RESTRUCTURING THE VALUE CHAIN
GOVERNANCE: THE IMPACT OF FOOD
SAFETY REGIME ON FISHERY SECTOR OF
KERALA, INDIA

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Scheme of Presentation

• Introduction, Hypothesis, Aim
• Value Chain concepts: Literature review
• Value Chain dynamics-1950s to 1990s
• Value Chain dynamics-Food safety regime
• General summary & Policy implications
Introduction

• Proliferation & stringency of standards
• SPS, HACCP, Compliance-Developing nations
• Significant economic & social consequences
• Issue: Marine product export from India
• Hypothesis: Evolving food safety standards cause restructuring of the value chain
Aims of the study

• Analyze the evolution of seafood export value chain governance in Kerala, India

• Analyze the impact of food safety regime on governance, characteristics and activities of the seafood export chain
GVC Concept: A Review

• Reorientation- Gereffi, 1994

• Producer driven & Buyer driven- Gereffi, 1996

• Industrial organization- Sturgeon, 2002

• Theory of governance structure- Gereffi et al, 2005
GVC-Empirics

- Upgrading and exclusion- Gibbon, 2001; Dollan, 2002
- Power relation in coffee chain- Ponte, 2002
- Class structure & local power- Phyne, 2003
- Vertical coordination- Humphrey, 2006
- Retail power in cashew- Harilal, 2006
- Social embeddedness- Rammohan, 2003
Methodology

• Visualizing through lens of GVC theory
• Analyzing past
• Field study-two districts
• Multi stakeholders- Respondents
• Focus group discussion
• In-depth informal discussion
# Dynamics of GVC governance

<table>
<thead>
<tr>
<th>Governance type</th>
<th>Complexity of transactions</th>
<th>Ability to codify transactions</th>
<th>Capabilities in the supply base</th>
<th>Power asymmetry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Modular</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Relational</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Captive</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Hierarchy</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

- **Governance type** refers to different types of governance structures within a GVC.
- **Complexity of transactions** indicates the degree of complexity in the transactions involved.
- **Ability to codify transactions** reflects the ease with which transactions can be standardized and codified.
- **Capabilities in the supply base** denote the breadth and depth of capabilities within the supply network.
- **Power asymmetry** illustrates the degree of power imbalance within the governance structure.
GVC dynamics-1950-late 1960s

- Financial, technological know how-USA
- Rupee depreciation-1966
- Letter of credit-Assured supply
- Meager state assistance
- No of exporters rapidly increased
- Patron-Client relationship
GVC governance type-1950-late 1960s

- Inadequate supplier capability
- Complex product specifications
- Dominance of lead firm intervention
- Dependence in transactions
- Vertical integration-Upstream end
- Captive form of governance
## Number of exporters and market share, 1950-70

<table>
<thead>
<tr>
<th>Year</th>
<th>No of exporters</th>
<th>USA</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>4</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>1962</td>
<td>8</td>
<td>92</td>
<td>3</td>
</tr>
<tr>
<td>1966</td>
<td>27</td>
<td>78</td>
<td>14</td>
</tr>
<tr>
<td>1970</td>
<td>53</td>
<td>47</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: MPEDA statistics various issues
GVC dynamics-1970s to 1990s

- Increase in supplier capability
- Diversified export markets
- Consignment system to Outright sale system
- Liberal credit market
- Scarcity of raw material-Competition
GVC dynamics-new players

- Top 10 exporters-55% share (1985)
- Emergence of large business establishments
- Entry of MNCs & small scale processors
- Strong barrier to entry-Political clout
- Disintegrated production and division of labor
- Governance type shifted to modular
Food safety regime-Downstream end

• Food scandals in EU-BSE, Salmonella threat
• WTA-SPS measures
• Response-HACCP, labeling, stringency
• National agency-EU importers
• Private standards- BRC COP, EurepGAP
• Product/price discrimination
• Large retailers-power-consolidation
• 15 retailers- 80% of the fresh produce in EU
Impact-upstream end of the chain

• Consignment rejections
• Institutional support- positive
• Compliance, upgradation- market access
• Integrated pre-processing sector
• Average compliance cost- USD 0.40 million
• Exit route for many
• Proactive early movers- successful
• Consolidation and concentration
# Price spread in the chain

<table>
<thead>
<tr>
<th>Value chain node</th>
<th>Activity</th>
<th>Price (INR/kg)</th>
<th>Proportion of retail price (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landing site</td>
<td>Price paid to the fisherman/boat owner</td>
<td>140.50</td>
<td>23.35</td>
</tr>
<tr>
<td>Auction agent</td>
<td>Price paid to the peeling shed owner/commission agent</td>
<td>146.50</td>
<td>24.35</td>
</tr>
<tr>
<td>Pre-processing hub</td>
<td>Price paid by the exporter/agent</td>
<td>156.00</td>
<td>25.93</td>
</tr>
<tr>
<td>Exporter</td>
<td>Exporters margin</td>
<td>25.90</td>
<td>4.30</td>
</tr>
<tr>
<td>Importer/Agent</td>
<td>Price paid to the exporter</td>
<td>228.40</td>
<td>37.96</td>
</tr>
<tr>
<td></td>
<td>Importer’s margin</td>
<td>38.60</td>
<td>6.41</td>
</tr>
<tr>
<td>Re-processor</td>
<td>Price paid to the import agent</td>
<td>289.40</td>
<td>48.10</td>
</tr>
<tr>
<td></td>
<td>Re-processor’s margin</td>
<td>70.10</td>
<td>11.65</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>Price paid to the re-processor</td>
<td>391.60</td>
<td>65.08</td>
</tr>
<tr>
<td></td>
<td>Supermarket’s margin</td>
<td>150.00</td>
<td>24.93</td>
</tr>
<tr>
<td>Consumer</td>
<td>Price paid at retail outlet</td>
<td>601.70</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Field survey

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Governance structure- Power relations

- Product and process standards
- Higher cost of monitoring
- Buyer switch over to competent supplier
- Marginalization of small players
## Change in concentration of export firms

<table>
<thead>
<tr>
<th>Year</th>
<th>Total no of firms</th>
<th>Industry (USD million)</th>
<th>Average turnover/firm (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>216</td>
<td>215</td>
<td>1.00</td>
</tr>
<tr>
<td>2003-04</td>
<td>178</td>
<td>243</td>
<td>1.37</td>
</tr>
<tr>
<td>2004-05</td>
<td>161</td>
<td>257</td>
<td>1.60</td>
</tr>
<tr>
<td>2005-06</td>
<td>146</td>
<td>285</td>
<td>1.95</td>
</tr>
<tr>
<td>2006-07</td>
<td>140</td>
<td>339</td>
<td>2.42</td>
</tr>
<tr>
<td>2007-08</td>
<td>138</td>
<td>360</td>
<td>2.61</td>
</tr>
<tr>
<td>2008-09</td>
<td>132</td>
<td>396</td>
<td>3.00</td>
</tr>
</tbody>
</table>
Externalities: upstream end

- Non SPS measures
- Social and environmental standards
- Multiple co-ordination at upstream end
- Varying from relational to vertical integration
- Governance type- buyer driven/directed network
Summary

• Evolution of governance structure
• Nascent stage-Captivated chain
• Developing stage-Modular governance
• Food safety regime-Buyer driven
• Multiple coordination
• Multi level impact
• Restructured value chain
Conclusions & policy options

• Demonstrates possible sectoral impacts of international policy changes
• Closure of pre-processing hubs: Socio-economic issue
• Proactive upgrading of national system for testing, certification and laboratory accreditation in tune with the international trade regulatory safety parameters.
• it is important to focus on proactive capacity building activities in the entire seafood value chain of the country.
Thank You Very Much