



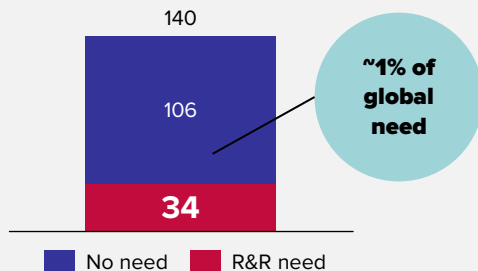
## El Salvador's coffee production was severely hit by La Roya and could be highly exposed to climate change

### Quick facts: El Salvador is a relatively little producer

<b>Production</b> '000 tons, 2014	<b>Production share</b> Global & region	<b>Coffee land</b> '000 hectares, 2014	<b>Varieties</b> Arabica-Robusta
<b>42</b>	<b>20<sup>th</sup> in world</b> <b>10<sup>th</sup> in LA</b>	<b>140</b>	<b>100% A</b> <b>0% R</b>

R&R need: ~80% of land is in need of R&R

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



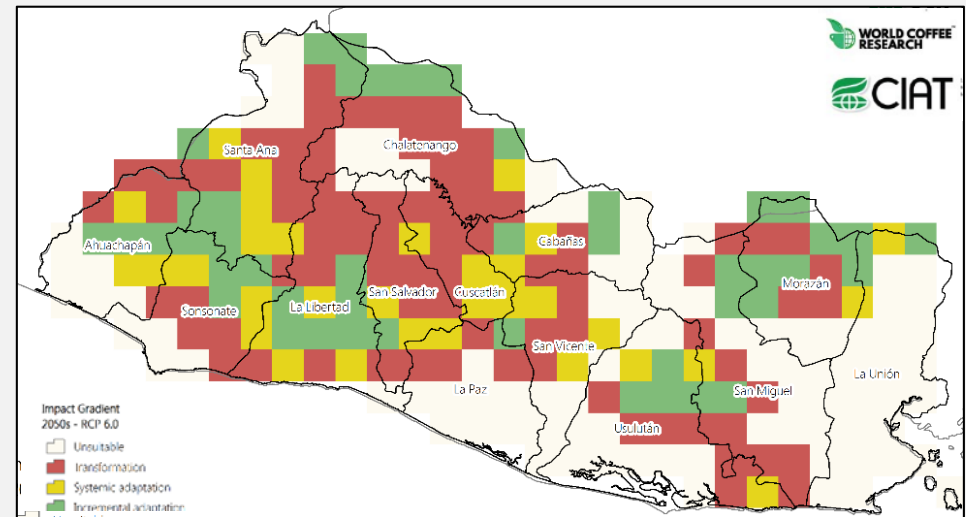
### Drivers of R&R need:



Need is driven by exposure to climate change in most of the coffee growing areas, age of trees, and exposure to disease (more than 70% of coffee lands were affected by *La Roya*)

### Viability: Most coffee growing areas are exposed to climate change

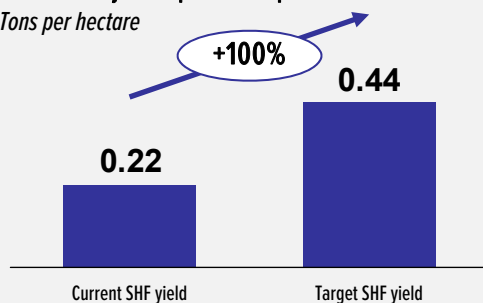
Suitability map



- Climate change could severely affect most of El Salvador's coffee regions

### Uplift potential: Significant uplift for SHFs, though little impact on supply

Current SHF yield & potential uplift<sup>1</sup>  
Tons per hectare



Potential increase in supply

**~5-15%**

Total national supply could increase ~5-15% if R&R and GAP is implemented on all SHF land in need of R&R<sup>2</sup>

### Other viability considerations

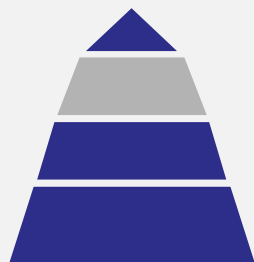
- Many children of coffee farmers turn to more lucrative, or less climate exposed food crops, or to non-farm activities
- Minimum daily wage for coffee harvesters is low – approximately USD 4
- Labor costs/salaries have decreased by 12% over the past five years, while fertilizer costs have increased by 3% and financial costs by 5%
- The “Cup of Excellence” competition promotes specialty coffees in El Salvador. Focusing on specialty coffee markets could increase producers' revenues

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 yield. (2) Rounded to the nearest 5%, estimate assumes that R&R and GAP increase yields with 100%, and the range reflects a 25-100% R&R success rate. Sources: USDA, *El Salvador: Annual Coffee Report*, 2017; Jimmy Sherfey, 'Salvador's Coffee Industry at a Crossroads', <https://dailycoffeenews.com/2016/01/06/el-salvadors-coffee-industry-at-a-crossroads/>, 2016; International Coffee Organization, *Perfil de país cafetero: El Salvador*, 2016.



## El Salvador is dominated by medium and large farms, and SHFs therefore have less impact on potential increase in total supply

### Farmer segmentation: Production is dominated by large farmers



#### National production is dominated by large producers

40% of coffee farms are large estates above 70 hectares<sup>1</sup>. There are 81 large cooperatives, but they do not target SHFs, who are mostly disconnected or in loose value chains

# SHFs '000	<b>17</b> – ~0.1% of global SHFs <sup>2</sup>
SHF land '000 hectares	<b>30</b> (~30% of national land) – farm size typically ~0.5 hectares
SHF production '000 tons	<b>8.5</b> (~20% of national production)
Assessment of SHF orgs.	SHFs are typically not organized in coops
Links to market	A majority of SHFs have loose and erratic links to market

### Enabling environment for R&R: Relatively weak environment for R&R

#### Political environment



#### Availability of inputs



#### Availability of finance



#### Knowledge availability



- Coffee share of GDP: N/A [Coffee share of exports: 2.6% (2015)]
- There is insufficient political support to overcome the coffee sector crisis
- Government assistance programs to support SHFs affected by La Roya have mostly been ineffective
- El Salvador is the only coffee producing nation in Latin America that does not have a research institution that provides certified rust resilient seeds
- The lead SHF extension service institution, CENTA, aims to provide 8 millions rust resistant plants to SHFs in 2017
- SHFs are highly credit constrained
- NCBA CLUSA recently partnered with Banco Hipotecario, one of the largest mortgage banks in El Salvador, to create a blended finance facility to deliver long-term credit to SHFs. The Bank aim to deliver USD 6.5 million in loans to SHFs
- The Salvadoran Coffee Council and CENTA provide extension services to SHFs. CENTA employs 85 officers who assist 7,000 SHFs with bi-monthly visits and field training
- Observers complain about the low efficiency of public extension services

### Examples of R&R programs: Past R&R programs have focused on renovating areas affected by La Roya

- **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
- **NCBA CLUSA - Coffee rehabilitation and agricultural diversification project** (2014 – 2018): NCBA CLUSA is working to improve the capacity of 50 cooperatives and 7,500 SHFs to renovate 6,000 hectares
- **World Coffee Research - Seed Verification program** (2016 – 2020) – WCR partners with local nurseries to develop genetic control of seeds

Notes: (1) A majority of coffee estates were parceled out into SHF properties as part of an agrarian reform in the 1980s (2) Assuming a global SHF population of 20 million. Sources: USDA, *El Salvador: Annual Coffee Report, 2017*; Jimmy Sherfey, *Salvador's Coffee Industry at a Crossroads, 2016*; International Coffee Organization, *Perfil de pais cafetero: El Salvador, 2016*, Ecuador Government, *National Census, 2017*.