STRATEGIES FOR LARGE SCALE MEASURABLE IMPACT IN MARKET SECTOR DEVELOPMENT

Case Studies: Bamboo and Tourism in the Mekong
PART 1
BAMBOO & SCALED POVERTY IMPACT
DEVELOPING STRATEGY A
IMPLEMENTATION B
MEASURING IMPACT C

PART 2
OTHER SECTORS IN THE MEKONG
TOURISM A
TOWARDS A PORTFOLIO B
BAMBOO & SCALED POVERTY IMPACT
STRATEGY FOR SCALED IMPACT

- SHARED AMBITION needed to lift many out of poverty
- STRATEGIC ANALYSIS to inform investment choices
to target MDG goals
- INTEGRATING development & business/investment
  sector approaches
- THE MARKET AS A SYSTEM; working for the
  poor = working throughout the market system
- BROKERING PARTNERSHIPS – linked up resources,
  commitment and experience
OPPORTUNITY ORIENTED STRATEGIC ANALYSIS

DEVELOPING STRATEGY
### Global Bamboo Markets

**‘Bamboo Market’ vs. ‘Global Market’**

<table>
<thead>
<tr>
<th>Product</th>
<th>USD Millions ‘BAMBOO MARKET’</th>
<th>USD Millions ‘GLOBAL MARKET’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chopsticks</td>
<td>300</td>
<td>390</td>
</tr>
<tr>
<td>Activated Carbon</td>
<td>20</td>
<td>1,200</td>
</tr>
<tr>
<td>Bamboo Shoots</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Charcoal</td>
<td>60</td>
<td>3,100</td>
</tr>
<tr>
<td>Bamboo/Rattan Handicrafts</td>
<td>5</td>
<td>6,000</td>
</tr>
<tr>
<td>Builders Joinery &amp; Carpentry</td>
<td>500</td>
<td>6,500</td>
</tr>
<tr>
<td>Wood Blinds</td>
<td>5</td>
<td>10,000</td>
</tr>
<tr>
<td>Wood Flooring</td>
<td>100</td>
<td>14,000</td>
</tr>
<tr>
<td>Wood Panels</td>
<td>200</td>
<td>27,000</td>
</tr>
<tr>
<td>Wood Furniture</td>
<td>1,100</td>
<td>57,000</td>
</tr>
</tbody>
</table>

**Size of Current ‘Global Market’**

- World $7BN PA, China ~$5.5BN PA

**Mid-Level Scenario**

2017 - World ~15-20BN PA

**‘Bamboo’ Markets are bamboo components of Global markets**

**‘Global’ Markets include overall product markets into which bamboo products penetrate**
GLOBAL BENCHMARKING

COMPETING TO SELL BAMBOO FLOORING

<table>
<thead>
<tr>
<th></th>
<th>Raw Bamboo Cost</th>
<th>Labour</th>
<th>Flooring Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>China</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Costs ‘07</td>
<td>USD100/t</td>
<td>USD150/mth</td>
<td>Floor 12.5/m2</td>
</tr>
<tr>
<td><strong>Vietnam</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Costs ‘07</td>
<td>USD40/t</td>
<td>USD50/mth</td>
<td>Floor 13.5/m2</td>
</tr>
</tbody>
</table>

COMPETITIVENESS UNDERPINS MARKET SHARE

- Drives market volume... which in turn
- Drives scale of impact
IMPROVED SUPPLY CHAIN STRUCTURE INCREASES SECTOR EFFICIENCIES

DIRECT SUPPLY MODEL
Current model in Mekong Waste rates 50 to 70%

PRE-PROCESSING MODEL
Current model in China Waste Rates 5 to 10%

BAMBOO SECTOR COMPETITIVENESS

DEVELOPING STRATEGY

FARMERS/TRADERS

PRE-PROCESSING

END PROCESSING
### Sector Structure Defines Distribution of Benefits

<table>
<thead>
<tr>
<th></th>
<th>Raw Bamboo Cost (Farmer income)</th>
<th>Labour (Worker income)</th>
<th>Sector Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>China</strong></td>
<td><strong>Unit Costs ‘07</strong></td>
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<td><strong>USD40/t</strong></td>
<td><strong>USD50/mth</strong></td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td>~60%</td>
<td>15-20%</td>
<td>~75%</td>
</tr>
<tr>
<td>% subsector</td>
<td><strong>Handicrafts</strong></td>
<td>70-80%</td>
<td>~75%</td>
</tr>
<tr>
<td>% subsector</td>
<td>2-5%</td>
<td>70-80%</td>
<td>~75%</td>
</tr>
<tr>
<td><strong>Shoots</strong></td>
<td>70-75%</td>
<td>5-10%</td>
<td>~80%</td>
</tr>
</tbody>
</table>
**IMPACT ‘YIELD’ BY MARKET SEGMENT INDUSTRIAL BAMBOO SECTOR**

- **Low Value Bulk Processing**
  - eg paper, charcoal
  - Raw culms VN

- **Medium value processing**
  - eg chopsticks, panels
  - Mat board VN

- **Premium processing**
  - eg flooring, laminate furniture
  - Paper + pulp VN
  - Flooring VN

**Bamboo laminated flooring and panels**

**LOCAL PRO-POOR FINANCIAL IMPACT PER HA (USD)**

- JOBS PER HA (FARMERS WORKERS FTE)
  - 0.2, 0.4, 0.6, 0.8, 1.0, 1.2

- DEVELOPING STRATEGY
  - DEMAND
  - OPPORTUNITY
  - COMPETITIVENESS

**LOCAL PRO-POOR FINANCIAL IMPACT PER HA (USD)**

- 500, 1,500, 2,000, 2,500, 3,000

- **Charcoal, briquets, Laos**
- **Charcoal, briquets, China**
- **Chopsticks VN**
- **Flooring VN**
- **Mat board VN**
- **Woven mat VN**
- **Raw culms VN**
PROVINCIAL SCALE POLICY CHOICE

SUPPLY CHAIN ‘INDUSTRY MIX’ SCENARIOS 50,000 HA

- **RAW MIX**
  - Jobs: 8,500
  - Value: $20m

- **BULK MIX**
  - Jobs: 9,500
  - Value: $21m

- **MEDIUM MIX**
  - Jobs: 16,500
  - Value: $31m

- **NEW INDUSTRY MIX**
  - Jobs: 20,000
  - Value: $40m

LOCAL PRO-POOR FINANCIAL IMPACT PER HA (USD)

JOBS PER HA (FARMERS WORKERS FTE)

LEGEND:
- Premium
- Medium value
- Low value bulk
- Raw
BAMBOO AND SCALED POVERTY IMPACT

IMPLEMENTATION

MBC – THE CORE
MBC – THE CONSORTIUM
MBC - IMPACT TARGETS
SUPPLY CHAIN PILOTS
In each sub-sector
Industrial bamboo, shoots and handicrafts

Provincial Priority Sector
-Sector Enabling Environment
-Policy and Strategy

Farmers
Investors
Businesses
End Markets
Facilitation

Production Resources
Links, Services Capacities

MBC – THE CORE

Thanh Hoa, Phu Tho, Yen Bai, Hua Phan...
SECTOR LEVEL ACTIVITIES

RESEARCH & KNOWLEDGE
- Market research
- Production & Technology development
- Resource Inventory mapping
- Regional knowledge platforms & global linkages

IMPACT ASSESSMENT
- Develop tools for baseline & capturing sector level transformations in households, businesses and institutions
- Replication & integration of databases - sector wide poverty impact and programme ROI

MARKET FACILITATION
- Linkages with Buyers (Walmart, Ikea etc)
- Business database, investor linkages

Thanh Hoa Nurseries – developing better bamboo production for Vietnam
THE MBC CONSORTIUM
PI - MANAGER AND CODIRECTOR WITH IFC

DOING THINGS ON THE GROUND
- GRET, Hadeva, Winrock, EDC, INBAR, IDE, CIAT, HRPC, Helvetas...
- Gov (VN, Laos, Cam Depts of Agric/Forestry)
- Range of Vietnamese businesses

IN DISCUSSION
- SNV, GTZ, many others including bilateral proj.
  - Gov partners, businesses/investors (national, global)
- Expect ~30+ operational partners in region

GOING TO SCALE BY 2008
- Growing the Core Team
- Formalising relationships
- Expanding full range of activities
THE MBC - LEVERAGING RESOURCES

MBC ASSOCIATES
- Uptake of practices
- Leverage own resources & competencies
- New experiences & Contribution to MBC

MBC CORE
- Core Partners
- Supply chain Pilots
- Sector Level Activities
- Coordinate & manage MBC
- Support to Associates

Cost efficient - Not a top down project architecture
Based on incentives to collaborate
MBC Mgt & Core accountable to Consortium Members
THE MBC - IMPACT TARGETS 2017

- Bamboo can lift 1-1.5 million out of poverty (2017)
  - Industrial bamboo (1M)
  - Handicrafts (450,000)
  - Shoots (100,000)
- Return on Investment for Donors
  - $40M of donor investment ... 
  - $900M pa pro-poor output

~ $40-60 PP OUT OF POVERTY

MBC DONORS
OHK & IFC (800,000k since 2004)
Minor donors 2005 - IKEA, M4P; 2006 OGB
Current 2007 → 2.5 million pa
(SDC, Irish Aid, OHK, IFC)
DEMONSTRATING SCALED IMPACT THANH HOA IMPACT TO DATE

METHODOLOGY, INTEGRATED M&E

BAMBOO AND SCALED POVERTY IMPACT

MEASURING IMPACT
BAMBOO IMPACT IN THANH HOA
THE SAMPLE POPULATION & THE METHODS

THE POPULATION
- 3 districts, over 2,359km²
- 36,258 Households
- 181,066 people
- 89% ethnic minority
- Official poverty rate 2002 = 72%

INCOME AND EXPENDITURE SURVEY
- Randomised Cluster survey
- Sample size (n=212) large enough to statistically differentiate conclusions
- Household selection fully randomised within clusters (communes)

TRIANGULATED WITH TRADER INTERVIEWS

COMPARISONS BETWEEN ‘04’ AND 06
- Bamboo & non-bamboo household incomes
- Movement out of poverty/across income groups
- Other factors (land, ethnicity etc)
BAMBOO IMPACT IN THANH HOA
Bamboo lifts people out of poverty

Survey area (60% of provincial sector) – 8500 people moved across poverty line

- 'Bamboo HH’
  - Poor HH with Bamboo Income
- 'Non Bamboo HH’
  - Poor HH without Bamboo income

% of total population*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total in Poverty</th>
<th>With Bamboo Income</th>
<th>Without Bamboo Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>67.6%</td>
<td>42.8%</td>
<td>24.8%</td>
</tr>
<tr>
<td>2006</td>
<td>64.8%</td>
<td>40.9%</td>
<td>23.9%</td>
</tr>
</tbody>
</table>

- '04 Total in Poverty 24,300 HH
- '06 Total in Poverty 23,300 HH
**What is best indicator to measure poverty impact?**

*Kernel Density Function Poverty & Sustainability Indicator?*

Bamboo HH are less poor than Non-bamboo HH

Bamboo HH move out of poverty - red line ('06) below green line ('04) in poverty zone

Non-bamboo HH move into poverty - red line ('06) above green line ('04) in poverty zone

1 USD = VND 16,000

0 5,000,000 10,000,000 15,000,000

Net Per Capita Real Income VND

2004 2006
BAMBOO IMPACT IN THANH HOA
INCOMES ARE INCREASING IN THANH HOA

- 61% had bamboo income in 2004; 70% in 2006
- 2004 bamboo incomes US$6.6million, 34% of total H/H income (of total US$20.9million).
- 2006, bamboo incomes US$10.3million, or 38% of total H/H income (of total US$27.5million)
BAMBOO IMPACT IN THANH HOA ETHNICITY IS NO BARRIER TO BENEFITS

ANOVA

VND

p = 0.218  p = 0.014  p = 0.008  p = 0.936

Ethnic Group
- KINH
- MUONG
- THAI

n = 206  n = 146


total net/capita  bamboo net/capita
Lu Thi Hoa: “With my monthly income from the bamboo workshop, I am now more independent. I support my parents and save some of the money for myself, too.”
ATRIBUTION AND SECTOR IMPACT

- Multiple regression analysis
  - Only bamboo income correlates with leaving poverty

- Activity (lens) based attribution of impact?
  (donor/agency ‘lever’ obsession)

- Designing for a control group of market system project?

- Attribution to The Consortium
Mekong Tourism Screening

- Application of demand-competitiveness-impact analytical model to Tourism

- Demand – tourism segments & spending patterns;

- Competitiveness? –
  National, destination, supply chain

Our first pilot destination
Siem Reap

Another IFC collaboration with PI

Project funded by IFC and Oxfam Hong Kong
Pro poor or local economic impact spend per day by spend category

- Other
- Shopping
- Spa / massage
- Casino
- Excursions / tours
- Entrance fees
- Guides
- Transport in town
- Meals and snacks, Drinks, Tips
- Accommodation
TOURISM

Bubble size =
Total PPI/Year

Policy Options?
TOWARDS A PORTFOLIO

Screening
- Pork with GoV, ILRE
- Biofuels & Energy

Feasibility
- Tourism with IFC Lead
- Coffee with GoV, EDE

Implementation
- Bamboo with IFC & Many MBC Partners

PART 2