



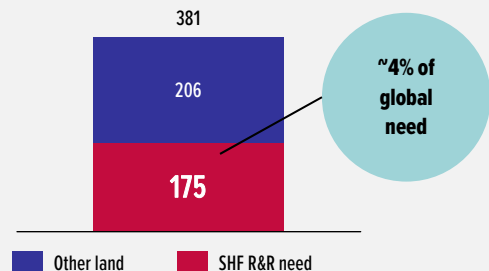
India is a significant global and regional producer, but has less potential for increasing national supply since SHFs drive only 60% of national production

### Quick facts: India is Asia's second biggest producer

Production '000 tons, 2014	Production share Global & region	Coffee land '000 hectares, 2014	Varieties Arabica-Robusta
<b>305</b>	<b>7<sup>th</sup> in world 2<sup>nd</sup> in Asia</b>	<b>381</b>	<b>~60% A ~40% R</b>

### R&R need: ~45% of total land is in need of R&R

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



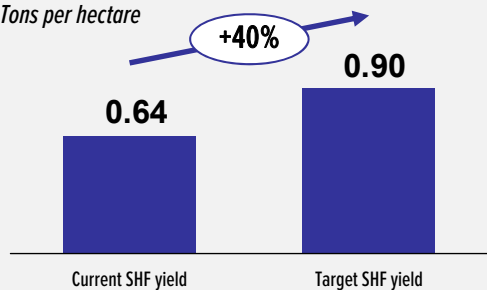
#### Drivers of R&R need:



~50% of trees have passed peak productivity and ~40% of Arabica trees are damaged by White Stem Borer. ~15-20% of low land areas could be at risk of climate change. Bad practices are less of an issue

### Uplift potential: Some potential for SHFs, though limited national impact

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

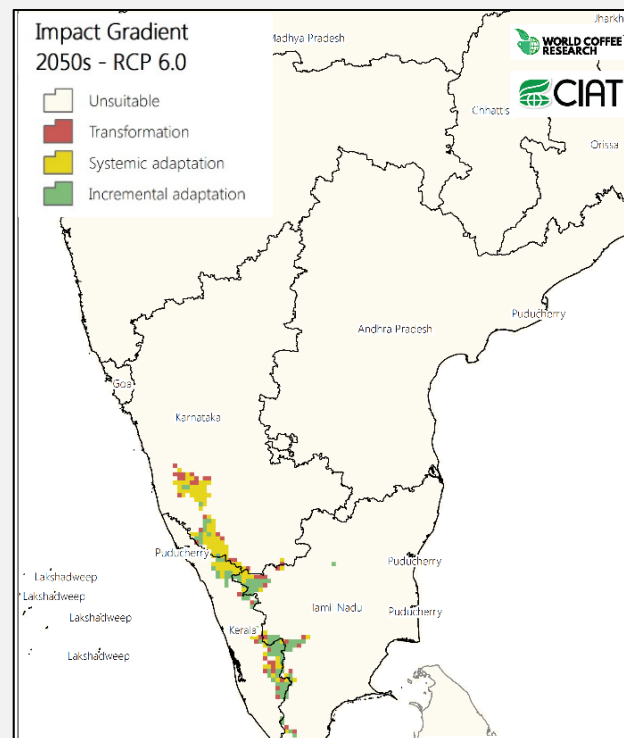


Potential increase in supply  
**~5-15%**

Total national supply could increase ~5-15% if R&R and GAP is implemented on all SHF land in need of R&R2

### Viability: Climate change could impact some areas of India

Suitability map



- Karnataka is the region that looks to be most severely affected by climate change
- There are few areas that are indicated to be in transformative need – but systemic adaptation could be needed in several places

### Other viability considerations

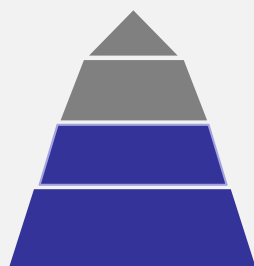
- There are no government subsidies for coffee
- Interviews indicated that outlook for Robusta might be better than for Arabica, since Arabica has been badly hit by White Stem Borer disease
- India has started to position itself for speciality coffee markets

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—this study cites an average SHF yield of 0.625 tons/hectare; (2) Rounded to the nearest 5%, estimate assumes that R&R and GAP increase yields with 40%, and the range reflects a 25-100% R&R success rate. Sources: FAOstat, *Coffee production and land under coffee*, 2014; ICO production statistics; USDA, *Coffee Annual: India*, 2017; Indian Coffee Board, *Annual Report*, 2016; Dalberg interviews



## Indian SHFs produce the majority of national supply, though they are less dominant here than in other countries

### Farmer segmentation: Most SHFs are at the bottom of the pyramid



#### The majority of national production comes from SHFs, but less so than other countries

SHFs are predominately in loose value chains or disconnected value chains, with weak and erratic links to market. There are few (well functioning) aggregation points for farmers

# SHFs  
'000

**218-520** (~1-2.5% of global SHFs)<sup>1</sup>

SHF land  
'000 hectares

**286** (~75% of national land) – average farm size ~1-2 ha)

SHF production  
'000 tons

**183** (~60% of national production)

Assessment of SHF  
orgs.

No aggregation points and SHF orgs. except for non-traditional growing belts

Links to market

SHFs typically sell their coffee via middlemen

### Enabling environment for R&R: Access to finance is the biggest problem

#### Political environment



- Coffee share of GDP: N/A [Coffee share of exports: 0.2% (2015)]
- The Coffee Board is implementing the “XII Plan Scheme: Integrated coffee Development Project” (2012-2017) with supportive measures including rainfall insurance for SHFs and subsidies for farm mechanization, though the success of the plan is unclear

#### Availability of inputs



- There are several private nurseries in India which are owned by farmers themselves, or professional groups, and which meet current demand

#### Availability of finance



- SHFs are highly credit constrained
- Few SHFs are organized into credit savings groups and thus cannot access microfinance funds

#### Knowledge availability



- Low adoption of GAP and limited current availability TA
- The Agricultural Sector Strategic Plan aims to train extension service workers across the country, but there is limited funding so far

### Examples of R&R programs: Despite its size and significance, few programs have been observed in India

- **Indian Coffee Board – Renovation of Traditional Areas** (since 2015): Component of the XII Plan Scheme. The purpose of the program is to renovate more than 3000 hectares of coffee land in traditional coffee growing areas