RESTORING COFFEE FARM PRODUCTIVITY IN THE FACE OF CLIMATE CHANGE

April 24th, 2019
AGENDA

- Introduction
- Why R&R?
- Sustainable Coffee Challenge
  R&R Network
- Key Learnings
- Voices from the Private Sector: ECOM, Nestle & Starbucks
- Q&A
CHALLENGES IN COFFEE...

- Market volatility and its impact on farmers & workers
- Climate change and the concerns for supply, quality, and sourcing diversification

More Migrants Are Crossing the Border This Year. What’s Changed?

In the past, undocumented immigrants were mostly single men from Mexico, but that’s no longer the case. A look at who is coming and what is driving them.
HOW DO WE ADDRESS THREATS TO FARMER PROSPERITY + NATURE...

...WHILE ENSURING FUTURE SUPPLY OF COFFEE
WHY CROP RENOVATION?

Renovation with new varieties using an agroforestry approach

- Increased yield
- Increased income from coffee and other shade byproducts

- Farmer resilience
- Avoid the expansion of coffee’s spatial footprint
- Contribution to global restoration targets
- Supply meets demand
50% >50% of the 7 million hectares of global smallholder coffee land could benefit from R&R

5-20% Global production could increase between 5-20% if R&R is applied to all land in need

$1-3B Farmers could accrue between USD ~1-3 billion at farmgate prices through increased coffee sales per year

1-3M Without R&R, a similar increase in yields and value would require an expansion of coffee land onto ~1-3 million hectares of new land under current yields
$1.2b
Has been invested to-date in 40 programs conducted in the last 25 years

80%
of the programs have targeted Arabica

600k
Despite the $1.2b in investments, programs have reached only 5% of farmers in need
COFFEE FARM RENOVATION & REHABILITATION

Accelerating the responsible renovation and rehabilitation of coffee farms and making it possible for every coffee farmer to undertake efforts as a regular part of doing business by sharing experiences, incorporating best practices and coordinating efforts + resources.
Joint commitment to 1 billion trees by 2025

Sustainably renovate & rehabilitate coffee farms by applying techniques such as replanting, stumping, and rejuvenation pruning.
REACHING THE TARGET

Providing support to stimulate investments by...

DISTRIBUTING KNOWLEDGE
Sharing knowledge on renovation and rehabilitation to improve farmer yields and meet future demand for coffee.

CREATING INCENTIVES
Research to identify sources of funding for partners and collective fundraising to secure match funding for investments.
Case study 2: Long-term loans for renovation are provided by a blended finance facility to farmer organizations in Latin America (1/2)

Coffee Farmer Resilience Initiative – Root Capital

<table>
<thead>
<tr>
<th>Country</th>
<th>Loan</th>
<th>Period</th>
<th>Cost</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honduras</td>
<td>100K</td>
<td>3 years</td>
<td>7,700</td>
<td>2014-2016</td>
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<tr>
<td>Nicaragua</td>
<td>150K</td>
<td>5 years</td>
<td>11,000</td>
<td>2015-2020</td>
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<td>Panama</td>
<td>200K</td>
<td>7 years</td>
<td>12,000</td>
<td>2016-2023</td>
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</tbody>
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Case study 2: Long-term loans for renovation are provided by a blended finance facility to farmer organizations in Latin America (2/2)
Indonesia is characterized by 1.5 million unorganized SHFs and a liberal and unorganized enabling environment.
The interactive Guidebook is housed at www.sustaincoffee.org, accessible via the R&R Collective Action Network page.

01. What do I need to know?
Meeting the R&R need will be crucial to securing coffee supply for 2050 and beyond but there are no quick fixes. Here are some key considerations.

02. Is R&R right for my supply chain?
There are so many considerations when developing a program. How do I know if a renovation or rehabilitation is right for my supply chain?

03. How can I take action?
There are seven major needs for the R&R sector, from scaling up existing approaches, to laying the foundations for future R&R

04. Where can I learn more?
Download the Country data sheets or complete Guidebook in English, Spanish or French

https://www.sustaincoffee.org/farm-renovation-rehabilitation/
GLOBAL COFFEE MONITORING PROGRAM

OVERVIEW
A network of hundreds of researchers in coffee-related fields, established in collaboration with coffee companies, NGOs, and other stakeholders. Participates in monitoring and evaluation of coffee production and productivity, as well as the performance of coffee-related activities in the global coffee supply chain. The network includes a variety of research and monitoring activities focused on improving coffee productivity and sustainability.

TARGET
Seeds Program

OVERVIEW
The Seeds program aims to identify opportunities to improve coffee production in specific regions, focusing on strategies that can be implemented by farmers and other stakeholders in a way that increases productivity and profitability for the farmers.

Geographic Focus
Central America, South America, East Africa, Asia, and the Middle East.

Key Activities
Research, data collection, monitoring, and improvement of coffee varieties and cultivation practices.

Timeline
2016-2021

COFFEE FARM RENOVATION & REHABILITATION

Impact to Date
The Seeds program has identified several opportunities to improve coffee production in specific regions. For example, in Central America, efforts have been made to improve coffee varieties and cultivation practices, resulting in increased productivity and profitability for farmers.

COFFEE FARM RENOVATION & REHABILITATION

Global Coffee Agroforestry and Reforestation Initiatives

OVERVIEW
Explores initiatives and projects focused on agroforestry and reforestation, with a primary emphasis on coffee-based initiatives. The program aims to promote sustainability, improve coffee production, and mitigate the effects of climate change.

TARGET
Agroforestry and reforestation projects

OVERVIEW
Agroforestry initiatives aim to improve coffee production by integrating coffee with other crops and trees, creating a more sustainable farming system. The program focuses on improving the efficiency and productivity of smallholder coffee farms, as well as fostering biodiversity and improving soil quality.

Key Activities
Research and development of agroforestry systems, training and capacity building for farmers, and implementation of reforestation projects.

Timeline
Projects are typically implemented over a multi-year period.
NEXT STEPS

- Resilience incentive fund that incorporates R&R investments

- Shade Catalog in partnership with World Coffee Research & the Smithsonian Institute’s Migratory Bird Center
1. Understanding farmer characteristics is important to help determine the most likely financing instrument and capacity to undertake R&R at the farmer level.

Notes: (1) Estimates of number of SHFs in each segment come from Hans R. Neumann Stiftung, Structure of the coffee sector and implications for R&R, 2017, methodology from: Dalberg, Inflection point: Unlocking growth in the era of farmer finance, 2016. (2) These farms are generally not considered for this Guidebook as they are, at least partly, able to self-finance R&R. Source: Dalberg analysis and Dalberg interviews.
2. Farmers, particularly smallholders, will likely continue to need concessional finance / grants for the near future.

Past R&R programs have either been financed by grants alone or by concessional loans supported by grants or subsidies to cover high operating expenses.
Farm level investment decisions are highly complex and personal given farmers needs and preferences

"Should I risk the increased cost and risk of R&R for potential additional benefits, or simply avoid the risk and rely on my current yields?"

Those interested in supporting farmers in R&R also have many considerations

"Is a return on my capital desirable? Feasible?"

3. Rehabilitation is a great option for many farmers, particularly those with less upfront capital and lower risk appetite.
4. Successful programs combine inputs, finance and knowledge

**Inputs**: includes planting material (for renovation), inserting trees (for shaded coffee), and other inputs such as nutrition, tools, and herbicide

**Knowledge**: Includes technical assistance on GAP and management of long-term loans and R&R programs

**Finance**: includes financing (loans or grants) during the ‘valley of death’ to cover project components, and, sometimes, broader investments in coffee sector
5. Indonesia, Ivory Coast, Ethiopia, Mexico, Uganda & Brazil make up more than half of the global hectares in need of R&R.
6. Environmental & Social safeguards should not be overlooked
Expand current programming models
Fill data gaps on R&R
Innovate in delivery models
Innovate in finance to leverage commercial capital & improve reach
Better understand possible rehabilitation outcomes
Build R&R support services by strengthening coops, nurseries, local banks, etc
Join others in advocating to governments the value of R&R

7. There are various ways stakeholders can get involved in R&R
VOICES FROM THE PRIVATE SECTOR

Eric Poncon  
ECOM  
Director,  
Strategy Management

Marcelo Burity  
Nestle  
Head of Green Coffee

Derek Bothereau  
Starbucks  
Sr Manager,  
Global Responsibility
ECOM: INVESTMENT IN GENETIC MATERIAL DEVELOPMENT & RENOVATION

• Opened lab in Nicaragua in the early 2000’s.

• First mass development and distribution of F1 hybrids

• Developed the Morsesella variety

• Post roya, brokered funding for long-term renovation loans in Nicaragua in partnership with IFC. IDB & Starbucks

• Partnered with The Moringa Fund & Cafetelera Nica-France to promote farm renovation ‘outsourcing’ model

• Provides nursery development services for renovation initiatives, including Starbucks, S&D, and others

• Clonal of native precious local timber species to promote use in agroforestry systems
NESTLE NESCAFÉ PLAN

• The Nescafé Plan is a global initiative that brings together commitments and activities that support the responsible farming, production and supply, and consumption of coffee.

• To improve the quality, quantity and sustainability of its coffee supply chain, as part of the Nescafé Plan, Nestle will distribute 220 million coffee plantlets for farmers by 2020.
NESTLE

- Plant Science unit in Tours/France
  - Arabica and Robusta breeding and selection since the 90’s – Ecuador and Thailand
  - Research on drought resistance, genetics
  - Training of several scientists from various research institutions
  - Ongoing research partnerships and collaboration in 15 countries with public and private entities
- Have distributed more than 180 Mio Robusta and Arabica coffee plantlets since 2010
  - Propagation done by SE, Seeds, Rooted Cuttings and Grafting
  - Around 90k Ha planted in 15 countries
  - More than 300 Agronomists and field technicians around the world
STARBUCKS RENOVATION EFFORTS: ONE TREE FOR EVERY BAG

• In September 2015, Starbucks committed to donate funds from each bag of coffee purchased in Starbucks stores between Sept 2015 – June 2017 to distribute rust-resistant coffee trees
• Sales generated enough funds to provide more than 30 million trees
• 10 million seedlings were delivered per year via 12 nurseries
• Trees are distributed to C.A.F.E. Practices farmers in Mexico, Guatemala & El Salvador
• Social & environmental safeguards and strong M&E ensure maximum reach
Starbucks to Provide 100 Million Healthy Coffee Trees By 2025 (SBUX)

- In 2017, expanded commitment to 100M trees by 2025 (10M per year)
- Builds upon the efforts of “One Tree for Every Bag”
- Leverages green coffee purchase power
- Contributes to Sustainable Coffee Challenge industry goal of 1 billion trees
- Insights from first harvest forthcoming
PEOPLE NEED COFFEE TO THRIVE

AND COFFEE NEEDS PEOPLE AND NATURE TO THRIVE