

Submitted on 2016-03-03 at 23:32 UTC

# CCAFS CORE W1\_W2 ONLY

**Title:** (IIASA) Households opportunities under the future climate in the framework of CCAFS regional development scenarios

<b>Start date (dd-MM-yyyy)</b>	01-01-2014	<b>End date (dd-MM-yyyy)</b>	31-12-2016
<b>Management liaison</b>	F4 - Flagship 4	<b>Mgmt. liaison contact</b>	Thornton, Philip <p.thornton@cgiar.org>
<b>Lead organization</b>	IIASA - International Institute for Applied Systems Analysis - Austria	<b>Project leader</b>	Havlik, Petr <havlikpt@iiasa.ac.at>
<b>Project type</b>	CCAFS CORE	<b>Detailed project workplan</b>	<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

This project does not have Bilateral projects

## Summary

CCAFS regional scenarios set ground for new forward looking assessments in developing regions. However, to rise to their potential, three additional elements seem to be required: 1. Validation through number of peer reviewed scientific publications, 2. Bringing the analysis down to the farm households, 3. Considering change in frequency and strength of extreme weather events.

IIASA has been involved in quantification of regional scenarios. These were developed to represent important trends at regional scale. However, it is at household level where impacts ultimately matter. IIASA/CSIRO will demonstrate an innovative methodology how to bridge scales and assess impacts and adaptation options at country and household level.

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## 2. Partners

### Partner #1 (Leader)

**Institution:** IIASA - International Institute for Applied Systems Analysis

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

#### Contacts

Type	Contact	Responsibilities and contributions
Project Leader	Havlik, Petr <havlikpt@iiasa.ac.at>	responsible for overall project implementation
Partner	Palazzo, Amanda <palazzo@iiasa.ac.at>	Activity 2014-356 *Leader*.
Partner	Mosnier, Aline <mosnier@iiasa.ac.at>	Activity 2014-368 *Leader*.

### Partner #2

**Institution:** University of Oxford - University of Oxford

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

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Vervoort, Joost <joost.vervoort@eci.ox.ac.uk>	Activity 2014-356 *Partner*. Activity 2014-369 *Partner*.

### Partner #3

**Institution:** IFPRI - International Food Policy Research Institute

#### Contacts

Type	Contact	Responsibilities and contributions
Partner	Mason-Mason-DCroz, Daniel <d.mason-dcroz@cgiar.org>	Activity 2014-356 *Partner*.

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**Partner #4****Institution:** CSIRO - Commonwealth Scientific and Industrial Research Organisation**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Herrero, Mario <Mario.Herrero@csiro.au>	Activity 2014-356 *Partner*.

**Partner #5****Institution:** IFAD - International Fund for Agricultural Development**CCAFS Partner(s) allocating budget:** <Not defined>**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Elhaut, Thomas <t.elhaut@IFAD.org>	Activity 2014-368 *Partner*.

**Partner #6****Institution:** FP4 Leader - FP4 Leader**Contacts**

Type	Contact	Responsibilities and contributions
Partner	Thornton, Philip <p.thornton@cgiar.org>	contributions to project

**Partnerships overall performance over the last reporting period:** The partnership with Oxford (Vervoort) and the partnership with IFPRI (Mason-DCroz) remain strong as Vervoort is the main contact between the quantified scenarios and the regional scenario-guided policy planning process and Mason-DCroz continues to be the main collaborator of the CCAFS quantified scenarios with IIASA. Both have been helpful in reaching the project outcomes and offering input to the project deliverables. Also other partnerships went as expected.

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**Lessons regarding your partnerships and possible implications for the coming reporting cycle:** The partnership with IFPRI (Mason-DCroz) and Oxford remains strong through regular internet conference calls. By having a single contact point for the regional scenario-guided policy planning activities through Vervoort, information is more efficiently shared.

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### 3. Locations



## 4. Outcomes

### 4.1 Project outcome narrative

#### Project outcome statement

The quantified scenarios results and datasets from GLOBIOM will provide insights to all CCAFS scenarios activities, inform priority setting for regional/global organizations and provide to the scientific community the regional context of global foresight for each CCAFS regions. By 2019, results from scenarios will lead to better understanding of future socio-economic and climate challenges and engagement with policy makers deliver direct impacts on climate-smart/food policies through engagement with stakeholders.

This project will feed into national policy making and investment decisions by international organizations. Insights about impacts in likely increases in climate variability on food availability, commodity markets, and farmers' incomes will contribute to capacity of decision makers to develop effective and cost-efficient strategies in form of insurance schemes, infrastructure, storage facilities, irrigation systems. Through developing innovative analytical methods it will boost research in the large economic assessment of climate variability impacts.

**Annual progress towards outcome (end of 2015):** The quantified scenarios results from GLOBIOM will continue to provide a major input for the CCAFS scenario-guided policy planning, where in 2015, at least 4 regional/national case studies will be presented in drafts that will be accepted and finalized, or have a concrete potential to be accepted and finalized in 2016. The dissemination of datasets and analysis of the scenario results will help to inform these policy engagements as well as the larger scientific community, since they offer regional context for sub-national decisions and thus help to better articulate the links between the socio-economic and climate drivers of change and resulting effects on food security.

**Annual progress towards project outcome in the current reporting cycle (2015):** IIASA prepared quantified scenarios results for presentation in a number of workshops in 2015, which were useful to allow policy makers to re-imagine the scenarios to fit their in their context. In three of these workshops, three national adaptation plans have been analyzed under the contexts of the scenarios, evaluated for their effectiveness, and re-drafted to be robust under climate and socio-economic uncertainty. One of the workshops included researchers from different CGIAR Research Programs (CRPs) who used the scenarios to evaluate their research objectives. In 2016, we expect to see the finalization of the draft policy plans.

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**Communication and engagement activities have contributed to achieving your Project outcomes:** IIASA has highlighted the activities of the project in its biannual news magazine as an example of using science for successful policy engagement. (p 9) <http://www.iiasa.ac.at/web/home/resources/publications/options/opt15w-web.pdf> A blog post was written to highlight the quantification of the scenarios used in the Burkina Faso workshop brought together national partners from the government, private sector and civil society to review the development of National Plan for the Rural Sector (PNSRs) as well as researchers from different CGIAR Research Programs interested in evaluating their research objectives using the quantified scenarios. (<https://blog.iiasa.ac.at/2015/08/20/back-to-the-future-using-scenarios-to-road-test-the-policies-of-tomorrow/>) Active engagement with partners allowed us to provide quantified scenarios from GLOBIOM.

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

**Annual progress towards outcome (end of 2016):** Budget constraints essentially mean not much will happen in 2016

**Annual progress towards outcome (end of 2017):** Budget may constraint progress in 2017 also

**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:** The scenario-guided policy planning process depends on the use of both qualitative and quantitative scenarios. The use of the scenarios in workshops continues to give insights into the region, where the feedback from policy makers and stakeholders who challenge the modelling results they think are not plausible from a regional perspective create a two-way interaction between the narratives and the modelling results that further improve the scenarios.

## 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: 5	Cumulative target to date: 6

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2019		
<b>Target narrative:</b> Activity 2014-356: In 2015, scenarios results from GLOBIOM continue to be the main quantitative tool used by the		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		

2015		
<b>Target value:</b> 1	<b>Cumulative target to date:</b> 1	<b>Target achieved:</b> 3.0
<b>Target narrative:</b> <Not defined>		
<p><b>Narrative for your achieved targets, including evidence:</b> In a workshop organized by the Burkina Faso government and CCAFS, and national partners reviewed the development of National Plan for the Rural Sector (PNSR) based the four future scenarios developed for Western Africa by stakeholders and quantified by GLOBIOM and IMPACT. (<a href="https://ccafs.cgiar.org/blog/using-future-scenarios-design-policy-and-research-together-burkina-faso#.VthYj0lrK70">https://ccafs.cgiar.org/blog/using-future-scenarios-design-policy-and-research-together-burkina-faso#.VthYj0lrK70</a>)</p> <p>In workshop organized by PACCA and CCAFS, policy makers used the four quantified scenarios to test and adapt the Uganda's NAPMF (<a href="https://ccafs.cgiar.org/scenario-guided-policy-development-uganda-context-climate-change#.VthXrElrK71">https://ccafs.cgiar.org/scenario-guided-policy-development-uganda-context-climate-change#.VthXrElrK71</a>).</p> <p>In workshop organized by PACCA and the CCAFS Future scenarios team, policy makers used the four quantified scenarios to test and adapt the robustness of Tanzania's National Environment Policy. (<a href="https://ccafs.cgiar.org/creating-future-scenarios-inform-new-environment-policy-tanzania#.VthYI0lrK71">https://ccafs.cgiar.org/creating-future-scenarios-inform-new-environment-policy-tanzania#.VthYI0lrK71</a>).</p>		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> <Not defined>		
<b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Not much gender content		

2016		
<b>Target value:</b> 0	<b>Cumulative target to date:</b> 1	
<b>Target narrative:</b> Budget limitations will hinder this work in 2016		
<b>The expected annual gender and social inclusion contribution to this CCAFS Outcome:</b> The inclusion of household-scale elements in integrated assessment modelling will allow gender disaggregation to be carried out, which would be a considerable advance		

2014		
<b>Target value:</b> <Not defined>	<b>Cumulative target to date:</b> 0	<b>Target achieved:</b> <Not defined>
<b>Target narrative:</b> <Not defined>		
<b>Narrative for your achieved targets, including evidence:</b> <Not defined>		



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

**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: 2	Cumulative target to date: 3
Target narrative: Activity 2014-356: The CCAFS scenarios-guided policy and investment planning project (2014-63) will	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>	

2015		
Target value: 1	Cumulative target to date: 1	Target achieved: 1.0
Target narrative: <Not defined>		
<p><b>Narrative for your achieved targets, including evidence:</b> In a workshop organized by the Burkina Faso government (led by the Permanent Secretariat for the Coordination of Rural Sector Policies) and the CCAFS Future Scenarios team, national partners from the government, private sector and civil society reviewed the development of National Plan for the Rural Sector (PNSR). They were joined also by researchers from different CGIAR Research Programs (CRPs) interested in evaluating their research objectives under the four future scenarios developed for Western Africa by stakeholders and quantified by GLOBIOM and IMPACT.</p> <p>(<a href="https://ccafs.cgiar.org/blog/using-future-scenarios-design-policy-and-research-together-burkina-faso#.VthYj0lrK70">https://ccafs.cgiar.org/blog/using-future-scenarios-design-policy-and-research-together-burkina-faso#.VthYj0lrK70</a>)</p>		
The expected annual gender and social inclusion contribution to this CCAFS Outcome: <Not defined>		
<p><b>Narrative for your achieved annual gender and social inclusion contribution to this CCAFS outcome:</b> Not much gender content</p>		

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2016	
Target value: 0	Cumulative target to date: 1
Target narrative: Budget limitations will hinder this work in 2016	
The expected annual gender and social inclusion contribution to this CCAFS Outcome: The inclusion of household-scale elements in integrated assessment modelling will allow gender disaggregation to be carried out, helping assessments to be evaluated in relation to their differential gender impacts.	

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

### 4.3 Other Contributions

#### Contribution to other CCAFS Impact Pathways

The project contributes to the overall CCAFS regional socio-economic scenarios project (2014-63). Scenarios quantification outputs feed into the scenarios project engagement processes and outcomes.

Collaborating with other CRPs: <Not defined>

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

There is not an Outcome Case Study added.

## 5. Project outputs

### 5.1 Overview by MOGs

Major Output groups - 2019
<p><b>FP4 - MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
<p><b>FP4 - MOG # 4:</b> Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios</p> <p><b>Brief bullet points of your expected annual 2019 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p>
Major Output groups - 2014
<p><b>FP4 - MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios</p> <p><b>Brief bullet points of your expected annual 2014 contribution towards the selected MOG</b> &lt;Not defined&gt;</p> <p><b>Brief summary of your actual 2014 contribution towards the selected MOG:</b> &lt;Not defined&gt;</p> <p><b>Brief plan of the gender and social inclusion dimension of the expected annual output</b> &lt;Not defined&gt;</p> <p><b>Summary of the gender and social inclusion dimension of the 2014 outputs:</b> &lt;Not defined&gt;</p>

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**FP4 - MOG # 4:** Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios

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

<Not defined>

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

<Not defined>

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

<Not defined>

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

<Not defined>

### Major Output groups - 2015

**FP4 - MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

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

<Not defined>

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

3 national level workshops to inform policy implementation and that encourage adoption of climate-smart agricultural practices using the quantified scenarios for testing.  
Presentation of the modelling tool to Ethiopian stakeholders. Identification of national priorities to be investigated with the model during 2016 through scenario analysis.

**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:**

Participants include researchers, national partners from the government, private sector and civil society who focus directly on addressing poverty and improving livelihoods.

**FP4 - MOG # 4:** Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios

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

<Not defined>

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

1 workshop with participants from CGIAR Research programs (CRPs)

**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:**

Participants include researchers who focus directly on addressing poverty and improving livelihoods

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**Major Output groups - 2016**

**FP4 - MOG # 2:** Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios

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

Write-ups of scenario quantification will be completed

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

Results of the quantification will be discussed in relation to gender where appropriate and possible

**FP4 - MOG # 4:** Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios

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

Lack of funds will limit what can be achieved, though a policy brief on the scenario quantification results will be produced

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

Policy implications discussed in relation to gender issues where appropriate and possible

**Lessons regarding your major outputs groups (MOGs) and possible implications for the coming planning cycle:** We have learned how the quantitative scenarios presented at the scenario-guided policy planning workshops more engaging, by focusing only on the most useful information policymakers want to see for each scenario: regional socioeconomic growth and food security, development of crop and livestock sector under climate change, and changes in land use and deforestation.

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## 5.2 Deliverables

### Deliverable #1

Main Information	
<b>Title:</b> Regional scenarios in the wider context of the “new IPCC” scenarios	
<b>MOG # 4:</b> Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	
<b>Status:</b> On-going	<b>Justification for cancelling the deliverable:</b> IIASA led and published a CCAFS working paper of the regional scenarios work. The scenarios for the 6 regions were presented alongside the quantified modeling results from GLOBIOM. This paper is being adapted at present to turn into a peer-reviewed journal article that will focus on how the CCAFS regional scenarios provide multiple narratives and quantitative assessments of plausible futures based around the SSPs, and when taken together provide a meso-scale representative agricultural pathways (RAPs). This paper will be submitted by June 2016.

Next-user
Policy makers, advisors in government departments, Scientific community
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Knowledge of multiple regional contexts as a part of larger global foresight; Practice of considering the effects of climate change and general foresight activities in policy planning; Modeling and development community will use multiple regional contexts for global foresight
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Provide synthesized quantification results for policy engagement; blog articles of each paper and sharing widely on networks.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Palazzo, Amanda <palazzo@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

Deliverable Ranking	
<b>Address gender and social inclusion aspect</b>	3
<b>Potential for/ actual contribution to outcomes</b>	4

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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: <a href="#">&lt;Not defined&gt;</a>

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #2

Main Information	
<b>Title:</b> Globally consistent country model version of GLOBIOM	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Data and information outputs, including datasets, databases and models	<b>Sub Type:</b> Models
<b>Year of expected completion:</b> 2015	
<b>Status:</b> Complete	



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Next-user
Regional agricultural research institutes and agricultural engineer schools or economic universities
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> CSA options are apprehended in a systemic approach including understanding of competition for resources, influence of drivers of change at local, regional and global scales, trade-offs between environment and economics, and long-term impacts of options. Local partners reinforce their modeling capacity that could be used for other studies.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The first step will be to identify local partners who have interest and basic skills in statistics/economics. The model will be transferred to them and they will benefit from IIASA support to further adapt and develop the model to fit their needs during the following year of the project.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Mosnier, Aline <mosnier@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

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

Deliverable Metadata
<b>Description:</b> In the case study country, GLOBIOM-Ethiopia has been successfully developed to represent main drivers of agricultural change at the third administrative level (woreda). GLOBIOM-Ethiopia integrates a new typology of farming systems which combines agro-ecological zones, set of activities, and land intensification gradient. Household survey data have been used to better represent Ethiopian smallholders' diversity in the model. Scenarios are being developed to investigate the impact of policies to improve market access and irrigation coverage on smallholders' food security and poverty status.
<b>Creator / Authors:</b> Aline Mosnier (IIASA)

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<b>Author Identifier:</b> <Not defined>
<b>Publication / Creation date:</b> December 15, 2015
<b>Language:</b> English
<b>Coverage:</b> Ethiopia

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

### Deliverable #3

Main Information
<b>Title:</b> Impact of CCAFS scenarios on farming households in the country case study
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios
<b>Main Type:</b> Reports, Reference Materials and Other Papers
<b>Sub Type:</b> Working paper
<b>Year of expected completion:</b> 2016
<b>Status:</b> On-going
<b>Justification for cancelling the deliverable:</b> <Not defined>

Next-user
Ministry of Agriculture of the selected country; International organizations involved in food, agriculture and environment (FAO, IFAD, WB,...)
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Mechanisms of transmission of policies to households and especially the poor and the women are well understood by policy-makers. Trade-offs between different adaptation options are taken into account in order to better design policies and development projects which can target the poor and the women.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The report is widely shared in paper and electronic forms with local stakeholders. The report is available through IIASA website and other relevant websites. Mechanisms are illustrated with simple charts. Impact of each adaptation option on a range of indicators is quantified compared to a reference scenario.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Havlik, Petr <havlikpt@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #4

Main Information	
<b>Title:</b> Modeling climate variability in the framework of CCAFS scenarios: Implications for adaptation options	
<b>MOG # 4:</b> Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2016	

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<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> The budget cut for 2016 requires shifting this deliverable by one year (December 31, 2017) pending available funding.
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Next-user #1
National policy makers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> This study will quantify and highlight the challenge represented by potential future changes in climate variability on food availability and farmers incomes. This will allow to better assess the need for and to better design strategies for market and income stabilization, like promoting insurance schemes, or investments in storage capacities.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Policy brief will be produced.

Next-user #2
International institutions like IFAD, WB
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> This study will quantify and hence highlight the real challenge represented by potential future changes in climate variability on food availability and farmers incomes. This will allow to better assess the need for and to better design strategies for investments in storage capacities, irrigation systems, transport infrastructure...
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Results will be communicated through our networks at these institutions.

Next-user #3
Researchers
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> The proof of concept about the feasibility to tackle climate change variability in large scale economic models of the agricultural sector will open this field to a large number of researchers and will hence trigger the efforts in filling this important knowledge gap.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Scientific conferences, workshops,...

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Havlik, Petr <havlikpt@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

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

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

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

Deliverable Data sharing
Deliverable files <Not defined>

## Deliverable #5

Main Information	
<b>Title:</b> Complex interactions of scenarios between socio-economic and climate and impacts on agriculture and environment	
<b>MOG # 4:</b> Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios	
<b>Main Type:</b> Peer reviewed Publications	<b>Sub Type:</b> Peer-reviewed journal articles
<b>Year of expected completion:</b> 2015	

Submitted on 2016-03-03 at 23:32 UTC

<b>Status:</b> Extended	<b>Justification for cancelling the deliverable:</b> Presently, IIASA has a draft manuscript that is being finalized for submission before June 30, 2016. The four globally-consistent regional scenarios on Western Africa's are presented there. The objectives of this paper are to 1) demonstrate how linkages of global SSPs and regional multi-stakeholder scenarios; 2) provide insights for Western Africa on the future of development, agriculture, food security and climate impacts in both qualitative and quantitative scenarios; 3) build scalable scenarios for regional decision makers and the scientific community to use scenarios to build and test robust climate policies.
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Next-user
Policy makers, advisors in government departments, scientific community
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Foresight about the compounded challenges under the socioeconomic conditions in the scenarios and the biophysical effects from climate change, Improved regional insight for the global foresight
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> Provide synthesized quantification results for policy engagement, blog articles and sharing widely on networks.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Palazzo, Amanda <palazzo@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

Submitted on 2016-03-03 at 23:32 UTC

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

## Deliverable #6

Main Information
<b>Title:</b> 6 datasets of selected quantified drivers and results from the regional scenarios
<b>MOG # 4:</b> Improved regional/global investment choices through appropriately contextualised priority setting, drawing on global foresight and socio-economic regional scenarios
<b>Main Type:</b> Data and information outputs, including datasets, databases and models <b>Sub Type:</b> Datasets
<b>Year of expected completion:</b> 2015
<b>Status:</b> On-going <b>Justification for cancelling the deliverable:</b> The selection of quantified drivers and results from the quantified scenarios has taken place. The datasets from each of the 6 regions are available but have yet to be distributed. The platform for sharing these datasets will take into account the needs of both the scientific community, who may disaggregated and downscaled the scenarios for other subregional, national and subnational assessments, as well as regional policy makers, who may use the scenarios as a testing ground for potential policies.

Next-user
Policy makers, advisors in government departments, Scientific community
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Foresight about the compounded challenges under the socioeconomic conditions in the scenarios and the biophysical effects from climate change, Improved regional insight for the global foresight

Submitted on 2016-03-03 at 23:32 UTC

**Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:** Provide synthesized quantification results in easily usable form, blog articles around each dataset and sharing widely on networks.

#### Partners contributing to this deliverable

**Partner #1 (Responsible):** Palazzo, Amanda <palazzo@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

#### Deliverable Metadata

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

#### Deliverable Data sharing

Deliverable files <Not defined>
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## Deliverable #7



Submitted on 2016-03-03 at 23:32 UTC

Main Information	
<b>Title:</b> Policy recommendations from the main results of the study	
<b>MOG # 2:</b> Priority setting contextualised with national stakeholders and capacity strengthened to apply outputs in policy formulation; including trade-off analyses, foresight activities, and quantification of regional socio-economic scenarios	
<b>Main Type:</b> Reports, Reference Materials and Other Papers	<b>Sub Type:</b> Policy briefs - Briefing paper
<b>Year of expected completion:</b> 2016	
<b>Status:</b> <Not defined>	

Next-user
Ministry of Agriculture; Ministry of Environment; International development agencies; International NGOs
<b>Knowledge, attitude, skills and practice changes expected in next-user:</b> Climate-smart agriculture projects are embedded in long-term strategies that rely on systemic approach i.e. local projects take into account future development of international markets and are consistent with strategies in other sectors.
<b>Strategies (facilitation, engagement, knowledge sharing etc.) will be used to encourage and enable next-user to utilize deliverables and adopt changes:</b> The policy brief will be sent through IIASA network and posted on relevant websites.

Partners contributing to this deliverable
<b>Partner #1 (Responsible):</b> Havlik, Petr <havlikpt@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis

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

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

Deliverable Metadata
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Submitted on 2016-03-03 at 23:32 UTC

**Description:** <Not defined>

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

**Author Identifier:** <Not defined>

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

**Language:** <Not defined>

**Coverage:** <Not defined>

#### Deliverable Data sharing

**Deliverable files**

<Not defined>

## 5.3 Summary on next-users

Next user #1
<p><b>Key next user for the current reporting period. Key game changers. Observed Knowledge, Attitude, Skills and practice changes:</b> The next users identified were regional agricultural research institutes and agricultural engineer schools or economic universities. They can provide updated and tailored information to support government in policy formulation using GLOBIOM-Ethiopia outputs.</p>
<p><b>Strategies (facilitation, engagement, knowledge sharing etc.) you used to encourage and enable this next user to utilize deliverables and adopt changes:</b> In 2015, engagement has been done through a workshop organized in Addis in September 2015 where we have presented the tool and preliminary results and discussed the main challenges for Ethiopian agriculture that could be investigated using GLOBIOM.</p>
<p><b>Reported deliverables serve as evidence towards this achieved change:</b> The model GLOBIOM-ETHIOPIA has been finalized in December 2015.</p>
<p><b>Lessons and implications for the next planning cycle:</b> It would be useful to have more support from CCAFS to identify potential local partners at the beginning of the project.</p>

Submitted on 2016-03-03 at 23:32 UTC

## 5.4 Project highlights

Project highlight Information #1	
<b>Title:</b> GLOBIOM informs Burkina Fasso's policy making	
<b>Author:</b> Amanda Palazzo	<b>Subject:</b> <Not defined>
<b>Publisher:</b> <Not defined>	<b>Year:</b> 2015
<b>Project highlights types</b> Participatory action research Successful communications Policy engagement Capacity enhancement	<b>Start date:</b> 2016-03-03
<b>End date:</b> 2016-03-03	<b>Is global:</b> No
<b>Country:</b>	<b>Keywords:</b> <Not defined>
<b>Highlight description:</b> <Not defined>	
<b>Introduction / Objectives:</b> <Not defined>	
<b>Results:</b> <Not defined>	
<b>Partners:</b> <Not defined>	
<b>Links / Sources for further information:</b> <Not defined>	

## 6. Activities

Activity #1	
<b>Title:</b> Completing CCAFS regional scenario analysis	
<p><b>Description:</b> Scientific papers:</p> <p>a) Paper positioning regional scenarios in the wider picture of “new IPCC” scenarios based on Shared Socio-economic Pathways (SSPs) for the socio-economic drivers and on Representative Concentration Pathways (RCPs) for climate change. These scenarios were developed jointly by the integrated assessment modeling (IAM) community and impacts, adaptation and vulnerability (IAV) community. CCAFS scenarios were developed in a participatory process starting from the SSPs but refining them to better correspond to perceptions of regional stakeholders. This paper will present both methods and model results of this unique effort (being the first one at this large scale) of regionalization of SSPs.</p> <p>b) The second paper will present in detail a regional case study on the complex interactions between socio-economic and climatic change and their impacts on the agricultural sector and environment. The exact case study to be presented will be identified at the beginning of the project.</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 30-09-2016
<b>Leader:</b> Palazzo, Amanda <palazzo@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis	
<b>Status:</b> Extended	<p><b>Justification:</b> The extension of this activity will allow for the continued engagement of IIASA with the CCAFS Future Scenarios team in their regional scenario-guided policy planning processes. Extension of this activity will also allow for the finalization and submission of deliverable #1 and deliverable #5. Deliverable #6 is completed, however, the extension of this activity will allow for the development of an interactive platform to share the datasets. New expected date of completion: September 30, 2016.</p>
Activity #2	
<b>Title:</b> Micro-level impacts of CCAFS regional scenarios	
<p><b>Description:</b> IIASA (with CSIRO) will demonstrate on a selected country, an innovative methodology how to assess impacts and adaptation options for future scenarios at country and household level. For this IIASA will</p> <p>a) Develop a single country version of GLOBIOM where the country will be represented in detail while the rest of the world will be simplified. This approach will allow for more accurate country analysis and potential dissemination of the model.</p> <p>b) Build on existing household surveys (e.g. IMPACTLITE) and create interface between GLOBIOM variables and a household model representing the individual household.</p> <p>c) Develop a structural change model which will translate the country developments projected by GLOBIOM to changes in agriculture with particular focus on future role of smallholder farms.</p> <p>d) Run CCAFS scenarios for the given region through the modeling framework developed in a)-c) and test alternative policies with the potential to adapt to climate change</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2015	<b>End date (dd-MM-yyyy):</b> 31-12-2016

Submitted on 2016-03-03 at 23:32 UTC

<b>Leader:</b> Mosnier, Aline <mosnier@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis	
<b>Status:</b> On-going	<b>Justification:</b> The model has been set-up and successfully tested.

Activity #3	
<b>Title:</b> Modeling climate variability and the related adaptation options under CCAFS scenarios	
<p><b>Description:</b> Climate variability will impact agriculture more than average change in temperature and precipitation. However, no global agricultural model is currently able to represent impacts of variability on markets, and hence access to affordable food.</p> <p>IIASA will build, based on GLOBIOM, a new model solved for every year (current: 10 years), with imperfect foresight based on price and yield expectations.</p> <p>IIASA will explore how price expectations together with climate variability lead to different market volatility. Climate variability scenarios will draw on CMIP5, artificial scenarios of yield distributions based on these scenarios, past observations, and literature review. These results will be compared with the CCAFS scenarios with GLOBIOM and IMPACT and implications for adaptation will be highlighted.</p> <p>In a final step, the ability of storage systems to moderate the agricultural commodity price volatility will be analyzed, and the role of different sizes of the storing capacities will be discussed.</p>	
<b>Start date (dd-MM-yyyy):</b> 01-01-2016	<b>End date (dd-MM-yyyy):</b> 31-12-2017
<b>Leader:</b> Havlik, Petr <havlikpt@iiasa.ac.at>, IIASA - International Institute for Applied Systems Analysis	
<b>Status:</b> Extended	<b>Justification:</b> This activity was planned for year 2016 but because of the budget cuts cannot be accomplished and is thus shifted to 2017. New end date December 31, 2017

**Lessons regarding your project activities and possible implications for the coming planning cycle:** None

Submitted on 2016-03-03 at 23:32 UTC

## 7. Leverages

<Not defined>