



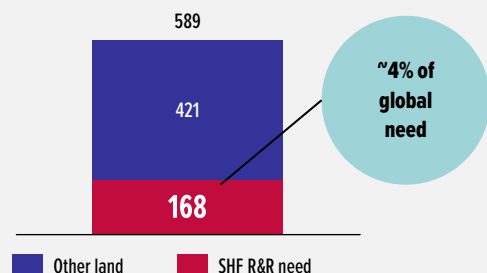
Vietnam is the world's most productive coffee producing nation and has little need for R&R given its strong sector institutions

Quick facts: Vietnam is the world's second biggest producer

Production '000 tons, 2014	Production share Global & region	Coffee land '000 hectares, 2014	Varieties Arabica-Robusta
1,406	2nd in world 1st in Asia	589	~10% A ~90% R

R&R need: ~30% of total land is in need of R&R

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



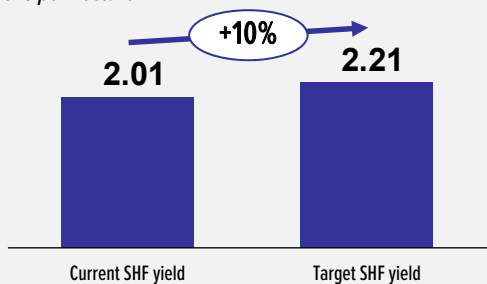
Drivers of R&R need:



The primary threat to Vietnamese trees are pests such as Nematodes. Trees are relatively young given a recent/ongoing national renovation effort. Farmers generally make use of GAP.

Uplift potential: Vietnam already has high yields

Current SHF yield & potential uplift¹ Tons per hectare



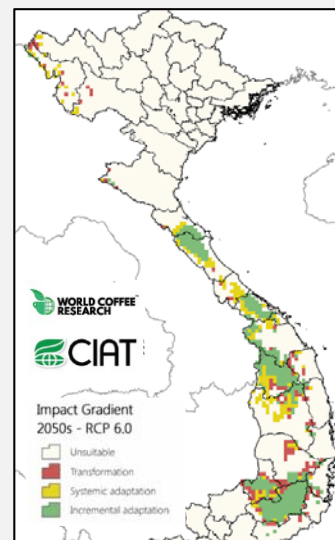
Potential increase in supply

<5%

Total national supply could increase ~1-2% if R&R and GAP is implemented on all SHF land in need of R&R

Viability: Continued high viability of coffee in Vietnam

Suitability map



- Arabica production in Vietnam could potentially be affected by Climate change – especially in the areas in the South and West of the country
- However, Arabica is currently only making up 10% of total production, why national supply is likely to be less affected

Other viability considerations

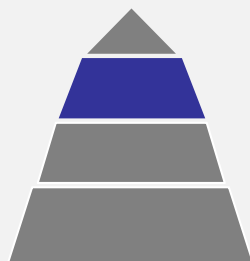
- ~90% of farmers have coffee as their main crop – less than 10% are intercropping
- Increase in intercropping with pepper since price of pepper is increasing, which gives an increased incentive to grow pepper when coffee is aged
- There is strong government support for coffee in Vietnam, and coffee production has reduced tax burden to help make the sector grow
- Farmers receive a high portion of the export price, with farmer share around 95%, making Vietnam the most cost-efficient coffee supply chain in the world³

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 Vietnam: GCP, Vietnam: GCP: Economic Viability of Coffee farming, 2017; (2) Estimate assumes that R&R and GAP increase yields with 10%, and the range reflects a 25-100% R&R success rate; (3) See the GCP source listed in (1) for more detail on this. Sources: FAOstat, Coffee production and land under coffee, 2014; ICO production statistics; Dalberg interviews



Vietnam is dominated by some of the world's most productive SHFs with stable links to market and good availability of inputs

Farmer segmentation: SHFs have strong links to market



National production is dominated by SHFs

The vast majority of SHFs are in tight value chains with close and stable links to market. There is a high degree of competition among collectors and exporters creating stable links for SHFs

SHFs
'000

570 (other estimates as high as 800k) - 3-4% of global SHFs¹

SHF land
'000 hectares

560 (~95% of national land – average farm size: ~ 1 hectare)

SHF production
'000 tons

1,125 (~80% of national production)

Assessment of SHF
orgs.

Only 10% of SHFs are organized in coops, which have not been successful so far

Links to market

Strong links to market through a competitive sector

Enabling environment for R&R: Strong, but access to finance could be improved

Political environment



- Coffee share of GDP: ~3% (2013)
- Government has been, and is, supportive of R&R efforts, having covered extensive TA programs for replanting and financing for replanting

Availability of inputs



- Government is increasingly involved in ensuring quality and verification of seedlings of local nurseries
- There is a high availability of inputs, though some farmers reportedly tend to over-fertilizer their land

Availability of finance



- Limited access to finance for most SHFs – commercial banks have little interest
- Collectors can provide access to finance, but do so at high interest rates and require SHFs to commit future sales
- Government has financed R&R

Knowledge availability



- Farmers already make use of GAP, though there is potential for cost savings from correct application of fertilizer and irrigation systems

Examples of R&R programs: The Vietnamese government is the main actor in supporting farmers

- **Government of Vietnam and world Bank - VnSAT – Rejuvenation in the Central Highlands (2014-2020):** Government led program, supported by the world Bank, to replant 90,000 hectares and transplant 30,000 hectares in 5 regions in the Central Highlands. The cost of the project is estimated at USD 314 million.
- **Nestlé – Coffee replanting (2013):** Nestle partnered with the Western Highlands Agro-Forestry Scientific and Technical Institute (WASI) to distribute free seedlings to replant 270 hectares

Notes: (1) Assuming a global SHF population of 20 million; (2) The sector was previously controlled by a national (monopolistic) coffee cooperative.

Sources: FAOstat, *Coffee production and land under coffee*, 2014; ICO production statistics; Dalberg interviews