

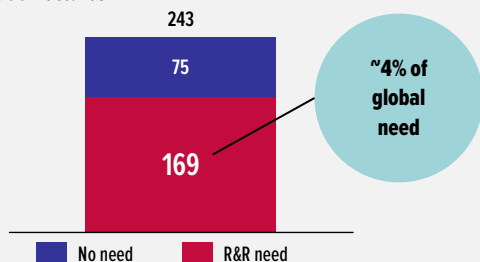
Guatemala has significant need for R&R since it has not yet recovered from a recent *La Roya* outbreak

Quick facts: Guatemala is the 5th biggest Latin America producer

Production '000 tons	Production share Global & region	Coffee land '000 hectares	Varieties Arabica-Robusta
232	11th in world 5th in LA	243	90% A 10% R

R&R need: ~70% of total land is in need of R&R

SHF land in R&R need out of all land
'000 hectares



Drivers of R&R need:

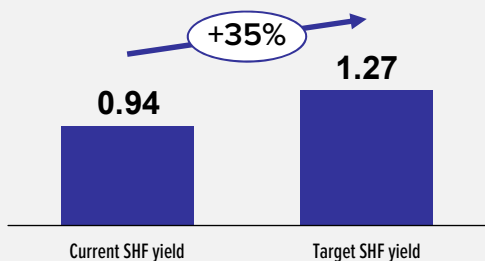


Need is primarily driven by old trees and exposure to disease (*La Roya* affected ~70% of coffee growing areas), and to a lesser extent climate change

Uplift potential: Moderate uplift potential on national supply

Current SHF yield & potential uplift¹

Tons per hectare



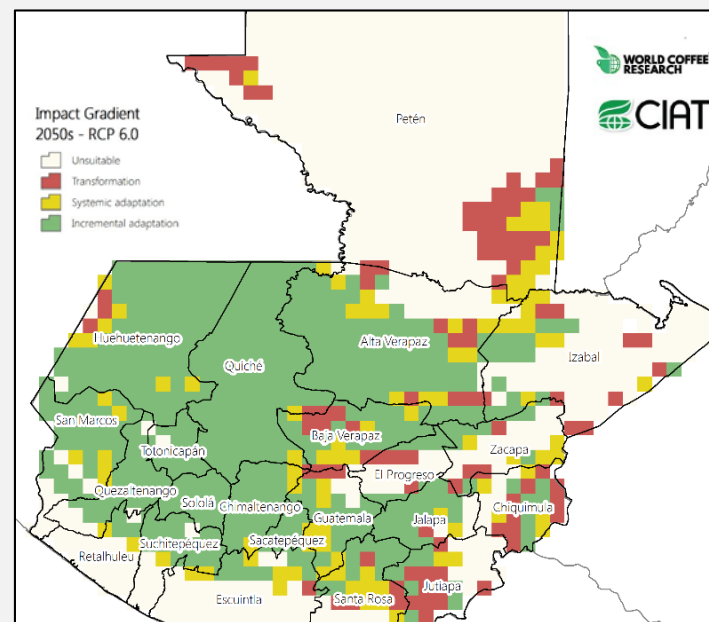
Potential increase in supply

~5-25%

Total national supply could increase ~2-15% if R&R and GAP is implemented on all SHF land in need of R&R²

Viability: Climate change could impact some regions

Suitability map



- The eastern and central parts of Guatemala (especially Petén) could potentially be severely affected by climate change

Other viability considerations

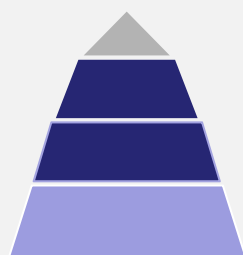
- There are almost no large and medium coffee farmers in Guatemala. They have mostly shifted to more profitable crops
- Relatively little government support, though Anacafé is well positioned to increase SHF incomes

Notes: (1) The current yield is calculated on the basis of SHF production divided by SHF land area, the potential yield uplift is based on an internal estimate based on other mixed countries and current yields. (2) Rounded to the nearest 5%, estimate assumes that R&R and GAP increase yields with 51%, and the range reflects a 25-100% R&R success rate. Sources: FAO Statistics database; ICO statistics; GCP and Technoserve, *Economic Viability of Coffee Farming*, 2017; USDA, *Annual Coffee Report*, 2017; FNC, *Sostenibilidad en Accion*, 2013; Santiago Silva Restrepo; *Evaluación de impacto de los progresos de renovación de cafetales 2007-11, 2012*; *Risk and Finance in the Coffee Sector*, The world Bank, February 2015; Dalberg Interview



Several renovation programs have attempted to help Guatemalan SHFs recover from *La Roya*

SHF segmentation: Most SHFs are in tight & loose value chains



SHFs
'000

122 (includes SHFs <7hectares – ~1% of global SHFs1)

SHF land
'000 hectares

240 (~100% of national land) – average farm size typically ~2 hectares

SHF production
'000 tons

227 (~98% of national production)

Assessment of SHF
orgs.

~70% of SHFs are linked to coops or loosely organized groups

Links to market

A majority of SHFs are linked to the market through *coyotes*, 'loan sharks' that charge extremely high interest rates

National production is dominated by SHFs

The majority of SHFs are either in tight or loose value chains. Most farmers groups do not have capacity to provide TA and finance to their members

Enabling environment for R&R: SHFs lack access to finance

Political environment



Availability of inputs



Availability of finance



Knowledge availability



- Coffee share of GDP: 1.6% (2013)
- The National Coffee Association (Anacafé) advises the Government on coffee policies for production and commercialization
- In 2014, the government created the “Trust for financial support for producers in the coffee sector” (the Trust Fund) with assets of USD 100 million dedicated to supporting farmers affected by *La Roya*. To date, about 40% of the fund has not been disbursed
- Anacafé produces seeds (including the rust resistant variety Anacafé 14), but there is a lack of production at commercial volumes
- Many SHFs produce their own seeds, but these typically have low quality
- Seeds may be imported from Nicaragua, but the certification process is slow.
- Low access to commercial bank loans for SHFs
- The Trust Fund has not yet been fully disbursed to SHFs
- Some coops provide TA, but coops generally have little capacity to deliver TA
- The Coffee Board does not prioritize the TA budget, and cuts it in case of crisis

Examples of R&R programs: Following *La Roya*, programs mostly focused on renovation of affected areas

- **Anacafé and USAID – Rural Value Chains project** (2012 - 2017) – Anacafé provided supported to farmer organizations to perform R&R. 129 organizations benefited from the project, over 3,000 hectares were renovated, and yields increased by over 60%
- **World Coffee Research - Seed Verification program** (2016 – 2020) – WCR partners with local nurseries to develop genetic control of seeds
- **Starbucks - One Tree One Bag** (2016-2018) – For each bag of coffee sold, Starbucks gives USD 0.70 to seed distribution to areas affected by *La Roya* in Guatemala, El Salvador and Mexico
- **Catholic Service Relief – Café Verde project** (2014 - 2016) - The project helped 765 SHFs to renovate old coffee plants susceptible to coffee rust

Notes: (1) Assuming a global SHF population of 20 million. Source: FAO Statistics database; ICO statistics; GCP and Technoserve, *Economic Viability of Coffee Farming*, 2017; Root Capital, *Learning Report: the CFIR*, 2016; USDA, *Annual Coffee Report*, 2017; IHCAFE, *Programa de Asistencia al Pequeño Productor*, 2017; IHCAFE, *El sector café de Honduras: avances, institucionalidades and desafíos*, 2017; Dalberg Interview