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# **Integrating MSEs into Value Chains: Evidence from Guatemalan Horticulture and Handicrafts**

**Accelerated Microenterprise Advancement Project (AMAP)**

**Elizabeth G. Dunn  
David E. Bloom**

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# PRESENTATION OVERVIEW

1. Introduction
2. Background on Guatemala Country Study
3. Findings
4. Implications

# I. INTRODUCTION

## Guatemala background

- 12.3 million people (growing at 2.3%)
  - 40% indigenous population
- GDP per capita (PPP): \$4,900 (\$12,000 for Costa Rica)
- 75% below poverty line (18% for Costa Rica)
- GDP composition vs. labor force occupation by sector:
  - agriculture: 22% vs. 50%
  - industry & services: 78% vs. 50%



# I. INTRODUCTION

## Story of two MSEs: Guatemalan homestead #1

- Uses land primarily for **grazing livestock** and **subsistence farming**
- **Small portion of land devoted to horticulture for sale in market**
- **Limited access to market information, without assurance of a buyer**
- Sells crops **directly to local consumers** or to truckers supplying **wet markets in local cities**

**Low risk, low return strategy**

# I. INTRODUCTION

## Story of two MSEs: Guatemalan homestead #2

- Allocates a significant portion of land to **high-value labor-intensive horticulture**
- Assured of buyer for crops with **agreed upon quantities and prices**
- Sells a portion of crops in **higher value-added markets** such as supermarkets or exporters
- **Buyer provides assistance** in the form of inputs, technical advice, and business development services

**High risk (with risk offsetting), high return strategy**

## 2. BACKGROUND

### Study overview

- Study assesses the **nature, determinants** and **consequences** of MSE participation in value chains
- Methodology: in-depth interviews and surveys of buyers and producers in **handicrafts** and **horticulture** value chains in Guatemala
- Major contribution: primarily uses a “**bottom up**” (producer) perspective that utilizes **empirical** testing

## 2. BACKGROUND

### Study approach – mixed methods

- **Qualitative field study (n=70)**
  - Individual and focus group interviews with firm owners, government officials, and NGO representatives
- **Quantitative buyer survey (n=132)**
  - Sample frame includes all firms on an export association list (AGEXPRONT), referrals, and a random walk strategy
- **Quantitative producer survey (n=785)**
  - Sample frame uses Respondent Driven Sampling (RDS), an innovative sampling method for hard-to-reach populations

## 2. BACKGROUND

### Producer survey sample frame

- **Respondent Driven Sampling (RDS)**  
employs a modified chain-referral methodology



Wave Number	Total Respondents in Wave		Cumulative Number of Respondents	
	Handicrafts	Horticulture	Handicrafts	Horticulture
1 (Seeds)	10	15	10	15
2 (Referrals)	20	20	30	35
3 (Referrals)	40	40	70	75
4 (Referrals)	80	80	150	155
5 (Referrals)	80	80	230	235
6 (Referrals)	80	80	310	315
7 (Referrals)	80	80	<b>390</b>	<b>395</b>



## 2. BACKGROUND

### Handicrafts and horticulture VCs in Guatemala

- Urgent need for **development**
- **Significance** to the Guatemalan economy
- **High MSE participation**, both within Guatemala and worldwide
- Value chains are **labor intensive**, providing a potential edge to MSEs
- Value chains are **inter-connected**



## 2. BACKGROUND

### Key research questions of study

- What is the nature of **MSE participation** in VCs?
- How can we best enhance **inter-firm coordination** and **cooperation**?
- How can we best encourage MSE owners to **upgrade**?



### 3. FINDINGS

#### MSE participation in value chains

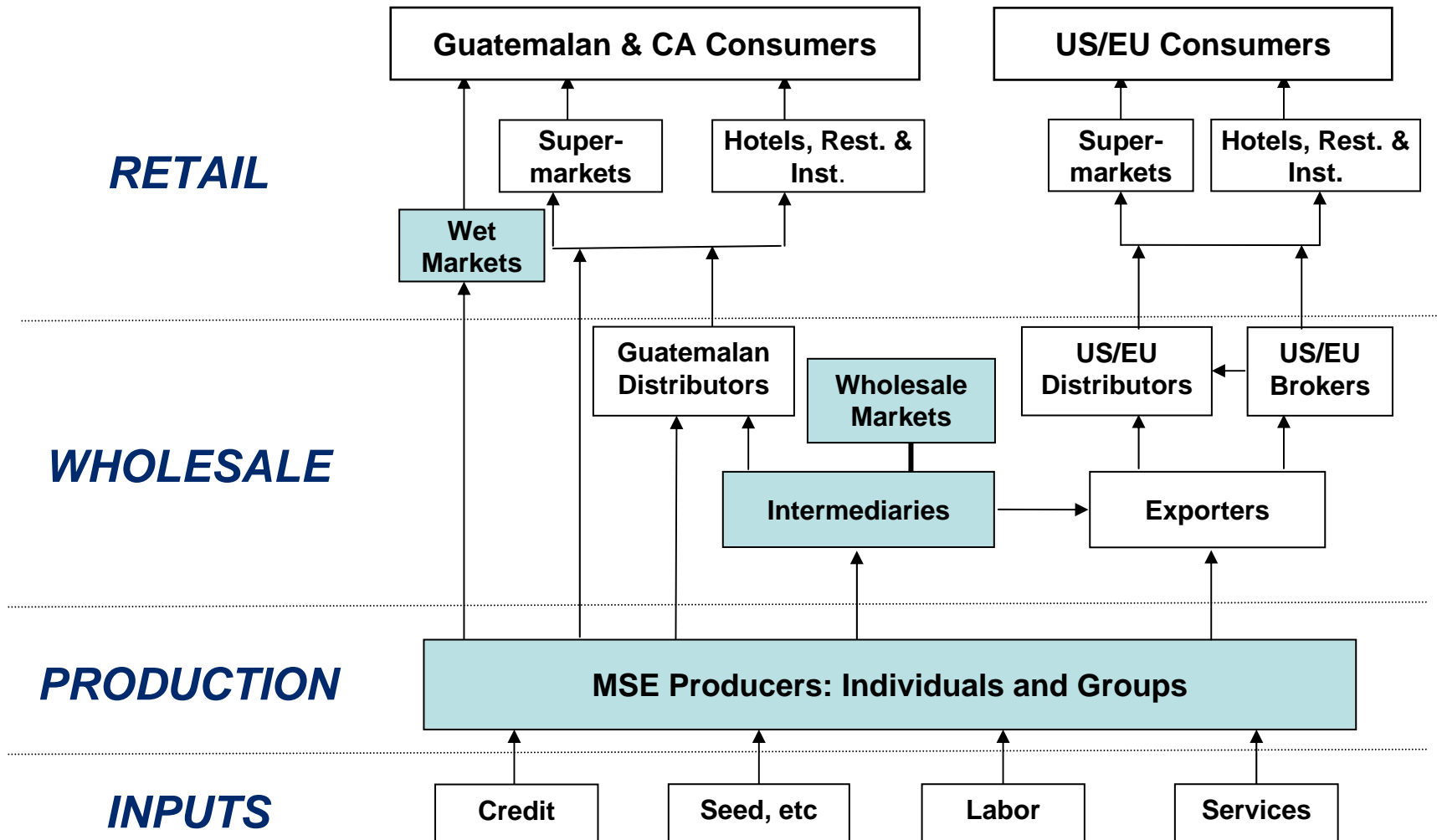
- Most firms in both samples are **micro and small enterprises**

Number of Employees by Firm Type and Sector.		
	Handicrafts Producer	Horticulture Producer
<b>Total Employees During Busy Season</b>	(n=381)	(n=383)
Mean	5	6
Range	1 to 21	1 to 33
50th Percentile	4	5

- MSEs have **limited knowledge** of market conditions
- MSEs have **restricted access** to international markets despite expressing a preference for these channels

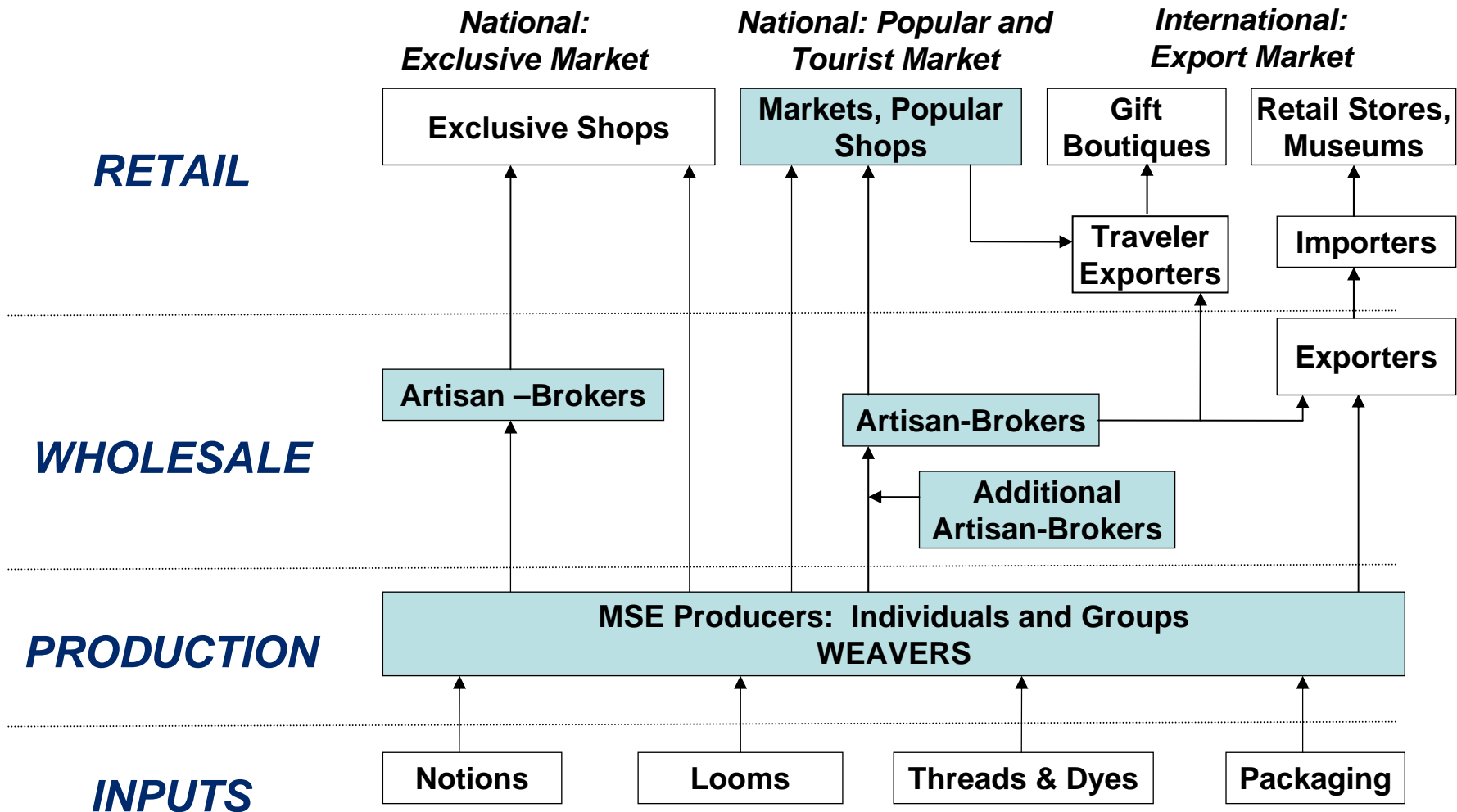
### 3. FINDINGS

## Guatemala horticulture value chain



### 3. FINDINGS

## Guatemala handicrafts value chain



## 3. FINDINGS

### Horizontal relationship characteristics

- MSEs report **low levels** of producer group membership:
  - Handicrafts – 12%
  - Horticulture – 20%
- **Fraudulent, opportunistic,** and **rent-seeking** behavior among producer group members has limited group participation



## 3. FINDINGS

### Determinants of horizontal relationships

- Organizational innovations can **mitigate group problems**, including:
  - Improved **group governance** (e.g., directly electing group leaders)
  - Increased **market knowledge** among producers
- Measures can also be used to **facilitate group participation**:
  - Cost-effective **information and communication technology (ICT)**
  - Increased **in-born social capital**

### 3. FINDINGS

#### Vertical relationship characteristics

- MSE relationships are **concentrated**
- **Personal communication** is the predominant form of interaction
- **Trust** of buyers is high among producers
- Business relationships are **long-lasting** (avg. 6 years)





## 3. FINDINGS

### Determinants of vertical relationships

- Vertical relationships depend on **trust**, which is promoted by:
  - Greater **personal communication**
  - Increased **producer knowledge** in the form of transparency about the distributions of rents
- Vertical relationships can be facilitated by **lowering transaction costs**

## 3. FINDINGS

### Upgrading practices

#### Horticultural Sector

Type of upgrading practice	Classification	Yes	
Knowledge of approved agrochemicals	Product	96%	379
Using practices that signal future upgrading	Product	54%	203
Being certified in good agriculture practices	Product	11%	40
Selling other producers' products	Functional	6%	24

#### Handicrafts Sector

Type of upgrading practice	Classification	Yes	
Using the foot loom	Process	31%	120
Using new designs from buyer in past 12 months	Product	33%	130
Selling other producers' products	Functional	9%	35

### 3. FINDINGS

#### Determinants of upgrading

- **Vertical linkages** with buyers in higher value-added markets
- **Horizontal linkages** with producer groups
- **Risk offsetting** opportunities
- **Information** on costs and benefits



## 4. IMPLICATIONS

- Horizontal and vertical relationships impact upgrading and we should be promoting their formation
- Based on this study, there are numerous action steps we should consider. We should:
  - **Facilitate information based services**
  - **Leverage information and communication technology (ICT)**
  - **Foster transparency**
  - **Encourage personal communication**
  - **Offer risk-offsetting incentives**
  - **Promote awareness**

# CONCLUSION

**THANK YOU!**

**What do YOU think about the  
implications?**

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**Elizabeth G. Dunn  
EDunn@ImpactLLC.net**

**David E. Bloom  
dbloom@hsph.harvard.edu**

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## PHOTO CREDITS

<b>Slide</b>	<b>Image</b>	<b>Source</b>
3	Map of Guatemala	CIA Factbook
8	RDS training	AMAP Guatemala team
9	Female with loom	AMAP Guatemala team
9	Farmers in field	Care International
10	Male / Female at market	AMAP Guatemala team
10	Farmer	The New Farm
10	Female artisan vendor	AMAP Guatemala team
14	Farmers gathered in group	Env'l News Service / IADB
16	Processing vegetables	AGEXPRONT
19	Back strap loom	AMAP Guatemala team