

Evidences

Study #2602

Contributing Projects:

- P57 - Mainstreaming CSA practices in mixed tree/food crop systems among smallholder farmers in W Africa & Latin America

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: On-going

Year: 2018

Title: Private sector extension services get (climate) smart: Coffee in Uganda

Short outcome/impact statement:

The Stepwise Climate Smart Investment Pathway is an approach developed by IITA in collaboration with partners. Stepwise breaks down the recommended best practices that many farmers cannot afford to implement into smaller, more affordable packages that can be implemented in phases. Stepwise considers specific agro-ecological variables and farmer needs and aspirations to guide incremental investment by the farmer in specific sets of, and timing of practices. This incremental investment is expected to subsequently increase coffee yields in a stepwise manner.

Outcome story for communications use:

Stepwise Investment Pathway (SIP)

The first step in the Stepwise journey was the creation of a national level investment pathway for both Arabica and Robusta coffee in 2016. Conceptualization of the study was shared with key sector stakeholders. An expert group consisting of government representatives, researchers and academia and implementing partners worked together to identify small sets of priority coffee management practices for both mature coffee before first harvest and old coffee.

Site Specific Climate Smart Investment Pathway (CSIP)

Taking the stepwise investment pathways to a local context, workshops with key district stakeholders were conducted. Stakeholders divided into four groups to develop a CSIP for both coffee types. The four CSIPs were compiled into a hybrid CSIP (with expected yield estimates). Subsequent establishment of demonstration plots with impact partner participating farmers provide the testing ground for each site-specific stepwise climate smart investment pathway. IITA researchers deliver a Training of

Trainers to the impact partner extension officers. Regular monitoring and data collection is done jointly by IITA and its partners. Site-specific Stepwise in coffee have been developed for Luweero, Nakasongola and Rakai districts in the Central region, and Ntungamo in the South West for Robusta coffee, and Sironko district in Eastern Uganda for Arabica coffee.

Overall Benefits of the Approach

- * Informs farmers on the most efficient incremental investments to increase coffee yields and improve livelihoods
- * Increases awareness and knowledge of climate smart agricultural practices
- * Informs public and private sector on effective targeting of extension support to smallholders

To support the roll-out of the Stepwise approach a Smartphone application was developed as a tool for use by impact partner extension workers. IITA partnered with Mango Tree, an educational, communication and design company based in Uganda (<https://mangotreeuganda.org/>) combining research and technical knowledge with creative expertise to develop an appealing and innovative application. IITA impact partners, Hanns R. Neumann Stiftung and Olam contributed insight on information delivery and field-based data collection needs to maximize the usefulness of the application to the private sector.

Olam Uganda, reports early signs of success from demonstration sites in Mount Elgon and is expanding beyond coffee and Uganda. The Stepwise methodology is not only influencing the way Olam staff provide technical advice to coffee smallholder in Uganda, but it's also being used to guide technical support to smallholders in other regions and for other products (e.g. cocoa West Africa). Piet Van Asten, Vice President, Olam Uganda.

Links to any communications materials relating to this outcome:

- <https://drive.google.com/file/d/1HfZvGo74L2EdaPDKiR8ECfBXjV4Jkr-U/view>
- <https://drive.google.com/open?id=1Ii4tUXWYvpHdURHU7ZRarUPNidI1gcm->
- <https://drive.google.com/open?id=1ng-LT9nHDyGOPhd5boZi94OvHwUJmdfS>
- https://drive.google.com/open?id=1m5IkYILwAIPcAEJ1A_n5c7sKe7F4q-mY

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution: <Not Defined>

Stage of maturity of change reported: Stage 1

Links to the Strategic Results Framework:

Sub-IDOs:

- Enhanced capacity to deal with climatic risks and extremes (Mitigation and adaptation achieved)
- Enhanced adaptive capacity to climate risks (More sustainably managed agro-ecosystems)

Is this OICR linked to some SRF 2022/2030 target?: Too early to say

Description of activity / study: <Not Defined>

Geographic scope:

- Multi-national

Country(ies):

- Uganda
- Ghana

Comments: The Stepwise methodology is also being used to guide technical support to smallholders in other regions and for other products (e.g. cocoa West Africa).

Key Contributors:

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security

Contributing Flagships:

- FP2: Climate-Smart Technologies and Practices

Contributing Regional programs:

- EA: East Africa
- WA: West Africa

Contributing external partners:

- HRNS - Hanns R. Neumann Stiftung
- Olam - Olam International

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

Initial IITA research on coffee in Uganda began in 2006 and has spread across 30-districts, with 58 field trials, and 178 demonstration plots established and more than 4,000 participating farmers. IITA supports the Uganda Government relevant agricultural and coffee research policies, working closely with the Uganda Coffee Development Authority (UCDA) and the National Coffee Research Institute (NaCORI). Working with private sector impact partners such as Olam, Kawacom, Great Lakes Coffee, and Hanns R. Neumann Stiftung, IITA research activities include: land-use mapping; farmer segmentation surveys, and the development of climate smart investment pathways to increase smallholder coffee farmer adoption of good agricultural and climate smart practices. IITA has published almost 30-scientific articles on coffee.

Innovations: <Not Defined>

Elaboration of Outcome/Impact Statement:

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In support of the Stepwise approach a Smartphone application was developed (<https://mangotreeuganda.org/>) combining research and technical knowledge to develop an appealing and innovative application. IITA impact partners, Hanns R. Neumann Stiftung and Olam contributed insight on information delivery and field-based data collection needs to maximize the usefulness of the application to the private sector.

Initial Stepwise participating farmers' feedback is promising. Stepwise is highlighted as a novel approach to increase investment in coffee by the Uganda National Coffee Platform Financial Viability of Coffee Farming Study Report, October 2018. The report states that initial observations from Stepwise demonstration plots in Central Uganda managed by IITA impact Partner Hanns R. Neumann Stiftung (HRNS) "show high yields in step 4." Preliminary data analysis suggests a decreased incidence of Black Coffee Twig Borer. Olam Uganda, is also reporting early signs of success from demonstration sites in Mount Elgon. Olam is expanding the testing of the Stepwise approach beyond coffee and Uganda. "The Stepwise methodology is not only influencing the way Olam staff provide technical advice to coffee smallholder in Uganda, but it's also being used to guide technical support to smallholders in other regions and for other products (e.g. cocoa West Africa)". Piet Van Asten, Vice President, Olam Uganda.

References cited:

- IITA, 2019. The Farmer Segmentation Tool: Understanding the diversity of coffee farmers. Outcome story brief -- <https://hdl.handle.net/10568/100128>
- IITA, 2019. Climate Smart Investment Pathways for smallholder coffee farmers. Outcome story brief -- <https://hdl.handle.net/10568/100129>
- IITA, 2019. The Stepwise Smartphone Application Co-creation of innovative agricultural extension support tools. Outcome story brief -- <https://hdl.handle.net/10568/100132>
- Sustainable Food Lab, 2018. Improving Coffee Sector's Climate-Smart Awareness and Decision-Making. Outcome story -- <https://cgspace.cgiar.org/handle/10568/100136>

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 2 - Principal

Main achievements with specific **Gender** relevance: Farmer segmentation tool

Agricultural extension to farmers in Uganda assumes similar needs and aspirations. Research reveals there are in-fact many variances between farmers. The farmer segmentation tool enables the researcher or implementer to identify different clusters of farmers with similar characteristics. By better understanding specific farmer characteristics, more effective extension service delivery models can be targeted.

Youth relevance: 1 - Significant

Main achievements with specific **Youth** relevance: Youth were included as one of the farmer segments used in this work.

CapDev relevance: 1 - Significant

Main achievements with specific **CapDev** relevance: Build local capacity to use climate science and farmer segmentation to drive extension decision making

Climate Change relevance: 1 - Significant

Describe main achievements with specific **Climate Change** relevance: Translation of long term climate projections into actionable information at the farm level

Other cross-cutting dimensions: Yes

Other cross-cutting dimensions description: Farmer segmentation tool [also above in Gender, not sure if it is cross-cutting or gender]

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Outcome Impact Case Report link: [Study #2602](#)

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