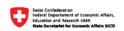
Enveritas

An analysis of the role of middlemen in coffee supply chains Vietnam Country Report

Prepared for:

IDH - The Sustainable Trade Initiative

February 2020











Country overview and mapping

- Middlemen role and services
- Income and sources of capital
- Business outlook and SWOT analysis
- Opportunities for engaging middlemen in sector initiatives
- Methodology









COUNTRY PROFILE: VIETNAM



| Indicator | Value | Quality of existing data | Remarks |
|--|--------------------------------|-----------------------------|--|
| Production volume (4-year avg) | 27.4M bags | .00 | Largest Robusta producer globally, domestic consumption and regional exports increasing fast |
| Production trend (10-year CAGR) | 29.7M bags +4.5% p.a | .000 | After decades of double-digit growth, production has slowed down and faces environmental constraints |
| Coffee types | 96% Robusta 4% Arabica | .000 | Predominately natural-processed Robusta, with some washed Arabica in the North |
| Smallholder production share | 97% | .000 | 59 large, state-owned farms contribute nearly 1 million bags; remainder is smallholders |
| Number of smallholder farms (Enveritas estimate) | 600,500 | .00 | Majority of smallholders are in the Central Highlands and require irrigation for cultivation |
| Avg. smallholder coffee farm size (Enveritas estimate) | 1.04 ha | .00 | 60% of coffee farms have less than a hectare; coffee is traditionally monocropped but increasingly competes with black pepper and rubber |
| Avg. smallholder productivity (Enveritas estimate) | 2,540 kg per ha | .00 | Vietnam has the highest average yields in the world; farmers use large quantities of fertilizer and irrigation |

Note:

- All volume in this report are cited in green bean equivalent (GBE) unless otherwise specified
- Exchange rate used for this report is US\$1 = VND23,100

Source: USDA, ICO, GAIN, IDH, IFC-World Bank, COSA, GSO, Enveritas.



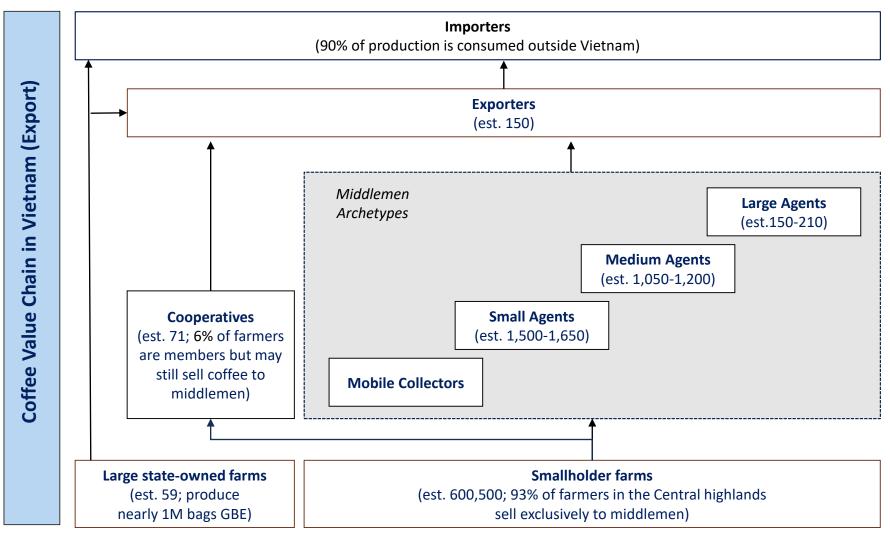




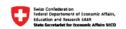


VIETNAM HAS MORE THAN 3,000 MIDDLEMEN AND THEY HANDLE NEARLY ALL THE COUNTRY'S ROBUSTA





Source: USDA, Stakeholder interviews, Enveritas smallholder survey 2018-19; Enveritas analysis









WE HAVE DEFINED MIDDLEMEN ARCHETYPES BASED ON VOLUME (SCALE) AND LEVEL OF SOPHISTICATION











Mobile Collectors

- Usually transports small volumes on bikes from farmer to other agents
- Decline in importance due to better rural infrastructure and other agent's direct reach to farmers

Small Agents

- Volume: ≤ 1,000 tons/year
- 50 55% of the overall middlemen population
- Trade primarily green beans and cherry
- Buy directly from farmer and often sell to Medium Agents

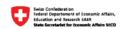
Medium Agents

- Volume: 1,000 10,000 tons/year
- 35 40% of middlemen population
- Trade primarily green beans
- Buy directly from farmer and smaller buying agents and often sell to large buying agents, and occasionally to exporters

Large Agents

- >10,000 tons/year
- 5 7% of population
- Trade primarily green beans
- Buy from medium and small agents, and less frequently from farmers
- Sell to exporters, and usually have the capacity to directly export

Source: Stakeholder interviews and Enveritas middlemen surveys









MIDDLEMEN WITH GOOD EXPOSURE TO BOTH ENDS OF THE SUPPLY CHAIN HAVE MORE SWAY



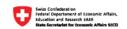
Assessment of factors contributing to middlemen and other actors' influence in the supply chain Each factor is assessed on a 1 to 3 scale and the overall score is averaged

Strong 3

Moderate 2

Weak 1

| Actor | Sources of Influence | Capital | Farmer Services | Proximity to farmers | Access to processing Infrastructure | Role in influencing local price trends | Replaceability | Operating Economy | Average "Score" |
|----------------------|--|--|--|----------------------|--------------------------------------|--|--|----------------------|--------------------|
| Mobile Collectors | Transportation and access to hard-to-reach places/minority communities | Personal savings and/or short- term arrangements with agents | Less common | Very close | Processing is not a priority | Often work as salaried worker under other agents | Importance declining due to other agents' increasing access to farmers | Informal | 1.3 |
| Small Agents | Relationship with the farmers, and farmer services | Arrangements with other agents | Inputs, finance, training. | Very close | Quality grading | Farm gate prices and quality | Few barriers to entry | Formal | 2.0 |
| Medium Agents | Proximity to both farmers and exporters. Strong capital and farmer services | Financial institutions | Inputs, finance, training. | Very Close | Drying, hulling, quality grading. | Price, quantity, and quality | Moderate barriers to entry | Formal | 2.9 |
| Large Agents | Scale and proximity to exporters/trading centers | Financial institutions/ Foreign Direct Investment | Inputs, finance, some facilitate training. | Low | Drying, hulling, quality grading | Price, stocks/availabili ty | Moderate barriers to entry | Formal | 2.1 |
| Coops | Market access. Increasing importance due to government support | Financial institutions | Input, training | Very close | Drying, hulling, quality grading. | None/Low | Opportunities for side-selling | Formal | 2.1 |









A "MODAL MIDDLEMAN" IS A 48-YEAR-OLD MALE WITH HIGH SCHOOL EDUCATION OR LOWER



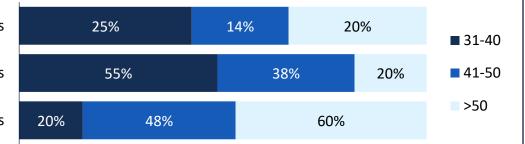


- The average age among middlemen surveyed is 48 years
- While large agents tend to be older (50+), there is a relatively high share of large agents between ages 41-50

Small agents

Medium agents

Large agents

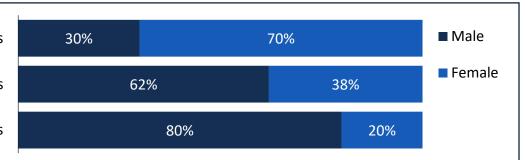


Gender

 Women have a strong presence in the Vietnam supply chain, especially among small and medium agent segments Small agents

Medium agents

Large agents

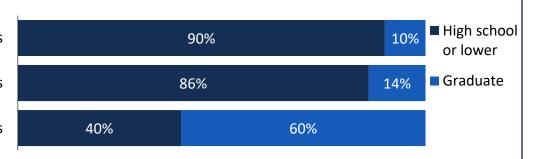


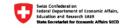
Education

 A significantly bigger proportion of large agents are graduates. Small agents

Medium agents

Large agents











AGENTS USUALLY HAVE 15+ YEARS OF EXPERIENCE, GROW THEIR OWN COFFEE, AND GENERATE INCOME FROM OTHER SOURCES



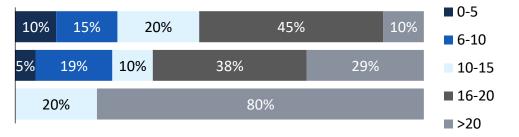
Years of Experience

- The average middleman has 18 years experience
- Generally, those who have more experience tend to have bigger scale operations

Small agents

Medium agents

Large agents

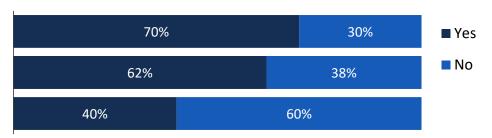


Also a Farmer?

 Only some middlemen surveys are also coffee farmers Small agents

Medium agents

Large agents

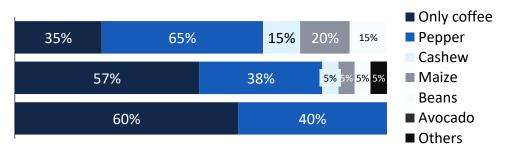


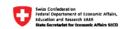
Other Crops Traded

 Small and medium agents have more diversification in crops traded while large agents focus on coffee and pepper Small agents

Medium agents

Large agents











MIDDLEMEN TEND TO BE INDEPENDENT OPERATORS, DOING BUSINESS OVER INTERNET-ENABLED MOBILE



Associations

There is no group or association for middlemen in Vietnam.

Confidence in business

• On average, middlemen ranked their confidence levels at 3.4 (0 = no confidence, 5 = very confident).

The most confident cited network and experience while the less confident cited price volatility and lack of trust in markets as key factors.

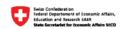
Middleman prospects

• 50% of middlemen want their children to continue their business. 38% don't want their children to continue because "it is a high-risk business."

Technology

- Almost all middlemen interviewed cited mobile phones with internet as the most common business technology to communicate with buyers/sellers.
- Computers, telephones, and fax machines are also used by many middlemen.
- While 99% of the middlemen report that technology is helping their business, critical things like logistics management, credit and financial management are largely paper-based.

Source: Enveritas farmer and middlemen surveys



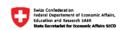








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MIDDLEMEN USE TRUCKS AS THE PRIMARY MEANS OF TRANSPORT FOR BUSINESS OPERATIONS





- 80% reported using a truck, valued at an average of US\$22,000
- Widely used by small, medium, and large agents
- 55% of middlemen who use trucks own one truck, 30% own two, and 15% between three and five

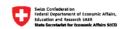


- 40% of middlemen use tractors, valued at an average of US\$5,000
- 50% of small and medium agents tend to use tractors.
- 65% of middlemen using tractors own just one, 20% own two and 15% between three and five



- 20% of middlemen use a motorbike with an average reported value of US\$1,000
- Widely used by Mobile collectors.

- Middlemen transport coffee an average distance of 40 km (min 5 km, max 250 km)
- When demand exceeds capacity, especially in peak seasons, many middlemen prefer to hire trucks from other middlemen or from market









MOST MIDDLEMEN HOLD INVENTORY THROUGHOUT A YEAR



Processing

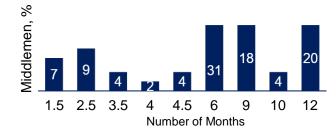
- 40% of middlemen process coffee and do so using self-owned infrastructure (mostly quality grading and moisture testing machines)
- There are a wide range of processing steps undertaken by middlemen including: sorting, cleaning, drying, and hulling

Blending

- 80% of middlemen blend various qualities of coffee before selling it
- This is done to meet the quality requirements of buyers and ensure homogeneity in their coffee sold

Storage

- Middlemen store coffee all through the year as there is inflow of coffee in all 12 months.
- Middlemen also stock up coffee to take advantage of the price arbitrage, especially during Jan-Feb when coffee could be purchased from farmers for lesser price due to Tet.
- 90% of middlemen store coffee between buying and selling





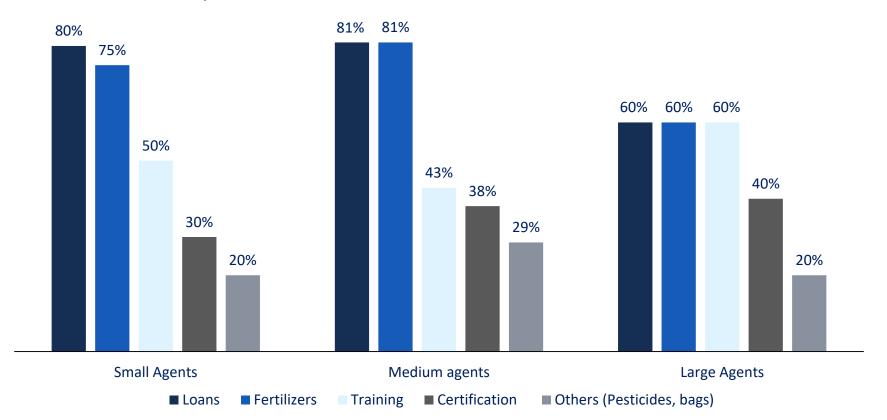


MIDDLEMEN OFFER A WIDE RANGE OF AUXILIARY SERVICES TO FARMERS



Services middlemen report offering to farmers

% of middlemen surveyed



Source: Enveritas farmer surveys in Lam Dong (n=1602)





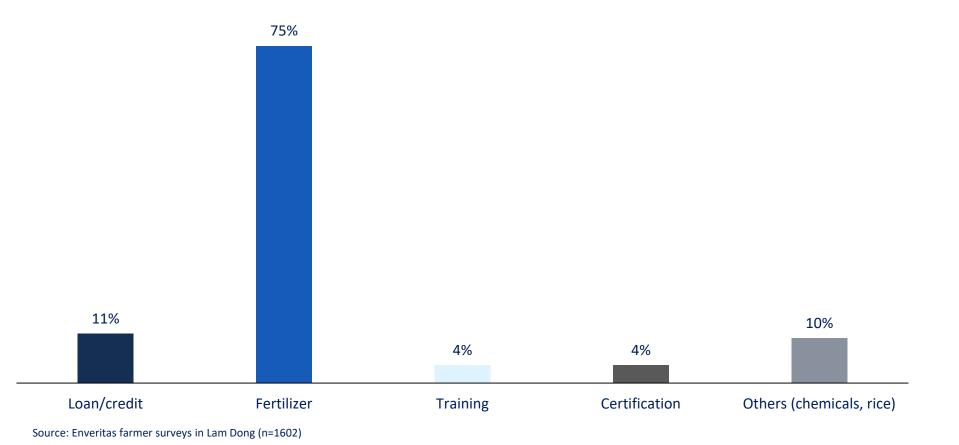




3 OUT OF 4 FARMERS BUY FERTILIZERS FROM MIDDLEMEN



Penetration of middlemen services among farmers in Lam Dong* % surveys











MIDDLEMEN OFFER LOANS TO BOTH FARMERS AND OTHER



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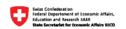




| | Small Agents | Medium Agents | Large Agents | | | |
|---|---|----------------------------------|--------------------|--|--|--|
| % Providing loans to sellers | 80% | 85% | 60% | | | |
| Reasons for the loans | Coffee/Fertilizers | Coffee/Fertilizers | Coffee/Fertilizers | | | |
| Average loan size quoted(VND) Interest rates agents say they provide to sellers | 28 M(\$1,211) 1.4% per month | 191M (\$8,270) 1.2% per month | | | | |
| Average # of sellers loaned | 90 | 157 | 78 | | | |
| Est. % of sellers who get loans (according to agents) | 62% | 52% | 57% | | | |
| Risks | Crop failure Loan defaults Price volatility Misuse of funds | | | | | |
| USP to farmers | Loan based on relationship; Simple procedures | | | | | |
| Typical form of loan | 75% in cash | 76% in cash | 60% in cash | | | |
| Loan tenure | | Min: 5 Months, Max: 1 Year | | | | |
| Conditions | While many farmers are regular customers, rarely farmers sell exclusively to a single middlemen. However, if a farmer has borrowed from a middlemen, they must sell coffee to the lender. | | | | | |

Source: Enveritas middlemen surveys

MIDDLEMEN



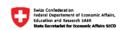








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MIDDLEMEN RELY ON A COMBINATION OF PERSONAL SAVINGS AND BANK LOANS FOR WORKING CAPITAL



Main findings

- 96% of middlemen reported they access loans through banks, a good alternative to personal saving
- Easier access to large amounts (an average of 4.4bn VND ~ \$190k)
- Reasonable rates of interest (average 0.7-1% per month)
- Simple procedures that are easy to carry out

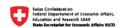
Institutions mentioned by middlemen











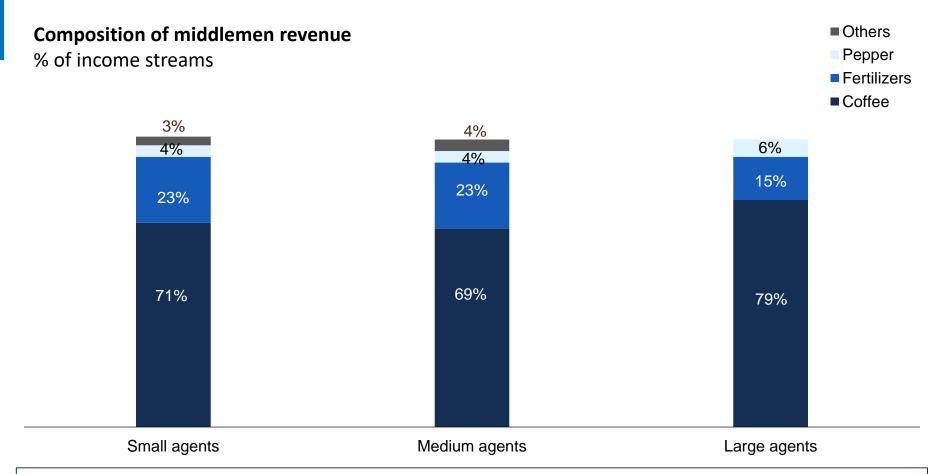




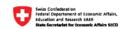


COFFEE AND FERTILIZERS ARE TWO MAJOR SOURCES OF REVENUE FOR ALL MIDDLEMEN ARCHETYPES





Many middlemen said that they leverage synergies between coffee and other businesses they run. For example, 1 of 4 middlemen got into coffee business to take advantage of their fertilizer and other crops customer base.











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MIDDLEMEN REPORT BEING PROFITABLE, THOUGH MOST SAW A DECREASE IN VOLUMES THIS PAST YEAR

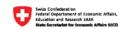








| | Small Agents | | Medium Agents | | | Large Agents | | | |
|--------------------------------|---|--------------------------|--------------------------------|--|--------------------------|--|--------------------------|--------------------------|--------------------------------------|
| YOY coffee volume traded | Increasing 25% | Decreasing 73% | Neutral 5% | Increasing 29% | Decreasing 71% | Neutral 0% | Increasing 20% | Decreasing 80% | Neutral 0% |
| Profits (Coffee) | Profitable 30% | Not Profitable 35% | Neutral 35% | Profitable 57% | Not Profitable 19% | Neutral 24% | Profitable 60% | Not Profitable 20% | Neutral 20% |
| Most profitable service | Coffee Trading 30% | Fertilizers 55% | Others (Pepper; Grocery) | Coffee Trading 57% | Fertilizers 33% | Others (Pepper; Grocery) 10% | Coffee Trading 80% | Fertilizers 20% | Others (Pepper; Grocery) 0% |
| Major expenses | Labor; Interest on capital; Transportation; Storage; Processing | | - | Labor; Interest on capital; Transportation; Storage; Processing | | Labor; Interest on capital; Transportation Storage; Processing | | | |
| Barriers to increase MM income | Price Volatility; Bad crop/Crop failure; Competition; Loan default | | | Price Volatility; Competition; Loan default Bad crop/Crop failure | | Price Volatility; Competition; Loan default | | | |





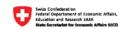




THE SWOT ANALYSIS REVEALS COMMON CONCERNS ABOUT CAPITAL, AGING TREES, AND PRICES



| Strengths | Ş Small | Medium | Large | Weaknesses | Ş Small | Medium | Large |
|---|------------|------------|-------|--|------------|--------|-------|
| Location | | | Ü | Limited capital | | | J |
| Long established relationships | | | | Lack of market knowledge | | | |
| Experience | | | | Lack of human resource | | | |
| Services provided | | | | Lack of experience | | | |
| Capital | | | | Lack of business skills | | | |
| Reputation | | | | Aging middlemen | | | |
| Relationship w/ local authorities | | | | Price volatility | | | |
| Processing facilities/warehouse | | | | Unstable buyers | | | |
| Network of local traders | | | | Labor shortage | | | |
| | | | | Weak business administration | | | |
| | ©. | Ţ | | | Ğ | | |
| Opportunities | Small | Medium | Large | Threats | Small | Medium | Large |
| Attracting new buyers | | | | Declining productivity/tree age | | | |
| | | | | | | | |
| Increasing domestic market | | | | Gender discrimination | | | |
| Increasing domestic market Certification programs | | | | Gender discrimination Price volatility | | | |
| | | | | | | | |
| Certification programs | | | | Price volatility | | | |
| Certification programs Coffee replanting | | | | Price volatility Loan default | | | |
| Certification programs Coffee replanting | | | | Price volatility Loan default Land conversion to other crops | | | |
| Certification programs Coffee replanting Regional advantage | | | | Price volatility Loan default Land conversion to other crops Climate change | | | |
| Certification programs Coffee replanting | | | | Price volatility Loan default Land conversion to other crops Climate change Shortage of water for irrigation | | | |











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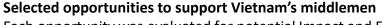






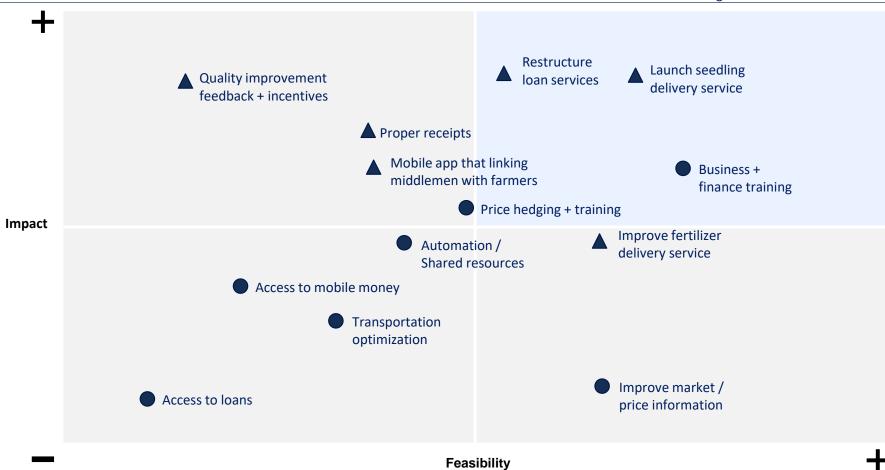
WE HAVE IDENTIFIED FIVE OPPORTUNITIES TO ADDRESS MIDDLEMEN BUSINESS CHALLENGES





Each opportunity was evaluated for potential Impact and Feasibility

Solve current business challengeChange business as usual



Source: Stakeholder interviews and Enveritas middlemen surveys









(1) BUSINESS AND FINANCE TRAINING FOR MIDDLEMEN



Concept Summary

- Train middlemen on business and finance
- Partner with local organizations or training institutes to design and deliver training
- Deliver training outside of harvest season in cities, e.g. Buon Ma Thuot and Da Lat; recruit via exporters or larger middlemen

Type of Opportunity

Solve current business challenge

Current Indicators

- 69% of middlemen are interested in business or finance training including business administration and market analysis
- 65% of middlemen are concerned about crop failure or low productivity is a risk in finance
- 83% of middlemen found price volatility as one of the business threats

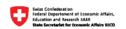
Design Considerations

- Middlemen's skill gaps:
- Record keeping and money management (SA + MA*)
- Optimizing processing facilities (MA + LA)
- Market analysis (All)
- Price hedging (All)
- Coffee production trends (All)

Envisioned Outcomes

- Improved money management
- Business growth

* Middlemen archetypes: SA= Small, MA= Medium, LA= Large Source: Stakeholder interviews and Enveritas middlemen surveys









(2) RESTRUCTURE LOAN SERVICES MIDDLEMEN OFFER FARMERS



Concept Summary

- Partner with local banks to offer coffee farmers access to formal financial services that meet their needs
- Middlemen (particularly small and medium archetypes) are trained and serve as banking agents, rather than issuing loans directly and receive commissions

Type of Opportunity

Change business as usual

Current Indicators

- 77% of middlemen offer loans to farmers
- 60% of middlemen are worried about farmers defaulting on loans, especially during periods with low coffee prices
- 11% of farmers have loans from middlemen

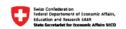
Design Considerations

- Loan use: Mostly for coffee inputs (e.g. chemicals); some for personal expenses
- Loan size: varies, from 5 million to 300 million VND (\$215 to 13,000)
- Interest rate: 1.5% per month on average ranging from 0.6% to 2.0% (depends on rate middlemen receive from bank)
- Payback: 5-10 months in cash or coffee
- Creditworthiness: based on size of production and trust; no paperwork or credit history required

Envisioned Outcomes

- Improved creditworthiness assessments
- Reduced default risk
- Increased access to formal financial services

Source: Stakeholder interviews and Enveritas middlemen surveys









(3) IMPROVE FERTILIZER DELIVERY FOR FARMERS



Concept Summary

- Improve the efficiency of fertilizer services that middlemen offer farmers
- Train middlemen (particularly small and medium archetypes) to assess farms for the appropriate type, dose, and application of fertilizer
- Pair with soil testing service
- Partner with coffee research institution to deliver NPK mix that is appropriate for coffee

Type of Opportunity

Change business as usual

Current Indicators

- 75% of middlemen offer fertilizer services to farmers
- 42% of middlemen offer farmers training or help connect them with training
- 99% of farmers use fertilizer

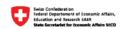
Design Considerations

- Fertilizer service currently offered by middlemen:
- Arrangement: Fertilizer offered as an advance to farmers
- Product: Predefined NPK or urea based on farm size
- Payment: Cash or coffee; Price similar to input providers
- Delivery: Convenient and easy for farmers
- Market: Middlemen receives commission from input suppliers

Envisioned Outcomes

- Improved soil quality and productivity
- Overuse of fertilizer and runoff reduced
- Reduce sale of counterfeit fertilizer (which are often sold at steep discounts compared with the genuine products)

Source: Stakeholder interviews and Enveritas middlemen surveys









(4) LAUNCH SEEDLING DELIVERY FOR FARMERS



Concept Summary

- Support or subsidize middlemen to serve as new distribution channel for coffee seedlings
- Train middlemen (particularly small and medium archetypes) to advise farmers on replanting protocols (e.g. replant farm in phases or rotation application)
- Partner with coffee research institution to design seedling variety distribution plan

Type of Opportunity

Change business as usual

Current Indicators

- 54% of middlemen are concerned about aging coffee farms resulting in low productivity
- 61% of middlemen are also farmers
- 36% of farms have more that 50% of trees above 20 years old

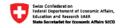
Design Considerations

- Insights on aging farms:
- Government's Priority*: Government is actively implementing policies for replanting coffee trees in targeted areas.
- Challenges: Three big challenges are replanting techniques, finance for replanting, and organization of replanting.
- Uncertainty around cost-benefits of replanting: Some farmers currently access low quality seedlings, and financial difficulties are keeping farmers away from replanting. Given the price volatility, farmers are also uncertain about the cost benefits of replanting coffee.

Envisioned Outcomes

- Improved access to improved seedling varieties
- Stable coffee supply chains

Source: Crop Department report at replanting workshop in Lam Dong, Oct 2019; Stakeholder interviews and Enveritas middlemen surveys









(5) PROPER RECEIPTS AND QUALITY IMPROVEMENT



Concept Summary

- Distribute pre-printed receipts for middlemen to use with farmers that feature quality grading
- Train middlemen to deliver feedback and tips on coffee quality (e.g. drying practices)

Type of Opportunity

Change business as usual

Current Indicators

- 3 of 4 farmers who sell directly to middlemen do not receive proper receipts
- 90% of farmers who sell to middlemen report middlemen do not reward quality with higher prices
- 9% of farmers report price was defined based on quality

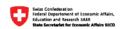
Design Considerations

- Insights on receipts and markets that reward quality:
- Measuring moisture content is the most popular method (65%), followed by visualizing (51%) and grading (25%).
- Currently no price mechanism to encourage farmer to pick ripe cherry.
- There is a widespread concern among stakeholders about declining coffee quality in Vietnam. A key reason behind this is, burdened by high input and labor costs, and volatile prices, farmers are resorting to picking green cherries.

Envisioned Outcomes

- Improved transparency around quality assessment
- Incentive for farmers to improve quality created
- Reduced informality

Source: Stakeholder interviews and Enveritas middlemen surveys











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METHODOLOGY



Scope of analysis

- A "middleman" is a colloquial term for a small-scale or informal trader that buys and sells raw agricultural products.
- The study focused on middlemen dynamics in the Robusta supply chains of Vietnam.
- The study was carried out between October 2019 and January 2020, and all figures and market data should not be considered representative of future or past conditions.

Primary data collection

- Middlemen interviews were conducted in the Central Highlands region (a major Robusta producing area, which includes Dak Lak and Lam Dong districts) in late 2019 / early 2020, with a sample size of 48 participants.
- Farmers interviews were conducted country-wide during both the 2018/19 and 2019/20 coffee harvests, with a sample size of over 6,000 farmer participants (combined years).

Secondary data collection

- The following sources provided reports that were referenced in this study: International Coffee
 Organisation (ICO), Vietnam Government Statistics 2018, IDH Sustainable Trade Initiative, and US
 Department of Agriculture (USDA).
- Interviews were conducted with representatives from the Vietnam coffee sector, including traders, exporters, farmer associations, and NGOs in November and December 2019.

