Peru is a major regional producer that has significant uplift potential due to high R&R need in areas affected by La Roya.

### Quick facts: Peru is the 4th biggest Latin American producer

<table>
<thead>
<tr>
<th>Production</th>
<th>Production share</th>
<th>Coffee land</th>
<th>Varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>'000 tons, 2014</td>
<td>Global &amp; region</td>
<td>'000 hectares, 2014</td>
<td>Arabica-Robusta</td>
</tr>
<tr>
<td>222</td>
<td>9th in world</td>
<td>362</td>
<td>~100% A, 0% R</td>
</tr>
</tbody>
</table>

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

- SHF land in R&R need out of all land: ~10-40%
- Drivers of R&R need:
  - Need is primarily driven by old trees and exposure to disease (La Roya affected ~50% of coffee growing areas), and to a lesser extent by climate change.

### Uplift potential: Significant uplift potential given low current SHF yields

- Potential increase in supply: ~10-40%
- Total national supply could increase by 10-40% if R&R and GAP is implemented on all SHF land in need of R&R.

### Viability: climate change could affect lowest altitudes areas

- Overall, Peru is forecast to be relatively mildly affected by climate change for coffee production.
- Coffee growing area in low altitudes are exposed to climate change risk.
- Coffee crowing areas in the North East look to be hardest affected.

### Other viability considerations

- Peru is the world’s leading exporter of organic coffee. SHFs, who are mostly unable to pay for fertilizers, are the main producers of organic coffee.
- A growing number of SHFs seek out specialized certification schemes to access foreign specialty markets and earn premiums.
- The coffee sector generates more than 850,000 jobs in remote and impoverished areas of the country. The government promotes coffee production as an alternative crop to coca leaf cultivation.

Notes: (1) The current yield is calculated on the basis of SHF production divided by SHF land area, the potential yield uplift comes from the GCP study on Peru. GCP, Peru: GCP: Economic Viability of Coffee farming, 2017; (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: FAO Statistics database; ICD statistics; GCP and Technoserve, Economic Viability of Coffee Farming, 2017; USDA, Annual Coffee Report, 2017; Federacion Internacional de Productores Agropecuarios, Las cooperativas de Café en Peru: experiencias y perspectivas, 2009; Ministerio de Agricultura y Riego; Plan Nacional de Renovacion de cafetales, 2014; Dalberg interviews.
About 60% of farmers in Peru are SHFs, some of which have benefitted from renovation programs following the La Roya outbreak.

Farmer segmentation: Production is split

National production is split between SHFs and large and medium farmers

About 59% of farmers are SHFs (30% in tight value chains and a majority in loose value chains). 39% are medium farmers (between 5 and 50 hectares) and 2% hold land larger than 50 hectares.

| # SHFs ‘000 | 132 | “1% of global SHFs” |
| SHF land ‘000 hectares | 260 | (“70% of national land”) – farm size typically “2” hectares |
| SHF production ‘000 tons | 110 | (“70% of national production”) |

Assessment of SHF orgs.

Coops obtain better prices, improve post-harvest processing and marketing strategies of SHFs – “30% of SHFs are linked to coops

Links to market

Non organized farmers are linked to markets by traders

Enabling environment for R&R: Government support, but capacity for R&R is low

- Coffee share of GDP: N/A [Coffee share of exports: 2.6% (2011)]
- The government of Peru has recently defined the coffee sector as a national priority.
- 2013: Implementation of a national renovation program with a USD 70 million budget
- The national renovation plan supports development of nurseries
- Seeds produced in private seedling nurseries are controlled and certified by the National Institute of Agricultural Innovation (INIA)
- SHFs in loose value chains have limited access to finance
- Many SHFs complain about credit terms (8 year tenor, 10% interest rate) from AgroBanco, though these are more favorable compared to local financial institutions
- Cooperatives have little capacity and experience in providing high quality TA
- The Junta Nacional del Café acts as a service provider, but has limited field presence

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

- Root Capital – Coffee Farmer Resilience Initiative (since 2013): Root Capital lent USD 2.7 million to farmer organizations in Peru and trained them to deliver loans to their members
- Government of Peru – Coffee renovation program (2012-2017): The Peruvian government channeled concessional loans to SHFs to encourage the renovation of 80,000 hectares