from other countries to adapt to climate change and b) develop appropriate policies, laws and guidelines to implement/use the MLS and Nagoya Protocol to be able to access and/or provide adapted germplasm and associated information both domestically and from other countries.	
Start date (dd-MM-yyyy): 08-01-2015	**End date (dd-MM-yyyy):** 12-12-2019
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	

Status: On-going	**Justification:** National project inception workshops, multistakeholder project governance groups formed, base line surveys largely completed, participatory sessions with farmers and scientists in two sites to identify climate change impacts on local crop production (with focus on maize), use of genebanks data and crop suitability info to identify potentially adapted germplasm in collections around the world.

Activity #7	
Title: Devloping policy for creating community genebanks to enhance community climate change reslience	
Description: Working with communities and South African national government to develop strategy for integrating community genebanks to strengthen community's capacity to adapt to climate change	
Start date (dd-MM-yyyy): 08-01-2015	**End date (dd-MM-yyyy):** 31-12-2016
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: On-going	**Justification:** The grant from the government of South Africa allowed the completion of the implementation pilot phase resulting in the establishment of two community seedbanks, one in Gumbu village in Limpopo, one in Sterkspruit, Eastern Cape, the training of a team of five staff of the Department of Agriculture, Forestry and Fisheries in issues related to establishing and supporting community seedbanks, the establishment of relationships with the agricultural extension departments in the two sites, the production and dissemination of a series of knowledge products, and the drafting of a concept note for the phase 2 of the work.

Lessons regarding your project activities and possible implications for the coming planning cycle: Development and implementation of national policies take a long time. Changes in national government and in the management positions of key governmental agencies and public research organizations affect the continuity of policy efforts initiated by any given project. This challenge can be partially addressed by investing in capacity building at the organization level and not exclusively among selected individuals. Countries face similar problems in relation to the implementation of international conventions dealing with genetic resources. Similarly, the challenges to integrating the conservation and use of agricultural biodiversity in national plans for climate change adaptation are common to most countries. Facilitating the sharing of concerns and experiences among experts from different countries is a very useful approach for national organizations to define and put in place effective policy measures.

7. Leverages

Leverage #1	
Title: Community seedbanks in South Africa	
Partner name: DAFF - Department of Agriculture, Forestry and Fisheries - South Africa	
Year: 2015	
Flagship: FP4: Policies and Institutions for Climate-Resilient Food Systems	**Budget:** US $140,000.00

Submitted on 2016-03-03 at 16:07 UTC

Title: (Bioversity) Policies to support biological diversification of agricultural production systems for climate change adaptation and risk management

Start date (dd-MM-yyyy)	01-09-2014	**End date (dd-MM-yyyy)**	31-12-2015
Management liaison	F4 - Flagship 4	**Mgmt. liaison contact**	Thornton, Philip <p.thornton@cgiar.org>
Lead organization	BI - Bioversity International - Italy	**Project leader**	Halewood, Michael <m.halewood@cgiar.org>
Project type	CCAFS COFUNDED	**Detailed project workplan**	<Not defined>

Project is working on

Flaship(s)	Region(s)
FP4: Policies and Institutions for Climate-Resilient Food Systems	Global: Global

Bilateral project(s) contributing to this project
181 - Integrated Seed Sector Development - Africa - 'Global Policies and National Realities'

Summary

This project investigates policy options to support biological diversification of agricultural production systems from global to subnational levels. It analysis the extent to which biological diversification is included in NAPAs, and supports development/adoption by a global intergovernmental body of guidelines for countries to include GRFA diversity in NAPs.

2. Partners

Partner #1 (Leader)

Institution: BI - Bioversity International

Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Halewood, Michael <m.halewood@cgiar.org>	Design of the initiative in SE Asia, fund raising, coordination of activities, facilatation of workshops, and coordination of report writing and dissemination. The work was led by Ronnie Vernooy.

Partner #2

Institution: NAFRI - National Agriculture and Forestry Research Institute

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Buahom, Bounthong <bounthong@live.com.au>	NAFRI hosted the workshop where the partners came together to discuss the three country desk reviews and identify next steps in the form of the development of a research proposal. NAFRI staff carried out the Lao PDR desk review.

Partner #3

Institution: CARDI - Cambodian Agricultural Research and Development Institute

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Channa, Ty <tychanna2013@gmail.com>	CARDI played a lead role in identifying and convening the three Cambodian partners involved. The Cambodia desk review was delegated to SOFDEC.

Partner #4

Institution: CASRAD - Centre for Agrarian Systems Research and Development

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	The Anh, Dao <daotheanh@gmail.com>	CASRAD contributed technical expertise in agricultural sustainable production systems, small-scale food producer organizations, inclusive business models for small farms and agricultural value chain developpment for different agro-regions.

Partner #5

Institution: WUR - Wageningen Unversity and Research Centre

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

Contacts

Type	Contact	Responsibilities and contributions
Partner	de Jonge, Bram <bram.dejonge@wur.nl>	Bilateral project 181 partner. Bram de Jonge was the coordinator of the ISSD project. Michael Halewood is the facilitator. Bram and I worked together to develop the framework paper. We will continue to work together to develop a proposal in 2016 for ISSD African for activities from 2017-2022.

Partner #6

Institution: IPSARD - Institute of Policy and Strategy for Agriculture and Rural Development

CCAFS Partner(s) allocating budget

BI - Bioversity International - Italy

Contacts

Type	Contact	Responsibilities and contributions
Partner	Dinh, Huu Hoang <hoang.dinh@aya.yale.edu>	IPSARD prepared the Vietnam desk review. IPSARD has expertise in agricultural trade and commodities, rural development, environment and natural resource management, and market information systems. SCAP has specialized expertise in policy and institutional analysis, farming systems analysis and farm land use behaviour.

Partnerships overall performance over the last reporting period: The partners from CASRAD, SCAP/IPSARD, PRC, NAFRI and CARDI met together in Lao PDR as part of a CCAFS workshop, organized by Bioversity International, focusing on crop diversification policies in 2014. First reports based on three country studies were presented by the partners at that meeting. In 2015, they worked together with Bioversity scientists to develop their reports into full chapters for the published monograph. The partners worked efficently and on time, dedicating a considerable amount of their own time and institutional resources to the activity overall.

Bram de Jonge of Wageningen University was inclusive and proactive. A good partner.

Lessons regarding your partnerships and possible implications for the coming reporting cycle: Engaging with the partners in the very early stages of identifying the issues to be discussed, and involving them from the beginning in discussion of terms of reference for the papers set the stage for their continued, active involvement. The participatory nature of the workshop and follow up proposal writeshop organized in Lao PDR and Vietnam further strengthened partner involvement. All SEA Asian partners have contributed to project proposal development.

Submitted on 2016-03-03 at 16:07 UTC

3. Locations

4. Outcomes

4.1 Project outcome narrative

Project outcome statement : <Not defined>

Annual progress towards outcome (end of 2015): <Not defined>

Annual progress towards project outcome in the current reporting cycle (2015): The Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning (Guidelines) were adopted by the 15th session of the FAO Commission on Genetic Resources for Food and Agriculture in January 2015, and later, by the Conference of the Food and Agriculture Organization of the United Nations (FAO) at its 39th Session in June 2015. Through this activity, Bioversity, on behalf of CCAFS, participated in an expert consultation meeting for the development of the Guidelines, organized by FAO, in April 2014 where it made a presentation concerning the role of biological diversity in climate change adaptation. Also with support of this activity, Bioversity conducted an analysis of the extent to which agrobiodiversity is included in the 50 NAPAs that have been developed to date. We presented a summary of our preliminary findings to the Expert Group. Our research established the need for the Guidelines to help countries think through options for relying more on genetic resources for food and agriculture (GFRA) in national climate change adaptation strategies, and considerations that should be taken into consideration in their further development. In early 2015, Bioversity/CCAFS published a CCAFS Discussion paper setting out its first full summary of its analysis. Bioversity/CCAFS organized an expert side event/panel during the FAO Commission meeting in January to present the paper to delegates. We provided space for presentations by the Secretary of the commission, and representatives of three countries whose NAPAs include comparatively high use of biodiversity. Hard copies of the paper were made available to delegates during the meeting. Bioversity/CCAFS made oral submissions to the Commission highlighting the need for the Guidelines and urging delegates to adopt them during that session. Our efforts clearly contributed to the adoption of the guidelines by the 189 member states of the Commission.

Communication and engagement activities have contributed to achieving your Project outcomes: Bioversity/CCAFS highlighted the importance of the Guidelines and ways to influence it, through blog posts that publicized the issue immediately after the April 2014 meeting, and immediately after the side event and release of the paper. It leveraged the research supported by this activity by presenting it to the Commission Secretary, experts developing the guidelines, and later, to delegates to FAO Commission assembled in Rome to consider them for adoption. In 2016, Bioversity will continue to contribute to outcomes in this area, publishing a reduced, sharpened version of its research findings in a peer-reviewed journal.

Evidence documents of progress towards outcomes: <Not defined>

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

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

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

Lessons regarding your Theory of Change and implications for the coming planning cycle; e.g. how have your assumptions changed, or do you have stronger evidence for them: Our experience under this activity confirms what we already know about our ToC. It is essential to engage directly in international policymaking processes through combinations of

activities, including liaising with leaders of those processes, experts who are providing opinions about how the policies should be developed and ultimately, to the decision-making delegates. One cannot approach these engagements with empty hands. One has to come to the process with something concrete to offer. In this case, our study of the 50 NAPAs provided directly relevant information to the others involved in the process, and provided us leverage for engagement.

4.2 Contribution to CCAFS Outcomes

FP4 - Outcome 2019: National/sub-national jurisdictions enact equitable food system policies and increase institutional investment that take into consideration climate smart practices/strategies, better articulated among themselves and in collaboration with private sector, civil society and researchers informed by CCAFS decision support tools

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

2019	
Target value: Activity 2014-385: information base to influence outcomes in later year	**Cumulative target to date:** Cannot be Calculated
Target narrative: Activity 2014-385: In 2015 CCAFS will be supporting research to develop a knowledge base and related research products that will be introduced into policy development processes in later years. Unlikely to yield a policy outcome in 2015.	
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>		

2015		
Target value: 0	**Cumulative target to date:** 0	**Target achieved:** 0.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: As stated in the P&R during earlier annual planning, "Activity 2014-385: In 2015 CCAFS will be supporting research to develop a knowledge base and related research products that will be introduced into policy development processes in later years. Unlikely to yield a policy outcome in 2015."		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: not applicable		

2016	
Target value: <Not defined>	**Cumulative target to date:** 0
Target narrative: <Not defined>	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

FP4 - Outcome 2019: Appropriately directed institutional investment of regional/global organisations and processes (e.g. IFAD, WB, FAO, UNFCCC) based on national/regional engagement to learn about local climate smart food system priorities

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

2019	
Target value: Activity 2014-385: Adoption by CGRFA in 2015 of guidelines for countries to integrate GRFA diversity into NAPs	**Cumulative target to date:** Cannot be Calculated
Target narrative: Activity 2014-385: adoption of these guidelines by the approximately 190 member states of the CGRFA should lead to GRFA diversity being included more frequently in NAPs with result of increased downstream investment by national, regional and global organizations that fund NAP implementation	
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>		

2015		
Target value: 1	**Cumulative target to date:** 1	**Target achieved:** 1.0
Target narrative: <Not defined>		
Narrative for your achieved targets, including evidence: The Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning (Guidelines) were adopted by the 15th session of the FAO Commission on Genetic Resources for Food and Agriculture in January 2015, and later, by the Conference of the Food and Agriculture Organization of the United Nations (FAO) at its 39th Session in June 2015. The adopted Guidelines are available on line at www.fao.org/3/a-i4940e.pdf		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome: The guidelines highlight the importance of taking gender issues into consideration in the context of developing national strategies that integrate GRFA, with a focus on engaging both men and women in vulnerability assessments, decision making, and ultimately as key actors in the management and use of GRFA on farm and across agro-ecosystems.		

2016	
Target value: <Not defined>	**Cumulative target to date:** 1
Target narrative: <Not defined>	
The expected 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: <Not defined>

4.4 Outcome case studies

Outcome case study #1
Title: 189 countries adopt guidelines to integrate GRFA in national climate change adaptation strategies
Outcome statement: First the FAO CGRFA, and then the FAO Council, adopted guidelines for countries to integrate genetic resources for food and agriculture into their national climate change adaptation strategies. CCAFS research outputs and targeted interactions with key boundary partners were important contributing factors to the development and adoption of the guidelines.
Research Outputs: CCAFS Discussion paper "Agricultural biodiversity in climate change adaptation planning: An analysis of the National Adaptation Programmes of Action". Presentation "Crop diversity for climate change adaptation" at workshop "Integrating genetic diversity considerations into national climate change adaptation plans - Development of guidelines", April 2014. Blog post "Promoting genetic diversity in agriculture through National Adaptation Plans", April 2014. Side event "The role of agricultural biodiversity in national climate change adaptation planning: analyzing NAPAs", during 15th session of the CGRFA, January 2015. Blog post "New guidelines for use of agrobiodiversity in climate change adaptation planning" based on side event, January 2015
Research Partners: The research component of the project consisted of desk research -- literature reviews, developing analytical framework, analysis of the 50 NAPAs, and follow-up GEF projects. This was conducted by a small group of scientists in Bioversity International. Three scientists provided peer review of the paper at various stages of its development: Alexandre Meybeck (UN FAO), Toby Hodgkin (Bioversity International) and Jacob van Etten (Bioversity International).
Activities that contributed to the outcome: Bioversity/CCAFS presented to a FAO-organized expert-consultation related to the Guidelines, April 2014; the presentation covered how agrobiodiversity assists adaptation to climate changes, and preliminary results of research on how agrobiodiversity is reflected in fifty NAPAs. We established the need for capacity strengthening for countries to integrate GRFA in adaptation strategies. Post-meeting, we submitted extensive comments in writing, and published a CCAFS blog post highlighting the issues. In 2015, we published the first full summary of our findings in a CCAFS discussion paper. To increase its influence, Bioversity/CCAFS organized an expert side event/panel during the FAO Commission meeting to present the paper to delegates, along with complementary presentations by the CGRFA Secretary, FAO experts, and three country representatives whose NAPAs include high use of biodiversity. Furthermore, we distributed the paper to delegates, and published a second blog post. Finally, we made statements to the Commission recommending adoption of the Guidelines.
Non-research Partners: Secretariat, Commission on GRFA of the UN FAO Platform on Agrobiodiversity Research, the consultant organization working on the guidelines Alexandre Meybeck, Senior Policy Officer on Agriculture, Environment and Climate Change, UN FAO Ty Channa, Deputy Director, Agricultural Research and Development Institute Ministry of Agriculture, Forestry and Fisheries, Cambodia Bounthong Bouahom, National Agriculture and Forestry Research Institute (NAFRI), Ministry of Agriculture and Forestry, Laos Amadou Sidibé, Institut d'Economie Rurale, Mali
Output Users: Participants at expert meeting (workshop on "Integrating genetic diversity considerations into national climate change adaptation plans - Development of guidelines"), consultant drafters of the Guidelines, delegates to 15th session of the CGRFA; Secretariat of CGRFA.

Submitted on 2016-03-03 at 16:07 UTC

How the output was used: The expert group, the Secretariat and its consultants working on the guidelines integrated comments/criticisms we provided regarding the guidelines. The delegates of 189 countries in the commission considered our recommendations, paper and side event when deciding to adopt the Guidelines.

Evidence of the outcome: Report of workshop "Integrating genetic diversity considerations into national climate change adaptation plans - Development of guidelines": http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/CCworkshopreport.pdf

CCAFS blog post highlighting Bioversity's contributions to the adoption by the Commission of the Guidelines: https://ccafs.cgiar.org/blog/new-guidelines-use-agrobiodiversity-climate-change-adaptation-planning#.VswQeVL9xan

Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning: http://www.fao.org/3/a-i4940e.pdf

References: CCAFS Discussion paper: https://cgspace.cgiar.org/bitstream/handle/10568/52991/CCAFS_WP95.pdf

Presentation entitled "Crop diversity for climate change adaptation": http://www.slideshare.net/BioversityInternational/crop-diversity-for-climate-change-adaptation

Blog post entitled "Promoting genetic diversity in agriculture through National Adaptation Plans": https://ccafs.cgiar.org/blog/promoting-genetic-diversity-agriculture-through-national-adaptation-plans#.VtWaMFL9xam

Side event presentation: http://www.slideshare.net/BioversityInternational/agricultural-biodiversity-in-climate-change-adaptation-planning

Side event flyer: http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/SideEvents_CGRFA15.pdf

Blog post entitled "New guidelines for use of agrobiodiversity in climate change adaptation planning": https://ccafs.cgiar.org/blog/new-guidelines-use-agrobiodiversity-climate-change-adaptation-planning#.VswQeVL9xan

The primary 2019 outcome indicator that this case study is contributing to:
FP4 Indicator: # of regional/global organisations and processes that inform their equitable institutional investments in climate smart food systems using CCAFS outputs

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

Year: 2015

Annexes uploaded: <Not defined>

5. Project outputs

5.1 Overview by MOGs

Major Output groups - 2019
FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>
FP4 - MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora **Brief bullet points of your expected annual 2019 contribution towards the selected MOG** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined>

Major Output groups - 2014
FP4 - MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues **Brief bullet points of your expected annual 2014 contribution towards the selected MOG** <Not defined> **Brief summary of your actual 2014 contribution towards the selected MOG:** <Not defined> **Brief plan of the gender and social inclusion dimension of the expected annual output** <Not defined> **Summary of the gender and social inclusion dimension of the 2014 outputs:** <Not defined>

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

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

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

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

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

Major Output groups - 2015

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

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

Brief summary of your actual 2015 contribution towards the selected MOG:
Based on a comprehensive desk analysis of crop diversification programs and projects carried out in Cambodia, Lao PDR and Vietnam between 2000 and 2015, effective policy implementation guidelines were identified concerning three core policy elements: clear and coherent purpose, taregeted instituional capacity development, and prioritization of policy interventions.

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

Summary of the gender and social inclusion dimension of the 2015 outputs:
The effective policy implementation guidelines were identified based on a social and gender analysis of the implementation and results of the crop diversification programs and projects in the three countries.

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

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

Brief summary of your actual 2015 contribution towards the selected MOG:
The Guidelines adopted by FAO Council in 2015 represent an important development in supranational governance. While they are adopted by an global intergovernmental body with 189 state members (the CGRFA),they are meant for use within countries for national level climate change adaptation planning.

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 Guidelines highlight the importance of taking gender issues into consideration in the context of developing national strategies that integrate GRFA, by engaging men and women in vulnerability assessments, decision making, and ultimately as key actors in the management and use of GRFA on farm and across agro-ecosystems.

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
<Not defined>

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

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

Brief bullet points of your expected annual 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: While the Guidelines represent a valuable experiment in a global policy body adopting a policy tool for use in national levels, it misses opportunities to promote climate change adaptation planning at regional and subregional levels. This is a reflection of the persistence (and limitation) of individual state sovereignty as the basis of UN membership and decision-making.

Submitted on 2016-03-03 at 16:07 UTC

5.2 Deliverables

Deliverable #1

Main Information	
Title: Background paper/policyregaring the extent to which biological diversification in ag production systems features in NAPAs	
MOG # 3: Effective supra-national governance systems and equitable engagement mechanisms between international and regional/national stakeholders to influence global policy and strengthened capacities to integrate local priorities into global fora	
Main Type: Reports, Reference Materials and Other Papers	**Sub Type:** Policy briefs - Briefing paper
Year of expected completion: 2015	
Status: Complete	

Next-user
Commission on Genetic Resources for Food and Agriculture
Knowledge, attitude, skills and practice changes expected in next-user: The paper highlights inconsistencies in which 50 countries include system diversification - with a focus on increased use of biodiversity in agricultural production systems -- in their NAPAs. It recommends the adoption of guidelines for countries when developing NAPs to identify ways for integrating increased use of biodiversity.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Policy brief/background paper will be shared with the CGRFA Secretary, who will help us to 'frame the issues' most effectively to capture the interests of the delegates to the meeting.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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	4

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

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/52991

Deliverable Metadata

Description: Bedmar, V.A.; Halewood, M.; Lopez Noriega, I. (2015) Agricultural biodiversity in climate change adaptation planning: an analysis of the National Adaptation Programmes of Action. CCAFS Working Paper no. 95. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

To guide climate adaptation policies and investments, the majority of least developed countries (LDCs) have developed National Adaptation Programmes of Action (NAPAs). Agricultural biodiversity is an important, but often overlooked, element in climate adaptation; new crop varieties, cropping and farming systems will be important under future climates. This paper analyzes the extent to which agricultural biological diversity is included as part of national adaptation planning in the 50 NAPAs developed by LDCs as of December 2014. The paper presents an analytical framework that was used for the analysis of the NAPAs. It identifies 48 activities included in the NAPAs that do (or at least could) increase biodiversity in agricultural production systems or in research and development chains as part of strategies to adapt to climate change. These activities are clustered, first, by sectors (crops/forages, livestock, fisheries, forestry, agroforestry and natural resources) and then by biodiversity levels (genetic/intra-species, species and ecosystems). The highest concentration of activities was found in the combined crops/forages sector and at the ecosystem level. The analysis highlights that agricultural biodiversity is not incorporated within and across the NAPAs in a comprehensive manner, demonstrating that there is not a commonly adopted approach to integrating agricultural biodiversity into strategic planning. In light of these findings, one of the paper's conclusions is that country teams developing national adaptation plans (NAPs) in the future would benefit from the guidelines for integrating genetic diversity considerations into climate change adaptation planning being considered by the Food and Agriculture Organization's Commission on Genetic Resources for Food and Agriculture during its fifteenth session in January 2015. Lessons learned from the NAPA development process are potentially valuable to countries that will be developing NAPs in the years to come.

Creator / Authors: Bedmar, V.A.; Halewood, M.; Lopez Noriega, I.

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: en

Coverage: National Adaptation Programmes of Action (NAPAs) of 50 least developed countries (LDCs)

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #2

Submitted on 2016-03-03 at 16:07 UTC

Main Information	
Title: Journal article regarding the extent to which biological diversification in ag production systems features in NAPAs	
MOG # 1: Improved national planning processes through policy analyses, (re)formulation and implementation; and stakeholder analyses and engagement through scenarios, learning alliances and science-policy dialogues	
Main Type: Peer reviewed Publications	**Sub Type:** Peer-reviewed journal articles
Year of expected completion: 2015	
Status: Extended	**Justification for cancelling the deliverable:** Journal article submitted to journal. Waiting for review/response.

Next-user
climate change scientists and policy actors
Knowledge, attitude, skills and practice changes expected in next-user: Increased awareness about option to include biological diversification of agricultural production systems in NAPs
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Dissemination of paper through networks of policy actors involved in national adaption strategy planning.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	2
Potential for/ actual contribution to outcomes	4
Level of shared ownership (partnerships across org.)	3
What is your personal perspective of the importance of this product	5

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

Deliverable Metadata

Description: journal article analyzing the extent to which the increased use of agrobiodiversity for climate change adaptation is included in fifty NAPAs. This article is based on a revised and sharpened treatment of the issues addressed in the discussion draft published earlier in 2015.

Creator / Authors: Ana Bedmar Villanueva, Michael Halewood, Isabel Lopez Noriega

Author Identifier: <Not defined>

Publication / Creation date: 2016

Language: English

Coverage: 50 least developed countries in the world that have developed NAPAs

Deliverable Data sharing

https://drive.google.com/drive/u/1/folders/0B0VTAnaUDXLBR2ZMN0tVOGxFR3c

Deliverable #3

Main Information

Title: Framework paper for ISSD Africas research theme 'global policies and national realities'

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

ISSD Africa project managers and funders, national and regional policy actors involved in follow-up action research

Knowledge, attitude, skills and practice changes expected in next-user: Increased appreciation of advantages of integrating policy support for informal and mixed (with formal and informal) seed systems in regionally harmonized IPR and seed laws. Increased appreciation how access and benefit sharing norms affect availability of biological resources for use in execution of regional climate change adaptation programs and strategies.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Frameworks paper shared through ISSD with wide range of policy actors in subregional organizations in eastern and southern Africa, and national organizations in a few (to be determined) countries. It will be the basis/justification for three action research projects to be carried out in 2015-2016 targeting subregional policy development/implementation processes.

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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: cgspace
Dissemination URL: https://cgspace.cgiar.org/handle/10568/71059

Deliverable Metadata
Description: De Jonge, B.; Halewood, M.; Mushita, A.; Wafula, D.; Mukuka, J. [Thematic Working Group 3] (2015) Thematic Scoping Paper: Matching global commitments with national realities. ISSD Africa. 12 p.
Creator / Authors: De Jonge, B.; Halewood, M.; Mushita, A.; Wafula, D.; Mukuka, J
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: en
Coverage: Seed systems in Africa

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #4

Main Information
Title: review of projects supporting crop diversiification in Cambodia, Lao PDR and Vietnam

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:** Other non-peer reviewed articles
Year of expected completion: 2015	
Status: Complete	

Next-user
Policy actors in the three countries
Knowledge, attitude, skills and practice changes expected in next-user: Increased awareness of need for institutional and policy supports for mixed farming systems (integrating mixed portfolios of livestock, field crops, vegetables, fish, trees) to minimize risks associated with climate variation
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Working with heads of agricultural research agencies on review paper and using that as a basis for development of proposal for future follow-up activities

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International
Partner #2: Channa, Ty <tychanna2013@gmail.com>, CARDI - Cambodian Agricultural Research and Development Institute
Partner #3: Buahom, Bounthong <bounthong@live.com.au>, NAFRI - National Agriculture and Forestry Research Institute
Partner #4: The Anh, Dao <daotheanh@gmail.com>, CASRAD - Centre for Agrarian Systems Research and Development

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: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/68388

Deliverable Metadata

Description: Vernooy, R. (ed) (2015). Effective implementation of crop diversification strategies for Cambodia, Lao PDR and Vietnam: Insights from past experiences and ideas for new research. Rome, Italy: Bioversity International.

The governments of Cambodia and Lao PDR have made strong commitments through the Climate Change Initiative of the Association of Southeast Asian Nations (ASEAN) to integrate mitigation of and adaptation to climate change into their national and sectoral development policies and action plans. Vietnam has also started to address climate-change adaptation at the national and sub-national levels. Governments in the three countries have identified a series of agriculture-based interventions as priorities to strengthen the resilience of smallholder farmers, most notable of which is crop diversification. However, how to practically implement effective policy measures that are of particular benefit to smallholder farmers remains a challenge. Research could contribute to developing a number of pilot initiatives at a sub-national scale to test and assess promising measures. If proven effective, these could then be scaled up under national agricultural policies and the national adaptation programmes of action for climate change (NAPAs). Vietnam does not have a NAPA, but chapter 2 offers a brief analysis of the NAPAs of Cambodia and Lao PDR in terms of the attention paid to crop diversification. It is based on a larger study about NAPAs and aims to explore the extent to which the NAPAs developed by Cambodia and Lao PDR include activities that, directly or indirectly, propose to utilize higher levels of biological diversity in production systems, agricultural research and development. The original study is entitled “Increased biodiversity in agricultural systems and the status of genetic resources for food and agriculture in the ‘National Adaptation Programmes of Action’ (NAPAs).” It will be published in 2015 by Bioversity International.

Bioversity International is working with national partners in the three countries to identify key elements needed to effectively implement policy measures for crop diversification targeted at farmers (both women and men) and ethnic minorities in low and upland regions. In 2014, this resulted in the elaboration of three country desk reviews of past and ongoing crop diversification projects and an international workshop on crop diversification in Cambodia, Lao PDR and Vietnam. This book presents the results of both the desk reviews and the workshop.

Creator / Authors: Vernooy, R. (ed)

Author Identifier: <Not defined>

Publication / Creation date: 2015

Language: en

Coverage: Crop diversification strategies in Cambodia, Lao PDR and Vietnam

Deliverable Data sharing

Deliverable files
<Not defined>

Deliverable #5

Submitted on 2016-03-03 at 16:07 UTC

Main Information

Title: Poster presentation about the NAPAs research at the conference "Our Common Future under Climate Change"

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

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

Year of expected completion: 2015

Status: Complete

Next-user

Assistants to the conference "Our Common Future under Climate Change" (CFCC15), Paris, July, 2015

Knowledge, attitude, skills and practice changes expected in next-user: Awareness rising about the inconsistency with which the 50 countries which had developed a NAPA as of July 2015 included system diversification - with a focus on increased use of biodiversity in agricultural production systems as part of their climate change adaptation planning.

Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: Results of the research project concerning how agrobiodiversity is included in the 50 NAPAs developed as of July 2015 will be presented at a poster session during the conference "Our Common Future under Climate Change" (CFCC15), Paris, July, 2015.

Partners contributing to this deliverable

Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

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	4

Deliverable dissemination

Open access restriction: Yes

License adopted: <Not defined>

Dissemination Channel: cgspace

Dissemination URL: https://cgspace.cgiar.org/handle/10568/71225

Deliverable Metadata
Description: <Not defined>
Creator / Authors: Bedmar Villanueva, A.,Halewood, M.,Lopez Noriega, I.
Author Identifier: <Not defined>
Publication / Creation date: 2016-02-26T11:02:08Z,2016-02-26T11:02:08Z,2015
Language: English
Coverage: <Not defined>

Deliverable Data sharing
Deliverable files <Not defined>

Deliverable #6

Main Information	
Title: Chapter in a book entitled "Micro-organism genetic resources for food and agriculture and climate change"	
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:** Book chapters
Year of expected completion: 2015	
Status: Complete	

Next-user
Scientists/Policy actors at internatinal, national and organizational levels who want to promote using agricultural biological diveersity for climate change adaptation.
Knowledge, attitude, skills and practice changes expected in next-user: Increased awareness of the impacts of climate changes on microbial genetic resources, and the potential for deploying microbial genetic resources to adapt to climate changes.
Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes: The book has been widely promoted by the CGRFA Secretariat to all 189 member states of the Commission as well as all observer groups (civil society, private sector, farmers organizations, CGIAR, regional organizations).

Submitted on 2016-03-03 at 16:07 UTC

Partners contributing to this deliverable
Partner #1 (Responsible): Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International

Deliverable Ranking	
Address gender and social inclusion aspect	1
Potential for/ actual contribution to outcomes	3
Level of shared ownership (partnerships across org.)	2
What is your personal perspective of the importance of this product	3

Deliverable dissemination
Open access restriction: Yes
License adopted: <Not defined>
Dissemination Channel: other
Dissemination URL: http://www.fao.org/3/a-i3866e.pdf

Deliverable Metadata
Description: Chapter in a book. Focusing on microbial genetic resources. Impacts of climate changes on pathogenic and beneficial microbes. Options for policies to support conservation and sustainable uses linked to climate change mitigation and adaptation.
Creator / Authors: Fen Beed, Anna Benedetti, Gianluigi Cardinali, Sukumar Chakraborty, Thomas Dubois, Karen Garrett and Michael Halewood
Author Identifier: <Not defined>
Publication / Creation date: 2015
Language: English
Coverage: global

Deliverable Data sharing
Deliverable files <Not defined>

5.3 Summary on next-users

Next user #1
Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes: Key next users for our NAPAs research were a) experts involved in developing the The Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning (Guidelines) and b) the delegates to the the 14th session of FAO's intergovernmental Commission on Genetic Resources for Food and Agriculture, who had to consider/adopt the Guidelines. The research results were directly relevant to the issues that the guidelines address; they provided a much-needed knowledge base upon which these two groups could make recommendations/decisions.
Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes: We liaised directly with the Secretary of the Commission to organize opportunities for us to get the maximum outcome-oriented leverage from our research. We made presentations of our preliminary research results to the group of experts that was assembled to develop the first draft of the Guidelines. we organized an expert side event/panel for delegates to the Commission meeting to share our research results and recommendations.
Reported deliverables serve as evidence towards this achieved change: See blog post about participation in Expert meeting , with slideshow at http://ccafs.cgiar.org/blog/promoting-genetic-diversity-agriculture-through-national-adaptation-plans#.U1e-DU2KDcv. See blog post about participation in the Commission meeting, with side event flyer and slideshow at: http://www.bioversityinternational.org/news/detail/new-guidelines-for-use-of-agricultural-biodiversity-in-climate-change-adaptation-planning/
Lessons and implications for the next planning cycle: There will be no continuation of this project in the next planning cycle.

5.4 Project highlights

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

6. Activities

Activity #1	
Title: Policies for agricultural system diversification to adapt to climate change	
Description: Bioversity will comparatively analyze all NAPAs, PIFs concerning extent to which countries prioritize system diversification (with particular focus on increased biological diversity) as means to adapt to climate change. Discussion draft of findings will be submitted to CGRFA in 2015. Revised paper will be submitted for publication. in journal. Bioversity will work with scientists from NAFRI, CARDI, VAAS to publish paper based on 2014 workshop on 'Effective Implementation of Crop Diversification Strategies in Cambodia, Lao PDR and Vietnam" and develop a proposal for follow up activities from 2015 onward, focusing on field crop, vegetable, livestock and aquatic animal diversification. Bioversity will act as facilitator of one of 4 research themes under newly launched Integrated Seed System Development (ISSD) Africa initiative supported by the Netherlands and B&MG Foundation. Will contribute to framework paper to guide action research projects to be conducted in 2015-16. The action research projects will concern 1&2. exploiting openings in regional IPR and seed law harmonization efforts to create incentives(or minimize disincentives) for farmers to continue manage a diverse range of planting materials; 3. promoting access and benefit sharing mechanisms to share plant genetic diversity for climate change adaptation. Bioversity will conduct literature review and series of key informant interviews concerning the influence of subsidies on diversity of reproductive materials made available for farmers through public and private suppliers	
Start date (dd-MM-yyyy): 21-01-2015	**End date (dd-MM-yyyy):** 23-12-2015
Leader: Halewood, Michael <m.halewood@cgiar.org>, BI - Bioversity International	
Status: Complete	

Lessons regarding your project activities and possible implications for the coming planning cycle: Our communications and partner engagement strategy succesfully maximize the impact of our NAPA-related research. More details in our outcome story.

The activities were all related to finalizing work that had been started in previous years. The deliverables were relatively straightforward and easy to deliver, that is, publications. These publications constitute useful contributions to ongoing policymaking processes at national and international levels. Bioversity scientists will continue to work in 2016 and onwards to ensure that the publications are introduced into relevant fora and shared with appropriate audiences/readers, to maximize their potential contribution to longer term outcomes (despite termination of this activity at the end of 2015).

The only activity/deliverable not 100% finished related to the publication of a peer-reviewed journal article. It has been submitted to a journal, but not yet reviewed or accepted. Of course, in 2016 we will follow up to ensure publication.

7. Leverages

<Not defined>