



# THE SUSTAINABLE COFFEE PROGRAM

A business case for sustainable coffee production

## VIETNAM

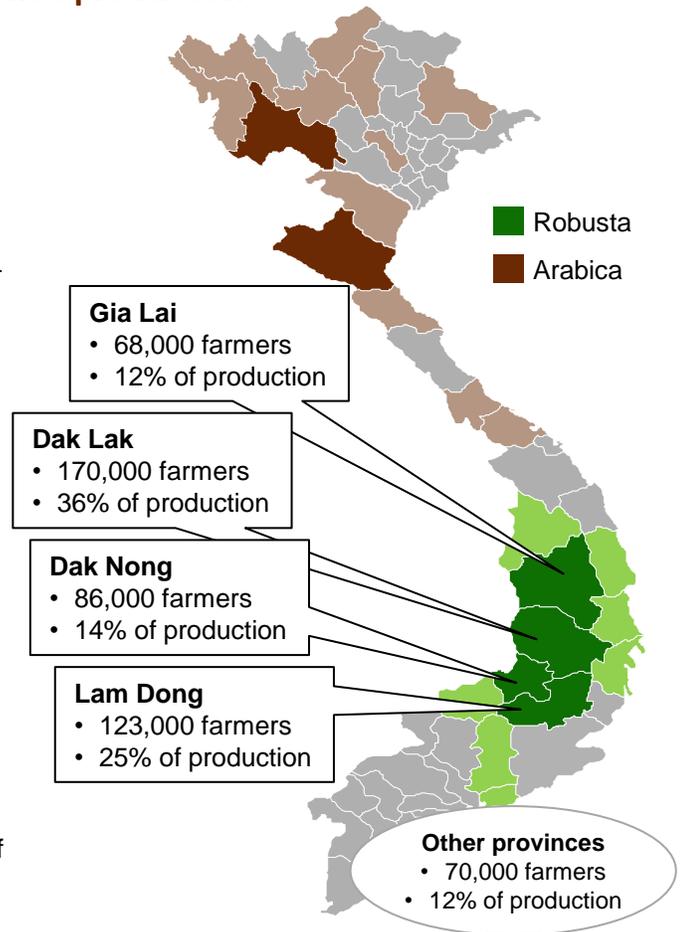
OCTOBER 2013

### The world's largest Robusta producer

Vietnam's coffee production began to rise rapidly in the 1980s, initially as result of large migrations and new planting, and subsequently through steady yield improvement. Heavy fertilizer use and irrigation have been key to Vietnam's ability to consistently achieve high yields.

Coffee has historically been very profitable for Vietnamese farmers. The combination of high yields, a competitive supply chain, and relatively low input costs have positioned Vietnam to be the world's most cost-efficient coffee producer. This advantage appears to be strengthening as yields falter and production costs rise in other coffee producing countries.

Smallholders supply more than 95% of Vietnam's coffee. They cultivate coffee as a monoculture and manage the majority of farming activities through family labor. Most farmers are not organized in groups or cooperatives and sell their coffee to small-scale collectors, who aggregate volumes and deliver to exporters. The lack of farmer organization creates high levels of competition at the farm-gate, but impedes efforts to reach farmers through group schemes and build loyalty.



### Emerging sustainability trends

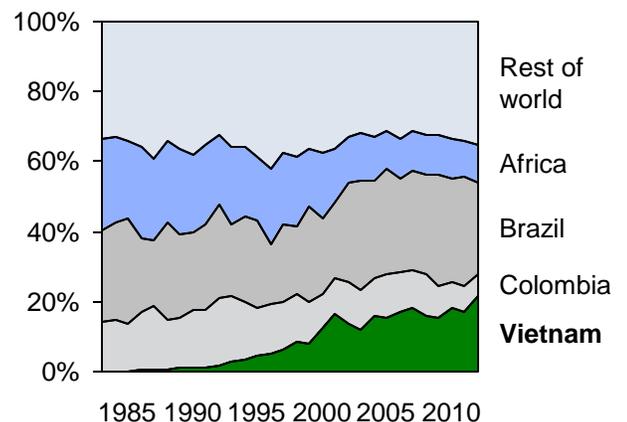
Vietnam has quickly scaled up production of verified / certified coffees. By the end of 2012, more than a quarter of Vietnamese production was part of a verified or certified supply chain.

Exporters have led this process by investing in group sustainability schemes and registering and training farmers. As exporters compete for market share and find ways to bring down costs, the supply of verified / certified coffees should continue to rise. If the current trajectory is maintained, more than 80% of Vietnam's supply is likely to achieve minimum verification levels by 2016, with verification becoming a normal supply chain function.

Although verification / certification does address several cross-cutting sustainability challenges, it is unlikely to address issues more specific to the Vietnamese context. Two of the most pressing issues are excessive agro-input usage, which could diminish soil fertility, and unchecked irrigation practices, which threaten groundwater reserves. To sustain high yields into the future, these environmental risks must be addressed.

Fortunately, there is a compelling business case for farmers, the Vietnamese government, and the coffee supply chain to tackle these challenges collectively.

### Global share of coffee exports



### Quick facts:

- Farmers: 509,235
- Avg. coffee farm size: 1.16 hectares
- Avg. yield: 2.13 tons/ha \*
- Type: Robusta (96%), Arabica (4%)
- Share of sales verified or certified: 9%\*\*

\* Four-year average

\*\* Estimate; includes UTZ, Rainforest Alliance, Fair Trade, 4Cs (2011/12)



## Key opportunities

More sustainable farming practices could **increase coffee farmers' net incomes over 30%**, from a base of about \$1,500 per year.

### Optimizing farmers' fertilizer practices

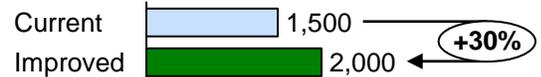
Farmers could use soil testing to optimize their fertilizer selection, reducing overall input requirements and helping avert long-term soil acidification. Improved agro-input practices could boost yield by 10% while saving farmers over \$100 per year in fertilizer costs.

### Conserving water and reducing irrigation

Farmers could be trained and incentivized to monitor and reduce irrigation volumes. The average farmer could more than halve his/her irrigation levels while still maintaining high yields, saving as much as \$125 per year in gross irrigation-related energy costs. If left unchecked, over-irrigation could deplete groundwater reserves in a drought year, causing substantial crop losses and market volatility.

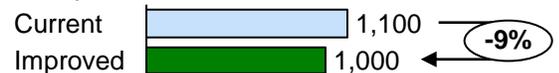
### Average farmer net income

US\$ per year



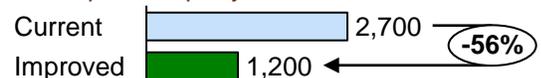
### Annual fertilizer expenditure

US\$ per farmer



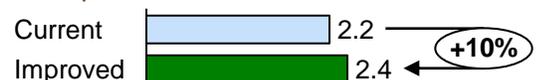
### Irrigation rate

Liters per tree per year



### Farm yield

Tons per hectare



## A strategy for co-investing in sustainability

Although there is a business case for farmers to shift to more sustainable practices, doing so requires co-investment from public and private actors and a collaborative framework for monitoring and implementation. Nationally, there is a **total investment requirement of \$75 million** (~2.5% of 2012 export revenues or <\$10 per ton over 10 years) to fund the implementation work with farmers. An investment of approximately \$150 per farmer yields a return of nearly \$500 in increased net income per farmer after 4-5 years.

For private coffee companies, sustainable supply from Vietnam is critical to procurement activities; investing in that future represents a cost-effective use of resources. For donors and the government, returns include higher incomes for farmers, savings of up to \$60 million in annual fertilizer purchases, and improved resilience to climate change.

Investments are also required from input suppliers, to expand soil testing and fertilizer options, and the government, to establish a water monitoring and incentive system. These investments do not require significant cash outlays and can be self-financed ideally.

The Sustainable Coffee Program is promoting a collaborative framework to assist implementation and is open to co-invest with likeminded public and private partners in field-level projects in Vietnam that demonstrate innovation or high potential for scale up

Key sources: Kuit Consultancy; Simpatica; Yara; Vinachem, Cheesman et al; D'Haeye; USDA; stakeholder interviews conducted in March 2013

Photographs: Dakman, UTZ Certified, 4C Association, WASI

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