# INDONESIA

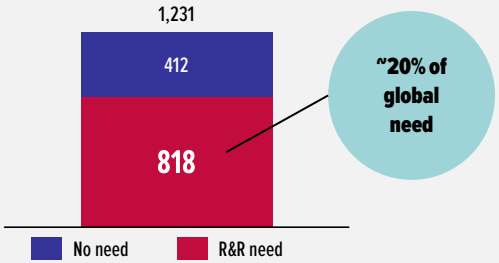
Indonesia represents around 20% of the global need for R&R alone, given its significant size and large SHF base

## Quick facts: Indonesia is the world's second biggest Robusta producer

| Production | Production share | Coffee land | Varieties |
|---|---|---|---|
| *'000 tons* | *Global & region* | *'000 hectares* | *Arabica-Robusta* |
| **644** | **4th in world**<br>**2nd in Asia** | **1,231** | **20% A**<br>**80% 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*

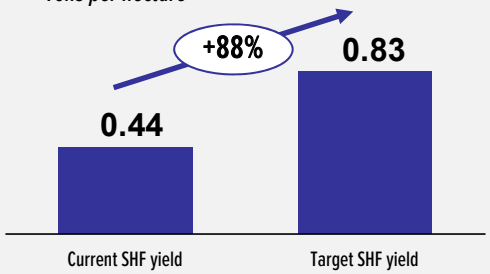



**Drivers of R&R need:**

R&R need is driven by high age of trees planted in dense areas, and low adoption of good agricultural practices. Most regions in Indonesia are projected to remain suitable for coffee growing in light of climate change

## Uplift potential: Significant potential to increase yield and national supply

**Current SHF yield & potential uplift[1]**
*Tons per hectare*



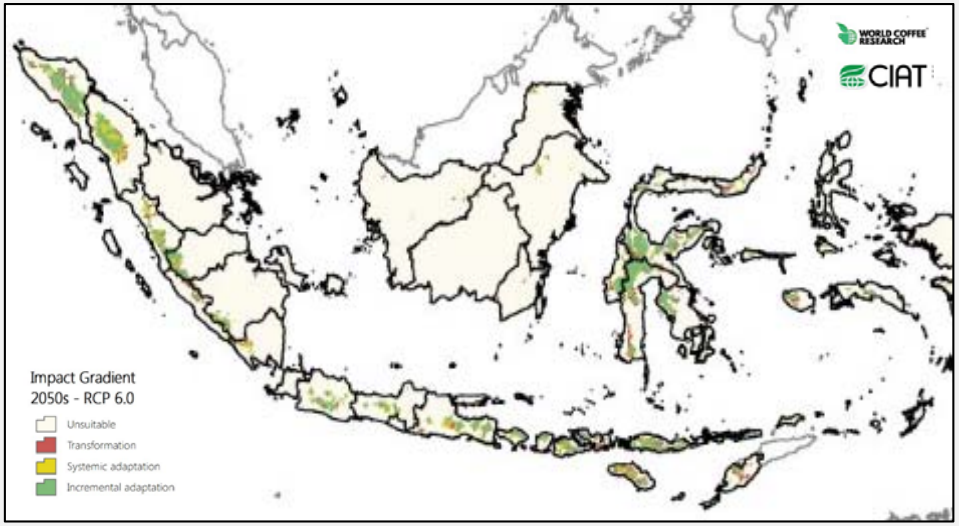

**Potential increase in supply**

**~10-50%**

Total national supply could increase ~10-50% if R&R and GAP is implemented on all SHF land in need of R&R[2]

## Viability: Long-term viability overall looks favorable

*Suitability map*




- Most regions in Indonesia are likely to remain suitable for coffee growing in the future, though some regions will need to think of systemic adaptation – especially the main coffee growing region, Sumatra

## Other viability considerations

- The yield uplift potential is higher for Robusta producers in Sumatra than for other SHFs
- Coffee plantations are heavily exposed to dry weather throughout Southern Sulawesi, Java and Eastern Indonesia

Notes: (1) Average yield is calculated as the total SHF production divided by the total SHF land. The potential yield improvement is estimated by GCP and Technoserve, *Economic Viability of Coffee Farming*, 2017; (2) Assuming an 88% yield uplift from R&R and a 25-100% success rate of R&R programs. Source: FAO Statistics database; ICO statistics; GCP and Technoserve, *Economic Viability of Coffee Farming*, 2017; Sustainable Coffee Program, *Indonesia: a business case for the production of sustainable coffee,* 2014; USDA, *Annual Coffee Report,* 2017; Dalberg Interview

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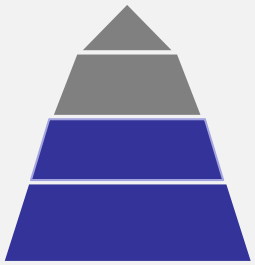
## Indonesia is characterized by 1.5 million unorganized SHFs and a liberal and unorganized enabling environment

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



**National production is dominated by SHFs**

The majority of SHFs are either in loose value chains or weakly connected value chains, with unstable links to market. SHF organizations are generally mismanaged and lack capacity

| | |
|---|---|
| **# SHFs** *'000* | **1,500-2,000** *(~7.5-10% of global SHFs1)* |
| **SHF land** *'000 hectares* | **1169** *(~95% of national land) – average farm size is ~1-1.5 hectares* |
| **SHF production** *'000 tons* | **515** *(~80% of national production)* |
| **Assessment of SHF orgs.** | Most farmers are unorganized and coops have little capacity to manage loans and provide technical assistance (TA) |
| **Links to market** | Farmers sell their unprocessed coffee to aggregators |

### Enabling environment for R&R: Liberal and unorganized coffee sector

**Political environment**

- Coffee share of GDP: N/A [Coffee share of exports: 0.82% (2015)]
- Indonesia has a liberal coffee sector. It is not a strategic priority for the Indonesian government[2], which mostly supports the sector as part of its commodity export strategy
- SHFs receive some support from the government (e.g. tax exemption on fertilizers)

**Availability of inputs**

- Only one research institute in Indonesia provides seedlings, but not at commercial volumes
- Some private nurseries provide seedlings, but there is no control over quality
- Low access to nutrition and other inputs

**Availability of finance**

- SHFs have very limited access to credit from local banks
- Foreign investors experience currency exchange risk when they make loans in local currency

**Knowledge availability**

- The government does not provide extension services to SHFs
- Some coops provide TA to SHFs, but overall there is limited presence and capacity from coops to provide TA

### Examples of R&R programs: Indonesia has been underserved by existing programs to date, and there is need for more engagement

- **FAO and the Coffee and Cocoa Research Institute – Nursery Program** (2016-2030): The program encourages Javanese and Balinese female farmers to manage seed nurseries
- **Kepahiang government - Peremajan Kopi[3]** (since 2017): The objective of the program is to renovate 4-5 million trees in the Kephahiang region (Sumatra)

Notes: (1) Assuming a global SHF population of 20 million – estimate on number of farmers is high-level only as numbers vary significantly. (2) The Indonesian government mostly provides support to staple crop sectors, and in particular palm oil. (3) Information on the Peremajan Program is only available in Bahasa and might be incomplete. Source: FAO Statistics database; ICO statistics; GCP and Technoserve, Economic Viability of Coffee Farming, 2017; Sustainable Coffee Program, Indonesia: a business case for the production of sustainable coffee, 2014; USDA, Annual Coffee Report, 2017; Dalberg Interview