Inclusive Value Chains

Labor Market Policy Course

May 14, 2013

Kwang Kim

Senior Consultant, Finance and Private Sector Development
Agenda

- Why Value-Chains?
- Elements of a Value-Chain Analysis
- Country Examples
- Implications to Policy and Operations
- Q&A
Why value chains?
Jobs growth must dramatically increase to “Bend the Arc of History”

**What has changed since the crisis?**

**22 MILLION**
jobs *lost* globally during the financial crisis (WDR 2013)

**OFFSHORING**
jobs offshoring might be *reversing* –
good for US and EU, bad for EM

**And what is needed now?**

**600 MILLION**
jobs needed over the next 15yrs to *sustain*
current employment rates (WDR2013)

**1 MILLION**
jobs needed *per month* for the next 10yrs in
Africa and South Asia alone (WDR 2013)

---

**SHARED PROSPERITY**

**POVERTY**

**% Population**

**Time**

**TRADITIONAL / PIECEMEAL INTERVENTIONS ARE NOT ENOUGH**

**WE NEED TRANSFORMATIVE SOLUTIONS – TO SPUR LONG TERM COMPETITIVENESS AND JOB CREATION**
Why value chains?
Value chains (and similar industry approaches) aims at filling a “missing middle”

Macro-stability, investment climate reforms and innovation policies

Multi-sectoral interventions bringing together public and private sectors to unlock value chains and clusters

Mentoring, networking and financing support to firms, grass roots and entrepreneurs

“We found that we can deliver very fast when we concentrate on the sectors that count”
(YB Senator Dato’ Sri Idris Jala, Minister in Prime Minister’s Office and CEO, PEMANDU, Government of Malaysia)
Why value chains?

Sector contribution to Kyrgyzstan’s GDP and Employment by Sector, 2000-2011

<table>
<thead>
<tr>
<th>Sector contribution to value added (as % of GDP)</th>
<th>2000-2003</th>
<th>2004-2007</th>
<th>2008-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>38.4%</td>
<td>44.2%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Industry</td>
<td>11.9%</td>
<td>18.7%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>49.6%</td>
<td>37.0%</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>49.6%</td>
<td>44.2%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Industry</td>
<td>14.1%</td>
<td>18.7%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>36.3%</td>
<td>37.0%</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

Employment has been directed to sectors with lower value added to growth. Agriculture contributed to 20% of total growth in 2008-2011, while employing 34% of the total labor force in 2008.

Kyrgyzstan policy options: (1) either shift jobs to other growth sectors, or (2) upgrade its agriculture sector towards higher growth activities (e.g. agribusiness).

Source: World Bank WDI data
What is a value chain?

Example: Brazil’s shrimp industry value chain – long list of constraints to growth

Source: Monitor Country Competitiveness/OTF Group, 2000
Why value chains?

Example: **opportunities** for honey producers in Brazil

<table>
<thead>
<tr>
<th>Actual segments where AAPI is competing</th>
<th>Segments where AAPI is not competing</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$1,05 / kg (Sales price, AAPI)</td>
<td>US$17 / Kg (Organic honey, EUA*)</td>
</tr>
<tr>
<td>US$10,5 / Kg (Goya)</td>
<td></td>
</tr>
<tr>
<td>US$11,4 / Kg (St Barbara)</td>
<td></td>
</tr>
<tr>
<td>US$23,3 / Kg (Apis Vida via BREX)</td>
<td></td>
</tr>
</tbody>
</table>

Source: interviews with Simplicio Mendes Producer association, USA market research, USAID-CRESCE Brasil analysis, 2005
Why value chains?

What is a value-chain?

Describes full range of activities required to bring a product or service through the different phases of production, including physical transformation, the inputs of various producer services, and response to consumer demand (Kaplinsky, Raphael, and Morris (2000)).

It is not…

- The same as sectors
- Just a transaction within the supply chain
- Stand-alone Business Development Services (BDS)
- A static description

Value-chain approaches look at the full range of issues facing the flow of production to market
Agenda

• Why Value-Chains?

• Elements of a Value-Chain Analysis
  - Country Examples
  - Implications to Policy and Operations

• Q&A
Overview

Five Elements of a Value-Chain Analysis (Upgrading)

1. Sector Prioritization

Discovery:
Multi-sector analysis: coffee, tourism, tea chosen

Where to compete:
Generic vs. premium coffee: premium chosen

2. Market Analysis

Long list of constraints and opportunities identified

3. Value-Chain Mapping

Prioritized issues, quantified gains

4. Benchmark Performance

E.g. Quality programs

5. Prioritized Action Plans

E.g. Quality programs
1. Use Sector Prioritization to Justify Project Scope

What does this figure reminds you of?

“Funnel” Process

1. Long Listing
   (10, 30, or 100+)
   Pre-selected from a preceding effort/factor or use technical criteria such as economic (e.g. export levels), development impact (e.g. SME concentration), and feasibility (e.g. presence of a champion)

2. Short Listing
   (3, 10, or 20+)
   Interviews, research, field visit, consultations, industry workshops

3. Final Decision
   (1, 3, or 5+)
   Approval by main stakeholder(s) / client

YOU ARE SELECTED!
1. Use Sector Prioritization to Justify Project Scope

What is your experience in prioritizing a sector or value-chain?

WBG Project P112011. Source: ITC, based on UN COMTRADE Statistics.
Have you ever worked hard on something that was unnecessary?

Market analysis helps you focus on the right products!
2. Market Analysis

Rwanda Coffee Strategy & the World Coffee Market

World Coffee Production versus Demand (1994 - 2002)

Source: USDA and Bloomberg

OTF Group materials - not for wider distribution
2. Market Analysis

Rwanda Coffee Strategy & the World Coffee Market

**World Coffee Production versus Demand**
(1994 - 2002)

- **Production** and **Consumption**

Source: USDA and Bloomberg

**World Coffee Price Index**
(Annual Average C-Price NY)

Source: International Coffee Organization

3. Value-Chain Mapping

Have you ever tried to get somewhere without a roadmap?

Input to Markets – Rwanda tourism industry map

- High value wildlife & safety
- Small firms, variable quality
- Meeting quality standards
- Disorganized
- Inadequate Technical Assistance

Henning, et. al, USAID/OTF Group, 2008
When you are busy, how do you prioritize?

A small percentage *decrease* in raw materials & packaging could offset large increases in other cost items.

Source: JCCP/OTF, 2004. Recent increase in energy prices are not reflected, but the cost analysis above remain largely valid, per firms consulted (2010)
## 5. Prioritized Action Plan

### Joint Public-Private Action Plan - Illustrative Example

<table>
<thead>
<tr>
<th></th>
<th>1 Regulatory and tax environment</th>
<th>2 Infrastructure</th>
<th>3 Access to finance</th>
<th>4 Skilled and trained labor</th>
<th>5 Access to technologies and R&amp;D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Public-Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BUSINESS PLAN SUB-PROJECTS

<table>
<thead>
<tr>
<th>Sub-Project</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washing Stations</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Packing Houses &amp; Cold Storage (ind. firms)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Houses &amp; Cold Storage (to associations/coops)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hygiene certification (firm), e.g. HACCP</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Hygiene certification (government/institutional)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Coffee Sector Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Fair attendance</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Budget support for testing institute (DFN)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Training of trainers for university staff</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Training business plans for firms</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Custom reform</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Source: Kassim, S., “Using PPD to Build Competitive Industries,” 2011

Source: Guatemala Enhancing MSME Productivity Project, 2011
Let’s review…

• Understand the importance of value-chains in the context of Bank operations
  ❑ *Why they are important?*

• Understand components of value-chain analysis using practical examples
  ❑ *What are they?*
Agenda

- Why Value-Chains?
- Elements of a Value-Chain Analysis
- Country Examples
- Implications to Policy and Operations
- Q&A
Pakistan
Pakistan
Khyber Pakhtunkhwa (KP) and tribal areas

Source of income for young men in Pakistan, in USD

- Suicide attacker payout (sum): 5,882 USD
- Militant stipend (monthly): 176 USD
- Police (monthly): 94 USD
- Marble miner (monthly): 76 USD
- Unskilled labourer (monthly): 73 USD
- Tribal levy/paralimilitary (monthly): 41 USD

Source: Marble data from PASDEC, other data provided by KP Southern Area Development Project (KP-SADP) via stakeholder consultations in communities, 2012
Pakistan
FATA in 2008 – How to Generate Jobs?


Source: Based on 10% national job growth rate used by SWOG Dimensional Stone Strategy, 2006.
Pakistan

Expanding jobs through the marble value chain in KP

Project Components (PAD):

(1) Machinery Pool ($ 4.0 M)
(2) Training Center ($ 3.15 M)
(3) Market Access ($ 0.23 M)

Additional loss of 5 to 10 x value (price) due to lack of proper cutting and polishing

75-85% loss of value due to poor quarrying techniques (e.g. blasting)

Licensing (3 types)
- Reconnaissance
- Exploration
- Mining (30 yrs)

Setup
- Infrastructure
  - (e.g. Feeder roads, electricity)

Extraction

Storage

Transportation

Cutting
- Calibrating
- Polishing (for exports)

Transportation

Packaging
- Sales & Marketing
- Transportation (domestic & exports)
Guatemala
Guatemala
Key economic challenges

- Quantity and quality of jobs
- Informality
- 80% of jobs concentrated in MSMEs

- Fragmented MSMEs
- MSMEs separated from global value chains
- Low cooperation within the value chain

- Baja calidad de los productos agrícolas y
- Baja calidad de los servicios turísticos
- 95% de la madera se utiliza como combustible y el resto como insumo primario

- Low infrastructure maintenance
- High economic inequality
- 51% of population live in poverty

Source: Country Economic Memorandum, 2010
Guatemala
Enhancing MSME Productivity Project

LOAN: US$32 millions
PERIOD: 5 years

OBJECTIVE: Strengthen MSME through:

I) MSME Support Policies

II) Integrating MSMES into value chains
Guatemala

How does this project help create quality jobs in Guatemala?

<table>
<thead>
<tr>
<th>Value chain prioritization</th>
<th>Transparent public-private dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment prioritization</td>
<td>Capacity building of government agencies</td>
</tr>
<tr>
<td>Risk management</td>
<td>New Business Development Services (BDS)</td>
</tr>
<tr>
<td>Matching grants</td>
<td>Linking skills with industry needs</td>
</tr>
<tr>
<td>Clean production technologies</td>
<td>National Quality Infrastructure</td>
</tr>
</tbody>
</table>
### Guatemala
How is this approach different?

<table>
<thead>
<tr>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank-led based on analysis</td>
<td>Stakeholder-driven based on analysis</td>
</tr>
<tr>
<td>Individual transactions</td>
<td>MSME value chain integration</td>
</tr>
<tr>
<td>Scattered efforts</td>
<td>Prioritization of efforts</td>
</tr>
<tr>
<td>The same beneficiaries, mainly political criteria</td>
<td>Inclusion of MSME, use of technical criteria</td>
</tr>
<tr>
<td>Little technical assistance to MSMEs</td>
<td>Technical and financial support</td>
</tr>
<tr>
<td>Little accountability</td>
<td>Measurable support</td>
</tr>
</tbody>
</table>
Guatemala
Project Organization

MINECO
Executive Committee

PIU

Assistant

Tourism Working Group

Agribusiness Working Group

Coordinator Component 1
Technical Specialist

Coordinator Component 2
Technical Specialist

Coordinator Component 3 (PIU)
Procurement Specialist
Financial Management Specialist
M&E Specialist

Safeguard Specialist

Procurement Officer

Financial Management Officer

M&E Officer
Agenda

• Why Value-Chains?

• Elements of a Value-Chain Analysis

• Country Examples

• Implications to Policy and Operations

• Q&A
Agenda

- Why Value-Chains?
- Elements of a Value-Chain Analysis
- Country Examples
- Implications to Policy and Operations
- Q&A
Implications to WBG projects

Effective value chain approaches integrate and leverage all capabilities of WBG

Overall quality of workforce

Industry-specific skills
The Virtuous Cycle Model

Virtuous Cycle

- Economic Growth
- Innovation
- Sustainability
- Productivity
- Social Equity
- Increased wealth across the value-chain
- Investment in human, social, and physical capital
- Sales of complex products
Thank you!

Additional WBG Resources (intranet)

https://ci (see “Sector Prioritization”)

“Clusters for Competitiveness: A Practical Guide & Policy Implications for Developing Cluster Initiatives”

Contact:

Kwang W. Kim (kkim@worldbank.org)
CI Sector Prioritization Discussion Framework

**Dimensions**

1. **Economic**
   - Growth
   - Market Share (relative advantage)
   - Employment
   - Income
   - Share of micro and SME firms
   - Workforce Displacement
   - Spillovers and linkages
   - Environmental impact
   - Inequality (Gini)
   - Sophistication (value added)
   - Endowments
   - Productivity (TFP, Labor)
   - Industry structure
   - Political
   - Technical
   - Financial

2. **Social**
   - Inequality (Gini)
   - Energy usage, material usage, air emissions, waste
   - E.g. up / downstream demand
   - 7 Forms of Capital*

3. **Feasibility**
   - Effort, cost, time for reforms and infrastructure

**Criteria**

- Growth
- Market Share (relative advantage)
- Employment
- Income
- Share of micro and SME firms
- Workforce Displacement
- Spillovers and linkages
- Environmental impact
- Inequality (Gini)
- Sophistication (value added)
- Endowments
- Productivity (TFP, Labor)
- Industry structure
- Political
- Technical
- Financial

**Variables**

- e.g. growth of exports and investments
- e.g. share of exports
- e.g. share
- e.g. inequality
- e.g. quality of life
- e.g. loss of jobs due to high TFP
- e.g. Energy usage, material usage, air emissions, waste
- e.g. up / downstream demand
- 7 Forms of Capital*
- e.g. Leadership
- e.g. Institutional structure
- e.g. Psychology and mindsets
- e.g. Winners and Losers
- e.g. Project feasibility
- e.g. Project costs and benefits

* Wolfensohn-Fairbanks Model
The four Elements of the Porter Diamond

National and industry competitiveness is created by upgrading the four elements

- **Demand Conditions**: More competitive
  - Dynamic environment for competition and business strategy, e.g. predictable business environment (e.g. competition, IP Policy), high variety and number of firms

- **Factor Conditions**: More competitive
  - Primary, secondary, tertiary education
  - Vocational schools
  - Consulting firms and expertise
  - Industry-academic collaboration

- **Context for Firm Strategy and Rivalry**: More competitive
  - Certification (e.g. HAACP)

- **Related and Supporting Industries**: More competitive
  - Public-private feedback mechanisms, including Industry-academic collaboration

Less competitive

- Lack of fair competition, e.g. collusive practices, frequent policy changes, a few firms dominate the industry, high entry and exit barriers, high informality
Implications to Policy and Operations
The case of Chile: workforce development through global value chain upgrading

<table>
<thead>
<tr>
<th>Stage 1: Production for Export 1980s—Present</th>
<th>Stage 2: Packing and Storage 1985—Present</th>
<th>Stage 3: Processed Fruit and Vegetables Mid-1990s—Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production for Export</td>
<td>Packing &amp; Cold Storage</td>
<td>Processing</td>
</tr>
</tbody>
</table>

**Private Sector Workforce Initiatives**
- Internal programs to train workers
- Internal programs to train workers
- HAAP standards training

**Public Sector Workforce Initiatives**
- Government Scholarships to University of California
- Tax incentives for foreign companies to train personnel

**Public-Private Sector Workforce Initiatives**
- The role specialized training agencies (e.g. CORFO’s supply development program, OTIC-AGROCAP trained more than 100,000 workers)
- 9,000 workers certified

Source: Duke CGGC, 2011