Value Chain Best Practices:
Building Knowledge for Value Chains that Contribute to the Health of Source Communities

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This report is part of the Wealth Creation in Rural America initiative, funded by the Ford Foundation. The aim of the initiative is to help low-wealth rural areas overcome their isolation and integrate into regional economies in ways that increase their ownership and influence over various kinds of wealth. The initiative has produced nine previous papers, which can be found at http://www.yellowwood.org/wealthcreation.aspx. The goal of this report is to advance the initiative’s broad aim of creating a comprehensive framework of community ownership and wealth control models that enhance the social, ecological, and economic well-being of rural areas.

Author Organizations

The Sustainable Food Lab is a consortium of business, non-profit and public organizations working together to accelerate the shift of sustainable food from a niche to mainstream in order to ensure a healthy future for the planet and its people.

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Figure 1. The French bean supply chain in Guatemala
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The Value Chain Framework

The purpose of this report is to contribute to the development of a tool box of best practices for using value chain strategies to impact rural livelihoods in the United States, taking advantage of research, analysis, and experience in value chains both domestically and internationally.

The concept “value chain” has evolved from supply chain management and encompasses not only the transactional relationships along a typical business chain but also the larger web of stakeholder relationships and “external” social and environmental impacts of any supply chain. For agriculture and other natural resource ventures, these value chains involve primary producers, intermediaries that aggregate production (usually either cooperatives or local enterprises), and one or more businesses downstream in the chain (processor, distributor, food service or retail.)

All supply chains get goods from one place to another, but many create unintended consequences for people or nature because of financial pressures that select for short term profit at the expense of long term resilience. There are other kinds of supply chains which we differentiate by calling Healthy Value Chains which provide social and economic benefit to all players in the chain while providing greater protection for ecosystems and natural resources. It is these value chains which are the subject of this report—how to improve existing chains to make them healthier, how to create new ones, and how to measure success.

Research Scan of Value Chain Interventions

The staff of the Sustainable Food Lab facilitates value chain interventions itself and it also collaborates with researchers at several other institutions to build a body of knowledge about best practices, capacities, and impact assessment of value chain interventions. The two key collaborative efforts are:

- A “Healthy Value Chain Network” chaired by Peter Senge that includes leaders of the Market Transformation division of WWF as well as researchers from the MIT Sloan School of Business. This network has generated case studies, a compilation of tools and practices, and the design of capacity building initiatives for value chain practitioners.

- A Ford Foundation sponsored global consortium of organizations, led by CATIE
of Costa Rica, to develop tools for assessing the impact of value chain approaches on poverty and the environment.

Both of these initiatives are informing and deepening the research that Sustainable Food Lab staff and consultants are doing into value chain interventions in the United States. This research began with a scan of U.S. value chains and the criteria used to choose cases by the Healthy Value Chain Network and the CATIE-led Ford consortium. From those criteria and the experiences of the Sustainable Food Lab members we chose, the following factors relevant to triple bottom line impacts of value chain interventions.

- Scalable
- Environmental benefit
- Financial/Risk innovations
- Human capital development
- Traceable to producer income
- Significant involvement of multi-stakeholders in chain development
- Distinctive NGO or intermediary role
- Significant/unique worker or producer involvement in business model
- Detail sufficient to assess success
- Geographic Span

The matrices in the appendices of this report illustrate these and other factors used in identifying the 10 cases to be researched for Ford. Beyond the criteria listed, these cases were selected to provide a range of product diversity, entry points and engagement with different scales of businesses:

1. Appalachian Harvest support for regional organic farmers
2. Look’s Gourmet in Maine
3. Carrot supply for NYC schools
4. Chipotle sourcing of natural pork
5. CH Robinson brokering Mississippi produce for retail chains
6. FIELD work on the west coast to improve worker standing
7. Forestry & Carbon Credits by MACED
8. Louisville Metro initiative to improve regional food supply
9. Red Tomato facilitation of regional food in the Northeast
10. Swanton Berries with worker equity strategy in California
11. DelCabo Farms in California and Baja

The initial skeletal case studies have already yielded insights included in this assessment, and more in-depth cases are now being researched for the Mississippi produce chains, the NYC carrot project, and time permitting, Appalachian Harvest. For brief illustrations of the cases please see the document “Overview of Interventions,” Appendix Four.

This project and report bring to bear not only literature in the field but also the work of
colleagues at IIED, CATIE, and CIAT, as well as decades of direct experience in sustainable agriculture and rural development.

**Key Questions for Case Study Research**

In addition to considering criteria for case research, it is essential to assess the degree to which an intervention, or strategic combination of interventions, create a sustainable framework for ongoing progress and increasing scale of impact. Consideration of the following questions is key to assessing and integrating the lessons from the cases above.

- Under what conditions do dealing with big corporations in mainstream supply chains contribute to farmer well being over time? (e.g. Mississippi project with CH Robinson, Wal-Mart and African American farmers)

- Under what conditions do NGO/donor-organized supply chains contribute to lots of farmers doing better, and what keeps them marginal, fragile and dependent on philanthropy? (e.g. Appalachian Harvest, Red Tomato)

- If there was a key person/group playing a specialized intermediary role to connect players in the chain, in what ways was this role important? What were the qualities and skills needed? What was the entry point, the length of time needed, and who paid the cost? (e.g. NY Carrot story)

- What was the form (cooperative, private firm) by which farm products were aggregated for sale to a buyer? What was the nature of the contracts, if any? What was learned about what works or doesn’t work and why?

- In what ways were a marketing and/or CSR advantage achieved? (e.g. use of story for PR, enhancing the brand, selling “local” or geographically distinct products, reducing food miles or environmental footprint, selling environmental services, selling investment in minority communities).

**Basic assumptions that underlie the strategy**

The raw materials for consumption by the US public come from geographies and communities which frequently do not benefit socially, economically or environmentally from that very production capacity. At the same time, at the other end of the supply chain, the business sector is increasingly aware of the need for thriving producer and harvester communities and an environmentally healthy resource base if they are to secure long-term reliable supply of the products which they buy and sell. Businesses are increasingly held responsible for the environmental and social impacts of their supply chains.

While both business and producer communities increasingly see benefits from considering TBL impacts, value chain strategies need to overcome the fragmented knowledge and
decision-making that impede co-design of improvements.

Specific assumptions that underlie value chain strategies are the following:

1. Because current business models tend to disadvantage smaller scale producers and often result in “externalized” social and environmental impacts, new business models need to internalize goals for triple bottom line impacts into decision-making all along the chain.

2. Much rural development work with primary producers focuses on supply first and demand later. Experience with rural livelihood development projects has proven that involving the demand side is crucial to making sure that what is produced is of sufficient quality and quantity to attract buyers and therefore add value for farmers and their communities over the long term.

3. Corporate buyers can be responsible partners if they are engaged with an understanding of where their market interests overlap with public interests.

**The goals of the strategy**

Value chain work aims to improve rural economic, environmental and social well being by engaging directly in the production and commercial transactions that form the life blood of the productive economy of a place. Interventions may be initiated by transactional participants in the chain (farmers, for example, or retail businesses seeking more local products), or interventions may be initiated by stakeholders external to the market transactions (an NGO, for example, that seeks to improve social or environmental impacts). Concrete goals include:

1. To achieve social and environmental goals as well as economic ones by engaging multiple stakeholders, including the end buyers, in the *co-design* of market agreements;

2. To *develop sufficiently deep relationships* among the key players so that the contracts or agreements can be adjusted as market conditions change without the weakest players sacrificing their interests;

3. To *institutionalize* what is learned and achieved into the core mission and strategies of participating organizations. As pilots are tested and show ways of adding value to each organization, more senior people in each organization adopt the inclusion of social, environmental, or financial equity goals in their core organizational strategies.

Beyond those overarching goals, healthy value chains are those which accomplish the following four conditions:
• Increase market access for small scale producers;

• Improve financial sustainability through buying relationships that better balance risk, responsibilities, and benefits among the chain actors;

• Assist in guaranteeing purchaser access to consistent supplies of agricultural products that meet or exceed market standards; and

• Be sufficiently flexible to enable both buyers and sellers to respond to changing markets and social and environmental conditions.

**Indicators and measures**

Value chain work is an emerging field in rural development. The following indicators and understandings of community wealth are similarly emergent. One of the roles of the Sustainable Food Lab over the next few years is to help create alignment among performance metrics being developed by NGOs, businesses, certifying agencies, and associations. The following are our best sense, at the moment, of where this is all heading.

**Triple Bottom Line**

**Economic Impact**

At the farm level:
- % Farmers who continue with the business (% of repeat planters)
- Number of new farmers who express interest in joining the scheme
- $ available for reinvestment in enterprise
- Producer/worker annual income over time

At the farmer association level
- Number of members year to year including gender breakdown
- % of fulfillment of contracted production year to year
- Services provided to members (both number and which ones plus % of members who use them)

At the enterprise / trader / exporter level
- Importance of smallholders as suppliers (% of total volume)
- Business growth (volumes and/or total sales)
- Diversity of markets / clients
- Capacity to access fiscal and non-fiscal support from government and international agencies

At the retailer or food service level
- Volumes / total sales
- Willingness to find ways to support key members of the supply chain through direct and indirect means

**Environmental Impact**

**Landscape-level indicators**
- Pollution impacts on marine organisms,
- High conservation value areas in the landscape
- Levels of flow in rivers.

**Farm-level indicators**
- # ha under active conservation management (natural habitat)
- # ha arable land under sustainable practices
- # m3 of water not affected
- # kg of N not wasted
- # kg of chemicals not used
- GHG emission trend
- Percentage of organic matter in the soil

**Social Inclusion**
- Revenues generated from new market access opportunities for smallholders, women, excluded groups
- Specific new leadership roles with intermediary functions through cooperatives or small and medium-sized businesses

**Community Wealth**

A systems understanding helps us understand the feedback loops among these **stocks of capital**. No one stock goes up or down independently of others. Value chain interventions are usually targeted at specific subsets of the “capitals” described below, but few interveners fail to notice the more system wide these feedback loops. Many development projects, for example, are explicitly aimed at poverty alleviation but evolve to address natural capital issues. Environmental NGOs like WWF or Conservation International are driven by missions to conserve biodiversity in particularly threatened regions of the world, but frequently they find that development objectives need to be simultaneously met in order for environmental objectives to be met.

**Intellectual capital** is the stock of knowledge, innovation, and creativity or imagination in a region and among those who influence a region. Specific indicators might include:
- Quantity and quality of shared information (eg about costs and returns at different stages in the chain)
- Shared capacity to imagine and co-design improvements.

**Social capital** is the stock of trust, relationships, and networks among all those who influence the well-being of a place.
• Quality of trust and commitment among stakeholders in a chain.
• First name relationships among transactional players along supply chains that are significant to the well being of the place.
• Confidence with which players at different places in supply chains can call upon one another to solve a problem or create an innovation.

**Individual capital** is the stock of skills and physical and mental healthiness of people who influence the region
• Skills of management, entrepreneurship, working with conflict, negotiation and team building

**Natural capital** is the stock of unimpaired environmental assets including non-renewable extracted resources, renewable resources produced and maintained and environmental services.
• Biodiversity and habitat in landscape
• Quality of water through watershed and at outflow into oceans
• No damage from toxics
• Low carbon footprint from economic activities
• High organic matter content in soil

**Built capital** is the stock of fully functioning constructed infrastructure including buildings and infrastructure available for local wealth creation; roads, rail-lines, processing facilities, aggregating facilities and school and institutional kitchens capable of utilizing fresh produce and products.
• % of built capital resources owned or managed by producers or source communities
• Brands owned, managed or developed by source communities

**Financial capital** is the stock of unencumbered monetary assets invested in other forms of capital or financial instruments, including money available for household living, investment, and savings.
• Household savings available for reinvestment in the enterprise
• Association reserves available for reinvestment in aggregation, post-harvest handling, marketing, etc.
• Access to capital by households and enterprises
• Access to capital by associations or aggregators
• Access to capital by small and medium-sized enterprises
Best Practices in Healthy Value Chains

Healthy Value Chains consist of a set of good practices to be implemented by farmers and business through the chain that will pro-actively facilitate more equitable and accessible procurement rules, formal standards, commitments and information systems. When the practices are built into value chains they create long term TBL improvements throughout the chain. Equity and accessibility are core aspects of wealth creation for producer communities.

A business model approach allows an analysis of the overall set of practices and processes by which improvements can be made to the inclusiveness, fairness, durability, and financial sustainability of trading relationships between small farmers and local businesses on the one hand, and downstream agribusiness – processors, wholesalers, retailers – on the other. Inclusiveness, fairness, durability, and financial sustainability of trading relationships translate directly into increased viability in producer communities.

When an enterprise explicitly reorients its business model to be a partner in development, it may adjust its role in one or several aspects of a value chain, so that the whole chain is more efficient and competitive and creates additional value which can be captured by smallholders and local businesses, and provides the right incentives for all parties to continue to invest in the future of the value chain.

In terms of buying practices, the objectives of these healthy value chains are to better balance risk, responsibilities, and benefits along a supply while improving the robustness of the chain, quality of production, and security of long term supply.

Recent research from Tradecraft suggests the most important ingredients are trust between stakeholders and commitment to improving conditions. They identify five starting points: improve forecasting and planning, use contracts and follow fair procedures, sharing information and support two way communication, be loyal to good suppliers, and implement standards fairly.1

Larry Jacobs, of Del Cabo2, says that he focuses primarily on “fairness, for which the short definition is transparency and a willingness and mandate to solve problems together across the chain.”

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1 A Fresh Perspective Consultation: sourcing vegetables from developing countries, Traidcraft, 2007.
2 Del Cabo refers to a partnership between Jacobs Farm Inc. of Pescadero, California, and the Del Cabo cooperatives, Productores del Cabo and Agroproductos del Cabo. It is a collaboration that may be a model for how to sustain small farms by using private enterprise and the economic power of American consumers.
Key aspects (some would call these ‘practices’) of healthy value chains which look most promising include:

- **Double specialized intermediaries**: entities set up to address gaps in the chain with a business and development orientation. These actors cultivate the match between farmers and buyers and often provide unique and essential services both up and down the chain.

- **Contracts** to increase knowledge and stability of prices. Contracts can be used as leverage for credit, reduce risk of price changes, distribute risk, specify minimum volumes, and set delivery dates to meet producer needs.

- **Minimum price arrangements** to provide predictability of pricing and ensure coverage of the variable costs of production for producers; premiums for established practices (sourcing from small scale producers, environmentally sustainable practices, quality of production, etc); and rapid payments on delivery terms (farmers often have low cash flow coverage).

- **Preferential sourcing arrangements** based on criteria (quality, scale, environmental practices, certification, etc).

- **Information and knowledge management** (mechanisms that support regular two-way communication and innovation) so that all parties have access to market trends, producer cost structures, producer risk profiles, options for managing risk, and the pricing structure along the chain.

- **New organization models**, balancing commitment with community development, including the facilitation of effective production associations and investing in their long term business management capacity.

- **Equity arrangements** including shared ownership business structures and price sharing arrangements.

- **Fair implementation of standards** to ensure that the cost of certification doesn’t unfairly reduce access for smallholders and that producers participate in the development and implementation of standards.

- **Consumer branding** to cultivate loyalty to the TBL outcomes of the business model.

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3 Referred to as “Enhanced Predictability and transparency for producers through contracts” in IISD paper on trading practices

4 Clearest example is from FLO – fair trade labeling organization

5 Trading Practices for a Sustainable Coffee Sector, page 33

6 From Fair Trade and CSR in Pepper Farming: “we demand that farmers organize in order to channel financial assistance, technology and technical assistance, and communication”

7 Trading Practices for a Sustainable Coffee Sector, page 28
Practices to avoid in a value chain:

- Threats of “delisting” approved suppliers if prices are too high
- Suppliers required paying for promotions or openings.
- Suppliers have to pay back a percentage of annual sales
- Minus margins (can’t supply at a higher price than to competitors)
- Delayed payment for produce already delivered
- Lowering prices at the last minute to suppliers who have few alternative outlets
- Last minute changing of quantities
- Changing standards with no support or time to change the production system
- Arbitrary removal of farmers from the supplier lists
- Using contacts that cannot be enforced by the suppliers
- Institutionalization of results: how can the learning from a value chain project ripple out from the specific chain to impact the core strategies of a large company and ultimately the whole industry?
- Are there public policies that get in the way of the chain, or if changed may help it grow?

Toolkit of Innovations to Create Healthy Value Chains

The Healthy Value Chain Toolkit captures most of the practices that have been distilled thus far, from the international and US value chains we have studied and is available upon request. Reflecting the constantly changing field of innovation in value chains, the toolkit is evolving directly from the pilot projects and experiences of NGOs and businesses innovating in this field. Our plan is to create a richly linked website for practitioners and organizations that do capacity building.

The toolkit is organized around process and structural innovations. The process interventions briefly describe different methods which have been tested in value chain projects to accomplish the goals of co-designing, building relationships and institutionalizing the improvement and learning. Although each process can be successfully implemented independently of the others, there are exponential gains in integrating many of the processes into any value chain strategy.

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8 “Who reaps in the Fruit”, 2006 report page 61
Structural innovations are divided into three types. The first are value chain structure innovations, for example the nature of contracts or mechanisms for information sharing between links in the chain. Generally these are most relevant to the producer communities, although they encompass all parts of the chain. The second are organizational structures for the relationships in the chain, for example the specialized intermediary model or the embedded sustainability manager. These innovations tend to be focused on structures in the middle of a chain. The third category is market structure innovations like harmonization of standards and shared ownership models.

An overview of the Healthy Value Chain tool kit is included as an appendix to this report, with process innovations and a few illustrative examples of the structural innovations. The entire tool kit includes case studies and examples of each innovation. We include here summary documents most relevant to domestic value chains.

**Process Innovations:**

a. *Create conditions for partnerships*—methods to nurture an incubation space

b. *Strategize* – identifying opportunities for action appropriate for the organization and for the market & sustainability context.

c. *See the System* --- Tools and methods for uncovering current reality in the system, in ways that both build understanding and ownership over the situation and help identify opportunities for change.

   i. Third Party NGO analysis of Value Chain
ii. Participatory Indicator Development
iii. Systems Thinking

d. **Build partnerships**—along the value chain or with civil society organizations, enabling depth of understanding the system and seeing possibilities

e. **Dialogue, Participatory Engagement, and Decision Making** – ways to more deeply engage with partners to build ownership and set the foundation for decision making

f. **Select indicators, monitor, collect feedback**
   i. Local Interpretation workshop

g. **Design to Institutionalize** – ways to move from single projects to organization change, scale-up
   i. Local Bilateral Engagement
   ii. Modular Implementation and Verification (MIV) Toolkit

**Structural Innovations**
Changes in infrastructure that enable healthy value chains:

a. **Value Chain structure**
   i. Contracts to increase knowledge and stability of prices
   ii. Minimum price arrangements to provide predictability of pricing; premiums for established practices (sourcing from small scale producers, environmentally sustainable practices, quality of production, etc); and rapid payments on delivery terms
   iii. Preferential sourcing arrangements based on criteria (quality, scale, environmental practices, certification, etc).
   iv. Information and knowledge management mechanisms that support regular two-way communication and innovation.
   v. Risk Sharing Fund

b. **Organizational Structure**
   i. Sustainability Manager embedded in buyer group
   ii. Specialized intermediaries to aggregate production and ensure traceability and quality
   iii. Alignment of incentives within organizations so that the goals of the value chain are symbiotic with the goals of the engaged organizations
   iv. Working with clusters/associations of smaller scale producers, including the facilitation of effective production associations and investing in their long term business management capacity.

c. **Market Structure**
   i. Harmonize standards and certification schemes
ii. Fair implementation of standards to ensure that the cost of certification
doesn’t unfairly reduce access for smallholders and that producers
participate in the development and implementation of standards.

iii. Equity arrangements including shared ownership business structures and
price sharing arrangements

iv. Make contributions visible through chain
Appendix One: Matrix of selection criteria
<table>
<thead>
<tr>
<th>FORD VALUE CHAINS NETWORK - CASE MATRIX</th>
<th>Criteria for selection</th>
<th>SETUP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appalachian Harvest</strong></td>
<td>skeleton done</td>
<td>Status</td>
</tr>
<tr>
<td></td>
<td>skeleton done</td>
<td>per acre, questions on total farm income</td>
</tr>
<tr>
<td><strong>Red Tomato</strong></td>
<td>skeleton done</td>
<td>possible</td>
</tr>
<tr>
<td><strong>Chipotle</strong></td>
<td>skeleton done</td>
<td>unknown, insufficient supply at this time, possible producer income benefit</td>
</tr>
<tr>
<td><strong>Niche Pork</strong></td>
<td>skeleton done, combine with Chipotle</td>
<td>premium price, but scale too small to be sustainably farmed</td>
</tr>
<tr>
<td><strong>L'ville Metro</strong></td>
<td>skeleton done</td>
<td>yes, but may not be significant</td>
</tr>
<tr>
<td><strong>Swanton Berries</strong></td>
<td>skeleton done</td>
<td>worker equity increased, wages unclear</td>
</tr>
<tr>
<td>NYC Schools local/Carrot story</td>
<td>skeleton done, combine with Carrots</td>
<td>yes, not sure there's an increase</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>CHRobinson/Federati on/</td>
<td>skeleton done</td>
<td>yes</td>
</tr>
<tr>
<td>MACED Forestry Carbon</td>
<td>skeleton done</td>
<td>yes</td>
</tr>
<tr>
<td>Del Cabo</td>
<td>skeleton done</td>
<td>YES with data, also other indicators of social wealth</td>
</tr>
<tr>
<td>Look's Gourmet Seafood</td>
<td>skeleton done</td>
<td>yes</td>
</tr>
<tr>
<td>FIELD worker</td>
<td>skeleton done</td>
<td>YES with data, also other indicators of social wealth</td>
</tr>
</tbody>
</table>

Value chain strategy assessment
## Appendix Two: Matrix of Case study Innovations and Tools

<table>
<thead>
<tr>
<th>FORD VALUE CHAINS NETWORK - CASE MATRIX</th>
<th>TOOLS AND PROCESSES</th>
<th>INNOVATIONS</th>
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<tbody>
<tr>
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<tr>
<td>Appalachian Harvest</td>
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<tr>
<td>Trust building</td>
<td>Developing local, organic reliable supply, aggregation</td>
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<td>Framing w/r/t org DNA</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>Tools to see the system</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>Adapting to local contexts</td>
<td>Tobacco farmer culture shift to organic production</td>
<td></td>
</tr>
<tr>
<td>Power shifting methods</td>
<td>Highlight existing market demand for organic</td>
<td></td>
</tr>
<tr>
<td>Institutionalizing</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>Brand extension / reframing</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>New products and markets</td>
<td>Certified organic, local produce</td>
<td></td>
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<tr>
<td>Information flow changes</td>
<td>organic veggies new for these farmers</td>
<td></td>
</tr>
<tr>
<td>Financial/Risk innovations</td>
<td>skill building for farmers, changes in grocery procurement?</td>
<td>shorter supply chains for produce?</td>
</tr>
<tr>
<td>Human capital development</td>
<td>Don't know</td>
<td>shorter supply chains?</td>
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<tr>
<td>Energy systems</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Red Tomato</td>
<td></td>
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<tr>
<td>measures this through surveys, took 10 years w/ farmers</td>
<td>possibly unknown yes yes unknown Red Tomato brand, Eco-apple certification changed mission from distribution to marketing yes there's a story here changed structure to address risks</td>
<td></td>
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<tr>
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<td>Tobacco farmer culture shift to organic production</td>
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<td>Don't know</td>
<td>shorter supply chains?</td>
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<td>Food with integrity, organic, local</td>
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<td>changed mission from distribution to marketing</td>
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<td>Red Tomato brand, Eco-apple certification</td>
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<td>shorter supply chains?</td>
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<td></td>
<td>Chipotle</td>
<td></td>
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<tr>
<td></td>
<td>need to find out yes  unknown yes unknown yes</td>
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<td>Don't know</td>
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<td>shorter supply chains?</td>
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<td>recruit new producers, expand niche production, reliable supply, market waste products</td>
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<td>Some use of exiting buildings and farm systems, what about slaughter and processing facilitates?</td>
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<td>Niche pork marketing</td>
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<td>less liquid manure generated, fewer antibiotics used on pork</td>
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<td>---------------------------------------------</td>
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<td>yes</td>
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<td>NYC Schools local/ Carrot story</td>
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<td>signs of this in NYC school food procurement</td>
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<td>CHR Robinson/ Federation/</td>
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<td>Del Cabo</td>
<td>ed offered by fellow Latinos</td>
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<tr>
<td>Look’s Gourmet Seafood</td>
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<td>yes</td>
</tr>
<tr>
<td>FIELD worker</td>
<td>consortium of growers, trainers, academia, ngo, worker reps, ed offered by fellow Latinos</td>
<td>worker training and ed benefit employers (growers)</td>
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</table>
## Appendix Three: Case overview with measures

<table>
<thead>
<tr>
<th>CASE</th>
<th>Summary</th>
<th>Measured</th>
</tr>
</thead>
</table>
| Appalachian Harvest | 52 farmers aggregating cert. organic produce selling to 9 major groceries, average $10K/farmer/yr.  more demand than supply.  Premium price for organic produce  
outcomes: shorter chain, +enviro practices, +local jobs                                                                                         | • # of farmers  
• Farmer income  
• Chemical inputs  
• # of jobs  
• Price for product compared to conventional |
| Red Tomato         | 30 NE farmers, FSC 5 farmer coops, 13 eco-apple farms, changed from distribution to marketing, branding, product development. Co developed eco-ap spec for growers with Univ., growers, new focus on regional IPM fruit rather than organic, still consolidates product.  
Outcomes: grower satisfaction survey, good match with right attitude rather than # farmers, Lower OP, traders as trainers program.                                                                                       | • Grower satisfaction  
• Chemical inputs  
• # farmers trained |
| Chipotle           | Connected to Niman’s, buying local produce  
Paying farm workers more – Immokalee tomato  
See Niche Pork below  
Outcomes:  +env. Recycling, no antibiotics, pasture fed meat,                                                                                                                                                  | • Hormone use levels  
• Recycling levels  
• # of producers  
• # lbs pasture fed meats – compared to conventional |
| Niche Pork         | 74 farms in 7 states by 2006. mission to foster successful niche pork value chains that are profitable to all participants, incorporate farmer ownership/control, and contribute to environmental stewardship and rural vitality  
Outcomes: lower antibiotic use, increased incomes, increased learning about organic meat production, marketing, use of waste products, relationship built btwn producer + buyer + major chain                                                                 | • Price per pound  
• # farmers  
• #lbs pork sold  
• Change in production practices  
• # chemicals/hormones  
• Acres pasture brought into program |
| FIELD worker       | Worker focused approach, SOAR = employers, academia, laborers, ngos together, premiums in retail/distributor pass to grower and laborer. Cases of CA bare root roses/wine grapes + Farmworker union.  
Farm worker survey and employer survey available.                                                                                                                                                             | • Farmworker income  
• Medical benefits  
• Injury claims  
• Quality improvements in product  
• Product yields |
| NYC Schools local  | NYC School demand - 860,000 meals/day -for carrot snack packs drove shift for                                                                                                                                 | • $ for local food/yr |
| Carrots | Carrot production, packing and shipping from NYS, from the traditional CALIF supply. Increased production of “willing/visionary” farmers, created more packing business for local packing company. | • # new local suppliers to NYC schools  
• $5 farm/food producer revenue due to these sales  
• consumption of fresh fruits and vegetables |
| Swanton Berries | Worker equity in business model  
Enabling federal policy  
Organic berry production | • 3% profit on stwbs  
• Worker equity in business |
| Federation of Southern Coops/CHRobinson/USFOOD | 341 acres of Mississippi Watermelons sold in advance by 19 small growers (18 acres on average) throughout Mississippi. Demand driven, Farmers willing to produce what is wanted. A collaboration of supporting roles: the buyers, Extension Service people, and local entrepreneurs. Connecting links in value chain to create seamless supply/demand for high quality regional or local products that are currently being underutilized. | • Food Miles  
• food quality (freshness and shelf life)  
• comparative damage and waste (long transit)  
• Supporting local economies, new jobs  
• support of small farms  
• # agricultural inputs.  
• water management:  
• locally grown product availability  
• ‘Balance’ transportation flows that add costs to the supply chain. |
| Forest carbon trading MACED | Incentivize sustainable forestry practice thru sale of enviro services i.e. carbon credits, 62 landowners representing nearly 31,000 acres applied | • # acres certified  
• $ income to landowner  
• # tons Carbon sequestered  
• # acres inventoried  
• $/acre to reach enrollment status  
• # tons carbon/acre/yr |
| Look’s Gourmet Foods: Seafood chain | Cannery sourcing throughout Maine fisheries/lobstermen, 3 brands MSC cert., CEI collaborator | • # species farmed  
• Escape prevention technology  
• Feed use  
• Chemical use  
• Wastewater regulation compliance  
• Amount aquatic habitat preserved  
• Mgmt of fisheries  
• Efficient use of wastes/bycatch |

Outcomes: support the region’s farm & food economy through increased local procurement  
Outcomes: premium price with profits passing to workers, management skill development for workers, branding of product related to social equity, organic berry production model, changing Whole Foods product story  
Outcomes: replicated and scaled in locally grown produce: Arkansas, Mississippi, Alabama, Minnesota, and NY, targeted support for small farmers through market,  
Outcomes: Early to tell, will have income data  
Includes 3rd party certification impact on practices and income levels  
Outcomes: Value added product line: Maine local, MSC certification, fisheries management education provided, funds education lab for sustainable fishing mangmt.
Appendix Four: Overview of Interventions

Case skeleton illustrations for Assignment #2

**Appalachian Harvest**
Initial Ford Case Skeleton

```
Producers  -->  Processor/ Aggregator  <--  Retailer  <--  Consumer
```

**Context and case:**

Appalachian Harvest is a network of certified organic family farmers located in southwest Virginia and northeast Tennessee providing produce to ‘area’ supermarkets including Kroger and Whole Foods. AH provides nine major chains. When the tobacco program ended in the late 1990s, the settlement agreement provided transition money for tobacco farmers to convert to other forms of production. Appalachian Harvest grew out of the need for farmers to make the conversion to diversified crops. The managing entity, Appalachian Sustainable Development (ASD) is a not-for-profit organization formed in 1995 focusing on developing healthy, diverse and ecologically sound economic opportunities through training, the development of cooperative networks and marketing systems. They focus on building a strong local food supply for a regionally oriented value chain.

**Key learning(s) for this case:**

1. The original strategy was to develop “jobs with environment”. AH was able to shorten the supply chain, practice sustainable agriculture, and create local jobs.
2. Shifting landscape of supply versus demand – currently, more demand than supply. Need to develop a larger farmer network.
3. The learning curve transitioning from conventional to meeting organic standards is a lengthy process. Appalachian Harvest offers an intense support system and training for new organic farmers.
4. It has been important for growers to see an existing market, whereas in the past, the farmer did not know where to sell organic produce.
5. Red Tomato and AH are ‘hybrid’ organizations – profit from produce but also are eligible for grants and donations (ie. to cover the training and education programs).

**Measures:**

- Number of new farmers to network
- 30 new jobs created
- Enrolled or trained 100 farms directly/indirectly
- $500,000 gross sales 2007
- Annual Farmer income over time
- Chemical inputs
- Price for organic product compared to conventional

**Wealth Creation:**

Social:

- Network of organic family farms in southwest Virginia and northeast Tennessee.
• Early ‘buy-in’ partnership with senior leadership of Ukrop and K-VA-T organizations.

Intellectual:
• Farmers learning to shift from conventional to organic growing.

Individual Capital:
• Creating new “jobs with environment”.

Natural:
• Reduction in pesticides, fungicides with conversion to organic practices

Built:
• New infrastructure for aggregation.

Financial:
• Premiums to growers for Organic production
• Organic tomatoes highly ‘value-added’ w/ more of premium going to farmer
• Creating access to a new market for farmers to sell products.
Swanton Berry Farms
Initial Ford Case Skeleton

Context and Case:
Swanton Farms, a large organic fruit and vegetable grower and aggregator working with unionized labor began implementing a unique Employee Stock Ownership Plan in 2005. The contracts with a Whole Foods supplier have allowed Swanton owners to award stock bonuses to a core group of key employees based on their individual contribution as well as on their group's success in meeting performance goals. Over time, this group is expected to own a substantial part of the business. The business pays for worker health insurance, pension, and other benefits, as well as providing low-cost housing. Swantons markets strawberries, ollaliberies, artichokes, broccoli, and cauliflower from Coastways Ranch, Wilder Ranch, Davenport Field, Laguna Ranch and Swanton Farms in retail supermarkets and 7 regional farmers' markets. The CEO is a member of a growers Business and Entrepreneurship Group where the success of this model is being closely watched.

Lessons and challenges:
Niche business markets can support business plan for worker benefits and training
Marketing fair and equitable worker standards can be successful strategy
Interviews in September at the Food Lab Meeting include a visit to this operation and will illuminate challenges and further lessons.

Measures:
- Increased Farm worker longevity in community
- Increased Farm worker health, education and management skill
- Increased Farm worker equity in business
- Increased acreage under organic certification with environmental benefits
- # of workers
- Worker annual income compared to average in region/sector
- Worker retention compared to norm for sector
- Water usage on these acres: organic compared to conventional
- Chemical use (chemicals not used)

Wealth Creation:
Social:
- Multi-sector involvement in developing equity sharing model
- Worker ownership model feeds diversified local community

Intellectual:
- Farm workers learning management and ownership skills
- Business community exposed to new model of worker benefits
- Organic production methods for berries key asset shared

Individual Capital:
- Creating farmworker ownership/equity in business

Natural:
• Reduction in pesticides, fungicides with organic practices

Financial:
• Premiums to workers and growers for organic production
• Creating access to a new market for organic berries with a CSR story.
**Context and Case:**

Red Tomato is an intermediary; connecting farmers and consumers through marketing, trade, and education, to create a value chain consisting of family-farm, locally-based, ecological fair-trade food. Red Tomato was doing its own distribution (quality control and overnight warehousing facility consolidating 100 different SKUs) but recently changed its focus to partner with private truckers. When the intermediary changed from distribution to marketing and education it did so to emphasize value-added products that engage customers’ interest, ie product development and branding. The history illustrates the challenges and outcomes of creating consistent and quality supply through ‘consolidation’ using Red Tomato branding, ie Eco Apples, into mainstream supermarkets.

The *Eco Apples* brand began in 2005 with six farms (650 acres) and developed its own *Eco Apple* certification. Early on the product reached 200 New England supermarkets, including Trader Joe’s, Stop and Shop, Whole Foods, as well as the independent grocers of Associated Grocers of New England. The intermediary manages the premium price paid to producers, which varies according to each company’s own definition of value.

Red Tomato is working on differentiating product, increasingly through packaging. The communication of the farm story or farm identity is important. The challenge for them is to figure out how to maintain the farm identity connected to final product.

**Intermediaries**

The primary relationship in this chain is between Red Tomato and the farmers, (and Red Tomato and the supermarkets) and involves building trust over many years (10) to cultivate grower relationships – this was key for consistency. Red Tomato hired the IPM Institute of North America to write the “Eco Apple Protocol and Grower Self-Assessment”. To kick off Eco Apples and the certification management, Red Tomato included apple growers, scientists from U.Mass and Cornell University and an IPM scout to serve on the board.

**Measures:**

- Quality of relationships. Did not want to use ‘increase number of farmers in network’ as a metric because that is a ‘non-profit’ approach, but rather use the quality of farmer relationships such as ‘are growers happy with this product’ through a Grower Satisfaction Survey.
- Lowering usage of OPs (Organic Phosphates)
- New accounts taken and growth in sales of Eco-Apples
- Lots more… the spec for certification as well as indicators for success which includes the qualitative nature of success

**Wealth Creation:**

Social:
• Long term cultivation of relationships (10 years) with farmers
• Multisectoral involvement in IPM standard development
• Build relationships with restaurant industry

Intellectual:
• Learning from shift to strategy from distribution to marketing and
• Red Tomato has become a resource for similar initiatives nationwide
• Learning how to ‘differentiate’ its products.

Natural:
• Reduced pesticide use
• Reduced food miles and GHG emissions due to regionalization of supply

Financial:
• ‘Branding’ of commodities into value-added goods for a premium price.
CH Robinson World Wide, US Food Service, Wal-Mart, Cooperative Extension, Farmer coops
Ford initial case skeleton
Key informants: staff of the Mississippi Association of Cooperatives and local farmers, as well as the Produce Director of CHRW

The context, the players and their motivations

CHRW, a major distributor with 8,000 employees, is currently working with small growers to help bring back traditional or historical crops and match their production with retail customers and consumer demand for locally grown produce. The CHRW focus areas to date include Arkansas, Mississippi, Alabama, Minnesota, and NY.

The two drivers of this corporate commitment were, according to JD Grubb, Director of Produce, the Sustainable Food Lab and Wal-Mart. Sustainable Food Lab meetings and a “Call to Action” provided the initial framing for CHRW to include sustainability in their own corporate strategy, and Wal-Mart provided the market.

For this case study, we will focus on emerging markets for small farm growers in Mississippi, and because some of those same growers have been marketing to US Foodservice, another Sustainable Food Lab corporate member, we will explore that relationship also as we interview the key players. Among those key players important roles are played by Auburn Cooperative Extension and a local entrepreneur who supplies labor and advice.

From the farmer perspective, the motivation for these relationships was simple: to expand sales and generate sufficient revenues to stay in farming. Some of the watermelon growers have commented that they will make more money per acre than they have ever made before.

For CHRW the “heritage agriculture project” has allowed them to connect their values (“support farmers and local economies”) with a business imperative to be ahead of competitors and supply customers.

The key story - What happened and why?

341 acres of Mississippi Watermelons are all sold in advance by 19 small growers (18 acres on average) throughout Mississippi.

Get more info from interviews. Who arranges the contracts? Do the farmers have any negotiating power? When Ben B sells his greens to them this fall, will have any say in the arrangement? One contract has prices pegged at 80% of the cost to bring CA produce of the same type to Jackson, MS. Producers: how, many, where, how much of what is in this chain, environmentally significant aspects, socially significant? If product is aggregated, what's the FORM OF AGGREGATION? Does that seem significant
in this story? Why? This needs more exploration. Do the growers haul their melons somewhere, or does a tractor trailer pull up to the farm?

CHRW has found a market advantage in its relationship with its retail customers, and that specific sales advantage is now translating into a company-wide search for a sustainability position. CHRW has hired a consulting company called PayDirt to "engage the whole company, all the way to the top, with a sustainability message." This "regional sourcing and heritage agriculture project" is a flag ship for sustainability in the company, and it has enabled them to be a lead supplier for their largest customer, Wal-Mart.

The watermelon project began as transactional: buyers looking for sellers, but the relationships also always had a flavor of piloting a new business model of sustainability and social responsibility. JD is very explicit about that, as are the Wal-Mart buyers. The Auburn Cooperative Extension people saw their support as consistent with their mission—to support farmers and rural communities.

Explore the degrees of partnership and degrees of paternalism, both real and perceived. With regard to "seeing" the system differently, find out more through interviews, particularly from the farmer point of view.

JD started out with a focus mainly on pleasing a customer and reducing food miles, but his enthusiasm bubbles over when he describes "revitalizing local economies and providing markets for farmers who are able to stay on the farm instead of working in town." He is very proud to have "found a way to put the pieces together."

**Lesson learned in the case - What worked and what did not?**

Demand driven  
Farmers willing to produce what is wanted  
A collaboration of supporting roles: the buyers, Extension Service people, and local entrepreneurs

**Is this scalable or replicable?**

The project is already being replicated by CHRW:

- **Mississippi Corn**: 800 acres of Sweet Corn, and 400 acres of Mirai (exclusive and proprietary triple sweet variety) Sweet Corn, all due to start around June 12th. Great growing area that is closer to consumption to many markets than the other major production areas at this time.

- **Mississippi Greens**: 26 acres of Cooking Greens this year - Collard, Mustard, and Turnip Greens to expand Indianola's (sweet corn area) growing period. Will be utilizing the "Make Mine Mississippi" logo on the Bagged Greens and "Make Mine Mississippi" ties for the bulk greens. Greens will be planted approx. Aug 1st, for a Sep 15th harvest, and will go through mid-November, possibly December.

- **Mississippi Cantaloupes**: We will be trialing 2 different varieties of Western Cantaloupes in Soso, MS. According to Dr Nagel from Mississippi State University, 15-20 years ago, there was a grower near Tunica, MS that grew Western Cantaloupes, but when he died, so did the Western Cantaloupe Deal. It was brought back to life 5 years ago, but quickly died out because of the lack of pre-harvest marketing. Dr. Nagel is working in conjunction with the Seminis seed company (owned by Monsanto) on conducting these trials.

- **Alabama Satsuma Mandarins and Alabama Peaches**: These products are well-known throughout the region and have been grown for close to 100 years but
growers have no access or capability to bring to market and labor is always an issue. May discontinue or scale back growing if markets aren’t developed.

- **Alabama Blueberries**: Anticipating 140,000 lbs, and possibly more depending on yields. These growers were ready to abandon their crop due to inability to bring to market.

- **Louisiana Onions**: We are trialing 1 acre of Yellow Spanish Onions in Delhi, LA with our Red/Yukon Potato Grower. The test is in conjunction with Seminis seed with help from Dr. David Nagel of Mississippi State, and some input from Louisiana State University also.

- **Arkansas Greens**: This year, we increased our main growers’ greens program by 127% in cases, and it has been so successful in Bradley County, that 4 other Grower Families have approached Randy on growing Greens in the fall for this program (with a shorter growing window due to cool weather.

- **Arkansas Cabbage**: Cabbage started in Hermitage last week, with 80 acres planted - double the acreage from 2007.

Learning from the work so far is having an impact on the core business strategy of CHRW and, because of the dominance of Wal-Mart, on other produce distributors. Because CHRW has been designated as a leader among Wal-Mart suppliers for regionally sourced produce, all these competitors are trying to catch up by sourcing more locally themselves.

There are also public policy implications. This case demonstrates the potential for small farmers to sell into mainstream markets, and we will discover some of the key steps that were taken that made it work, and maybe some of the key steps that might help make it even better.

**TBL outcomes and 6 forms of wealth/capitals**

Data available on producer or source community #s, livelihood impact, a premium price, environmental + social impact data.

Measures used in this case to indicate impact:

- Minimize Food Miles.
- Reduce damage and waste (long transit)
- Introduction of varieties that provide peak flavor, nutrition and customer satisfaction (not shelf life extension)
- Support local economies that provide new jobs and economic activity.
- Enable abundant US food production through support of small farms.
- Reduce the need for harmful agricultural inputs.
- Redistribute demand for water & avoid excessive demand in pressured areas.
- Meet consumer demand - consumers are seeking out locally grown product
- Ease the imbalance between transportation flows that add costs to the supply chain.
**FIELD farm worker projects**
Ford initial case skeleton

**Context and Case:**
Consortium of business, workers, ngos, academia piloting projects in California and Oregon showing worker training and education produced tangible benefit to workers AND their employers (growers.) Documented improvements in product quality, yields, reduction in hourly labor costs as a percentage of total overall enterprise costs, 800% reduction in the number of days of work lost due to injury, increases in worker income, worker medical and retirement benefits.

Farm Workers Institute for Education & Leadership Development (FIELD) developed an economic strategy that involves both the growers and the workforce to improve productivity through a better educated and trained workforce that produces value-added commodities from the rural economic sector in California and Oregon. This **consortium of employers from the dominant economic sector**, agricultural, as well as training-providers, academia, public-sector agencies, and workforce representatives ensures that the economic gains generated from the premiums “pass through” the distributors and retailers and back to the producers - both growers and their workforce. Project is called Strengthen Our Agribusiness Region, or SOAR. Additionally, SOAR has developed a pilot program that aims to improve the quality of employment opportunities to attain economic self-sufficiency.

Strengthen Our Agribusiness Region (SOAR) research began with an effort to understand the region’s agricultural economic issues. In the U.S., the share of profits from the sale of agricultural commodities that goes to the farm has been flat or falling in recent years.

For example, in 1996, Bear Creek Corporation, a bare root rose grower in the southern San Joaquin Valley, formed a unique partnership with the United Farm Workers union. Through this partnership farmworkers working for Bear Creek were provided training in problem solving skills, including analysis, goal setting, action planning, performance measurement, teamwork, interpersonal communications and leadership, as well as basic literacy. By 1998–99, Bear Creek began to see tangible results in its bottom line profits.

In the wine grape and nursery industries of the Willamette Valley, farmworkers are settled members of Oregon communities. They are not migratory workers who leave the state when agriculture’s high labor demand seasons come to an end.

**Measures:**
- Rose quality improved significantly, allowing Bear Creek to sell more of its roses at a higher grade and thus earn greater profits.
- In 1999 Bear Creek’s percentage yield on premium roses had increased by 53.8% from 1996.
- Over the three year period, the number of days of work lost due to injury decreased by 800%, and the average cost of a worker’s compensation claim plummeted from $27,000 to $1,200.
- Hourly labor costs as a percentage of total overall enterprise costs were reduced by 3% every year during the partnership.

Bear Creek’s workers saw significant benefits as well:

*Value chain strategy assessment*
• Average hourly earnings increased by 6% from $7.62 to $8.07.
• Piece rate earnings increased 44% from $11.13 to $16.12.
• The number of paid holidays was doubled.
• Medical plan contributions were increased by 50%, and the retirement plan contribution rate increased by 100%.

**Wealth Creation:**

**Social:**
- Relationship building between growers, workers, worker unions, universities.
- Increases in teamwork and interpersonal communication in worker community
- Doubled paid holidays

**Intellectual:**
- Farmer worker literacy, leadership skills, ability to set and meet goals
- Business/owners learn of tangible profit results from program

**Individual:**
- Creating trained workers with increased ability to market skills
- Lower medical costs, fewer injuries

**Natural:**
- Improved product quality and yield

**Financial:**
- Worker income and medical/retirement benefits increased
- Owner /farmer income increased
- Reduced labor costs to growers
Local food procurement for NYC Department of Education: Carrots
Ford initial case skeleton

Case Context:
SchoolFood Plus Initiative in 2004 with funding from NYS Department of Agriculture. NYC Schools serve approximately 860,000 meals per day.

Carrot Crunchers: NYC School demand for carrot snack packs offered an opportunity for a new look at carrot production (growing), packing and shipping from NYS, alternate to CALIF supply. Increased production of “willing/visionary” farmers, created more packing business for local packing company (now growing to supply into Sysco, et al), and provided a LESS EXPENSIVE product to NYC schools.

All products procured fit within the price/bid specifications issued by the Department every 5 years. No premium is paid per se, however, in the case of fresh products, when there is a shortage of supply overall, they pay above the bid/spec price. Sometimes these purchases are made of local foods.

SchoolFood Plus objectives:
- improve children’s health and academic performance
- support the region’s farm & food economy through increased local procurement

The goal of the project is to “institutionalize” local procurement within the Department of Education’s head office staff. Specialized intermediary worked with the NYC Department of Education, Office of SchoolFood to design, execute and manage a local food procurement strategy.

The three-pronged approach includes:
1. Replacing items SchoolFood currently buys on the open market with locally produced items—including fresh, frozen and minimally processed foods;
2. Identifying local suppliers—farmers, processors and food producers who can develop new products according to SchoolFood nutritional guidelines and other product specifications; and
3. Helping to influence positive changes in city, state and federal policy by leveraging the success of program accomplishments.

“Farm to School” is a significant trend in the US. NYC approaches Farm to School differently by working all sectors along the chain—fresh, frozen and minimally processed foods. Their scale and contract/distribution systems make it impossible to form direct connections between farmers and schools—through procurement (education, marketing are opportunities for direct farm/farmer connections). NYC Dept of Education can not be seen to show preference for suppliers (or distributors, so there are different angles to the CSR advantage. NYC is looked to as leader because of the volume of products they procure and serve; any purchases they make of local foods can provide significant uptakes to producer revenue. NYC School Officials seem unaware—or uninterested—in overt CSR objectives of their local procurement work, though there are CSR outcomes through the purchases.

In 2006 the total potential purchases* of local foods was:
<table>
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<tr>
<th>2006 local potential</th>
<th>Volume (pounds)</th>
<th>Dollars (\textit{\textasciitilde}=10% of total spend)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh</td>
<td>16,866,735</td>
<td>$7,970,036</td>
</tr>
<tr>
<td>Frozen</td>
<td>2,855,607</td>
<td>$1,704,143</td>
</tr>
<tr>
<td>Canned</td>
<td>7,867,647</td>
<td>$2,467,271</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27,589,989 lbs</td>
<td>$12,141,450</td>
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</table>

Approximately 8,000 cases per week of non-fat, blended yogurt produced by Upstate Farms Dairy Cooperative, with milk from NYS dairy farmers; a $4.5 million contract with an upstate NY company to process and pack NY-grown apples as snack items for all NYC schoolchildren; 250,000 pounds of fresh NJ peaches and nectarines; \textit{Carrot Cruncher snack packs—grown, processed and shipped all in the state of New York to NYC schools (up to 3,000 cases per week)}; and flash-frozen NYS-grown vegetables from upstate farmers through the Rochester-area Allen Canning (formerly Birds Eye) facilities.

\textbf{Learning from this strategy:}
The biggest learning thus far is that the parameters of “lowest bid” do not completely derail the opportunity for local food purchases—local food can be competitive with food procured from national sources. Contract specifications include lowest bid award, inability to include Geography in the specifications, strict USDA nutritional and portion size requirements, and 5 year fixed prices.

\textbf{Measures:}
- Number of new local suppliers to NYC schools, and increased farm/food producer revenue due to these sales
- Increased consumption of fresh fruits and vegetables (local and overall) to shift food KAB (knowledge, attitude and behavior) about food, among NYC schoolchildren
- Increased sales multipliers by adding value in-state for raw/commodity agriculture products

\textbf{Wealth Creation and TBL impacts}

\textbf{Environmental:}
- regional demand for NYS products keeps more NYS farming acreage in production—stave off development pressure in sensitive areas (Delaware Watershed, e.g.) close to NYC
- reduced food miles = lower GHG emissions

\textbf{Social:}
- increased opportunities for new/returning farmers;
- increased consumption of fresh fruits and vegetables by children in NYC;

\textbf{Built:}
- increased demand on existing processing infrastructure in NYS which is often fragile.

\textbf{Financial:}
- opportunities for market expansion to retail (eat at school, buy also for home, e.g.);
- farmer livelihoods by growing more and also working with or adding value themselves;

\textbf{Appendix Five: Examples from the HVCN Tool Kit,}
**Innovation Tools and Methods**

**Third-party NGO analysis of value chain**

**Context:** "Juan Francisco Project" - Inquiry into French green bean supply chain originating in Guatemalan and ending with Costco; CIAT and Counterpart International as NGO third parties

**Description:** To help gain greater visibility on the social, economic, and environmental impacts of a value chain, it can be valuable to enlist the support of a third party - an NGO or research organization - whose job is to gather and analyze data and provide an "objective" analysis. There are two elements of this: Process and Product.

**Process:** The biggest challenge in this process is building trust and transparency to allow information sharing. Methods for doing so include:

- Laying the groundwork through one on one relationship building (including mutual face to face visits) among key decision makers in the value chain
- Selection of third party with regional expertise, analytical capability, and seen as an honest broker by all involved
- Drafting a Memorandum of Understanding with clear policies about governance and information sharing during and after the study
- Formation of a steering committee with representatives of each major actor and the involved NGO(s)
- Designation of tiers of information:
  - What is only to be shared between actor and NGO
  - What can be shared within steering committee but not more broadly in the organizations
  - What can be shared among the participating organizations
  - What can be shared with wider audiences
- Data gathering and analysis from a mix of sources: company records; phone and field interviews; field visits and observations
- Value chain summits at which representatives from across the supply chain review draft documents and discuss findings
- Co-design strategies for improving the supply chain

**Products** of the analysis might include:

- A picture of the product flows through the value chain, such as the one below:

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• Descriptions of the services provided by each of the actors in the supply chain (e.g. production/processing, technical assistance, market information)
• Revenue, costs, and an estimate of gross profitability of each actor in the supply chain to see if a "fair" distribution of benefits is occurring
• Direct economic and social impacts of income from value chain on community actors
• Indirect economic and social impacts of value chain activities
• Environmental impacts of primary production (soil health, biodiversity, waste, water, emissions), transportation, built infrastructure, etc.

Example of Application:
Researchers from CIAT and Counterpart International conducted a study of the French green bean supply chain originating with indigenous farmers in rural Guatemala and proceeding through the Cuatro Pinos cooperative, the Los Angeles Salad Company, and Costco. The analysis was conducted using the method described above. The final document served as focus for a supply chain summit in Guatemala, using the "peace circle" method for facilitation and ensuring of equal voice for indigenous farmers. As such this analytical way of "seeing the system" was complemented with literally seeing and listening to the people who comprise the system. From this analysis and dialogue, an opportunity was identified to create the "Juan Francisco Foundation" to support community development activities. The Foundation is funded through fixed-percentage contributions from the profits of the French beans by the involved companies ("collaborative foundation for chain upgrading").

Additional Documents about this tool/method:
Mark Lundy Summary Report of the Juan Francisco Project:
French_bean_summary_Final.pdf
Mark Lundy and colleagues give a detailed description of their methodology in "Increasing the Competitiveness of Market Chains for Smallholder Producers: A Field Guide":
market_chain_manual_v2.pdf
Contacts for further information:
Mark Lundy, CIAT
Sheri Flies, Costco
Jason Jay, MIT
Don Seville, SFL
Participatory Indicator Development

**Context:** Green Mountain Coffee Roasters project to develop indicators of poverty and hunger in their supply chain to improve their capacity to partner with source communities. Sustainable Food Lab and CIAT were third party facilitators and researchers.

**Description:** There are several approaches to indicators of poverty, ranging from single criteria to long lists of welfare variables to criteria elicited from the poor themselves. The World Bank has used single indicators (e.g., income of less than $2.00 a day) based on census estimates to establish baselines and to measure change for large numbers of people. Although widely criticized, the approach has served as a district, national and regional level litmus characterization. Other single specific measures include childhood stunting as the poverty measure for our global work on both crop biofortification and development of drought tolerant cultivars (Hyman, Fujisaka, Jones 2006).

Large researcher-determined lists of indicators have been used to measure impact. Data elicited through large sample surveys include income sources and amounts, self-employment, seasonal and occasional labor, land and livestock holdings, costs of farm/enterprise inputs including family labor, housing and housing construction materials, holdings and value of different assets from radios to domestic appliances and motorcycles, levels of education, literacy, health measures, debt and savings, and access to water, power, health care, education, roads, and markets. Such data can be subjected to econometric analysis with results that are not always convincing but almost always expensive to come by.

In reaction against measures thought to be locally inappropriate, researchers have used different forms of indicators elicited from the poor themselves, called participatory indicator development. This approach asks people about their classificatory systems regarding poverty and wealth. Once categories are elicited, definitions of each category are elicited; and these latter serve as locally appropriate indicators of poverty. In village x, for example, housing material may be irrelevant to local definitions of poor or rich; and the number of educated sons may be all important. The recommendation would be to use the locally agreed-upon indicators.

**Example of application:** To get locally relevant indicators on poverty and hunger in coffee growing regions, we focused on eliciting of livelihood circumstances in good vs. bad years and of the use or allocation of good year resources. Groups of small-holder coffee producers were interviewed using participatory methods by the researchers working in pairs--required up to 21/2 hours; were preceded by an explanation of objectives and methods, possible outcomes, and a request to continue. Interviews ended with questions and concerns of the respondents. Group participation was universally lively and enthusiastic. Where strong,
people would conduct heated discussions in their indigenous languages before turning back to provide decisions in Spanish. Both males and females participated. Each and everyone were encouraged to participate. Elicited and prioritized in the group interviews were:

- **Livelihood activities or resources used in good and bad years**, with “good” and “bad” defined in terms of coffee production and price. The elicited responses identified the different enterprises, activities, and income sources that producers relied upon and their relative importance in both good and bad years. As a set of potential impact indicators, projects or programs such as fair trade payments and organic certification and premiums would strive to reduce “bad” year outcomes and to increase years approximating what farmers described as “good” years.

- **Allocation of resources gained in “good” years**. Farmers’ real or desired investments in good years provide insights into desired outcomes that, if and when met, can serve as indicators of impact.

- **Coffee production and coffee-related problems**. Solution of prioritized problems related to coffee production, processing, and marketing would have clear, positive impacts on the lives of farmers. Work on increasing benefit-cost ratios via problem solution and improvement of returns to factors of production within the coffee enterprise could be achieved through technical programs (not encountered in the course of the research).

- **Rough estimation of costs-benefits**. Farmer provided very rough estimates of yield, production costs, prices paid for conventional specialty vs. organic/fair trade specialty coffee. Detailed enterprise budgets would have been desirable but were not possible to elicit given the limited time in the field and the number of researchers.

- **Community problems**. Groups identified and prioritized community level problems. Programs seeking to ensure that price premiums benefit local producers could easily invest in community rather than individual needs.

**Additional Documents about this tool/method:**
Impacts and indicators of impact of fair trade, fair trade organic, specialty coffee, Sam Fujisaka, Thomas Oberthur, Raul Rosales, Herman Usma, and German Escobar, October 18, 2006

**Contacts for further information:**
Thomas Oberthur, Eco-Agriculture Partners
Sam Fujisaka, CIAT
Rick Peyser, GMCR
Don Seville, SFL
**Systems Thinking: Causal Loop Diagramming**

**Context:** Systems thinking is one of the core disciplines of Organization Learning and is used primarily to help elicit and create graphic representations of individual or group understandings of the relationships that cause systems to change over time. Key questions are: *What has been happening over time? Why has that been happening? What is it likely to look like in the future? How can the future direction be changed?* Making cause and effect assumptions explicit in a diagram helps groups increase the breadth of their analysis by looking at multiple causal factors at once, increase their time-horizon, and look at feedback – closing the loop between actions, results, and the information and conditions that drive actions.

**Description:** At its broadest level, systems thinking encompasses a large and diverse body of tools, methods, and principles that are oriented towards understanding the interrelatedness of forces. One form of systems thinking that has proved particularly valuable as a language to help groups understand and devise strategies for changing systems stems from the field of system dynamics developed by Professor Jay Forrester and his colleagues at MIT. System dynamics is a vehicle for developing understanding of how complex feedback processes can generate problematic patterns of behaviors in physical, social, and economic systems.

The causal loop diagram is one of the most commonly used systems thinking tools. It is a pen and paper language for mapping our assumptions about cause and effect relations. At one level, this is a familiar discipline – mapping our assumptions about how to achieve the results we desire. Often this takes a linear view: the difference between a situation and our goal is perceived as a problem. That problem leads people to make decisions, which leads to new results in the system.

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Situation \rightarrow Problem \rightarrow Decisions \rightarrow Results
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Systems thinking encourages us to think beyond the first level of linear change and examine how the results of our actions both change the situation on the ground that we are reacting to and change our goals for the system. In other words, rather than reacting to problems that are considered exogenous (outside of) our thinking and actions, we consider how our past actions have actually contributed to the very problems we are facing. This is an endogenous world view.
Causal loop diagrams provide a casual language for mapping our understanding of these systems in such a way that other people can inquire into our assumptions and improve the picture. We focus on variables that can change over time and write out assumptions about drivers. For example, we might want to express our assumptions about the drivers behind an increase in traffic in a community. One part of the larger picture would be that additional house building (more houses) leads to more residents, and therefore more traffic. That is expressed in causal loop diagramming language below.

Key to understanding the full behavior of systems is understanding feedback. There are two basic feedback processes in dynamic systems – reinforcing loops and balancing loops. Reinforcing loops are the virtuous or vicious where systems amplify over time. For example, a local effort at water conservation produced positive results. Over time, there was general awareness of positive results. Awareness boosted overall public support for water conservation in the community. Community support lead to additional effort at conservation which produced even more positive results, leading to even greater awareness of positive results … and so on...

Balancing loops are the loops that try to maintain equilibrium – such as when price acts to
balance supply and demand. Taken together, reinforcing and balancing loops can be used to example the behavior of complex systems.

A very useful supplement to causal loop diagrams are archetypes, which are commonly occurring patterns of behavior that over time have been documented with guidance to understanding the traps and potential ways out of these structures. These include “fixes that fail,” “shifting the burden,” “limits to growth,” “success to the successful,” and so forth.

**Example of Application:**
After conducting household level interviews to better understand what was happening with poverty and hunger in coffee producer communities, a group met at the Green Mountain Coffee Roasters office to make sense of the data. Looking across the 147 interviews, what was the pattern emerging? Out of those household interventions it was clear that hunger was a persistent issue, as more than 50% of those interviewed experience food shortages. During the discussions, we drew a systems map to place the different drivers from the research onto a framework. This facilitated the groups ability to discuss different opportunities and what leverage there might be based on the findings and the wider experience of the participants in the room.

The causal loop diagramming process centered on the variable that we wanted to understand and the behavior of into the future – hunger. Hunger in this case being described by the number of months that farmers had to change their diet due to lack of physical or financial access to food.

We went through the research and our own understanding to draw a map of the drivers of hunger. Key focuses include access to affordable food and net income. As net income increases, all else being equal, we would expect hunger to decrease. Similarly, if food gets more expensive (affordability of food declines) we would expect hunger to increase, all else being equal.
Next we mapped out the drivers of net income, which include coffee income (price * yield minus cost of production) and alternative livelihood sources. Then we mapped out the drivers of each of those variables. As we went through the discussion, we mapped the data against the variables to help show where intervention would be most useful.

After mapping the causes, the group looked through the map and added potential intervention areas that could ultimately reduce hunger, shown in the blue squares on the map. While each of these areas was suggested by the data or by the experience of the folks in the room, the causal loop diagram represents a theory, our best current understanding and next needs to be tested against the experience of more people in the system or through additional analysis.

**Additional Documents about this tool/method:**
The fifth Discipline and the Fifth Discipline Field book

**Contacts for further information:**
Peter Senge, MIT/SOL
Don Seville, SFL
Local Interpretation Workshop

**Context:** Rainforest Alliance undertakes Local Interpretation workshops as a way of simultaneously adapting its global sustainable agriculture standard to local tradition and law and securing the support of stakeholders and partners for implementing the standard and certification system.

**Description:** Standards and certification regimes for sustainable business practice, whether deployed by a corporation (e.g. a Vendor Code of Conduct, a sustainability standard), a single NGO (e.g. Utz Certified), or a network of NGOs (Rainforest Alliance, Fair Trade), are generally authored at a global level. They take a set of general principles for sustainability and equity and define criteria and best practices that enact those principles. At the same time, one size does not always fit all - these global standards must be localized to the specific legal, institutional, cultural, and ecological context of countries where they are to be applied. This localization has three levels:

- An intellectual level of defining indicators for measuring compliance with the standard in a way that ensures cultural, social and ecological appropriateness, as well as coherence with national law.
- An organizational level - recruiting and engaging local partners who have an interest in the way that the standard is applied on the ground, granting them a sense of ownership and voice in the process of implementation.
- A strategic planning level - gathering information about potential risks, challenges, and opportunities unique to the local context that inform the definition of indicators.

The Local Interpretation Workshop is a method for accomplishing goals at all three levels simultaneously. Convened by the organization with accountability for the overall certification regime, the Workshop enrolls key stakeholders from the country or local context where the global standard is about to be deployed. These stakeholders should include:

- Experts on the local ecology, culture, and laws. They can provide insight into contradictions or conflicts that might arise between local practice and the global standard, based on research and general knowledge.
- Representatives from agencies and organizations who might be tasked with technical assistance, auditing, and other functions associated with standards implementation. Being involved in the interpretation process helps generate a sense of ownership, and their involvement brings their local knowledge about challenges they might anticipate.
- NGO's and local organizations with overlapping missions (e.g. wetland conservation

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**Process Innovations:**
1. Create conditions for partnerships
2. Strategize
3. Build partnerships
4. See the System
5. Dialogue, Participatory Engagement, and Decision Making
6. Select indicators, monitor, collect feedback
7. Design to Institutionalize

**Structural Innovations**
1. Value Chain structure
2. Organizational Structure
3. Market Structure
groups for a sustainable agriculture standard). Their local knowledge can inform the process, and their involvement can help them anticipate and potentially align their own work with the certification effort.

The product of a Local Interpretation Workshop is a set of Interpretation Guidelines or Local Indicators. These do not modify or erode the stringency of the standard, but clarify how it is to be applied. For example, local indicators for sustainable cocoa production might have an Interpretation Guideline about how much shade should be applied and which shade tree species are the most appropriate for cocoa farms in the country. The experience of co-authoring the Guidelines helps generate a common understanding and connection among the people and organizations who will have to collaborate in implementation. These Interpretation Guidelines then become a public, transparent document to go along with the standard and guide practice, and can be revised through further Interpretation Workshops.

**Example of Application:**
A global network of NGOs called the Sustainable Agriculture Network (SAN) owns the sustainable agriculture standard; the Rainforest Alliance functions as the Secretariat and owns the seal. The SAN standard specifies 10 principles of sustainable agriculture. From these principles derive 94 criteria. Up to this level the standard is maintained by the SAN secretariat. When a standard is to be implemented in a new country, however, the SAN and Rainforest Alliance convene an Interpretation Workshop. For example, in November 2006, a workshop took place to interpret the standard for cocoa in Côte d’Ivoire. The workshop was tasked with interpreting how to apply criteria regarding use of shade, prohibition of hunting and employment contracts into the specific context of the natural environment, tradition and law. The workshop convened representatives from appropriate government agencies, local universities, NGO's focused on labor issues and sustainable agriculture and the private sector. By co-authoring the Interpretation Guidelines, this group developed a shared understanding and concept of sustainability that facilitated implementation of the standard in the cocoa sector in Côte d’Ivoire.

**Additional Documents about this tool/method:**
ISEAL Code of Good Practice for Setting Social and Environmental Standards (www.isealalliance.org)

**Contacts for further information:**
Edward Millard, Rainforest Alliance
Local Bilateral Engagement

Context:
The Coca Cola Company and the World Wildlife Fund initially formed a partnership around water at the executive level. To really execute on shared goals required Local Bilateral Engagement between the two organizations.

Description:
Partnerships between NGO’s and companies can range from arms-length philanthropy, to a symbolic commitment to a shared goal, to operational engagement on the ground. For this last, most intensive mode of partnership, the relationship can not exist solely at the executive level. Global organizations are composed of regional and national affiliates, business units, and divisions, each of which may have their own subculture and priorities. Institutionalizing a partnership means putting care into cultivating relationships between counterparts at the local level.

Local bilateral engagement can be accomplished through workshops and retreats that unite local management teams from both organizations, as well as Learning Journeys to the “turf” of one or the other organization (e.g. a corporation’s production facility, or a village or nature reserve protected by the NGO). Through this process, outside facilitators may be helpful in cultivating a common language and vision, as well as actively surfacing any cultural differences, misaligned expectations, or disincentives to collaboration that might affect the partnership.

As quickly as possible, the local partners should identify and undertake joint actions, even as simple as drafting a charter or research agenda. It is through setting goals and taking action together that issues can be surfaced more rapidly, and trust can be built.

Example of application:
The Coca Cola Company and World Wildlife Fund identified watershed management as a key area of shared interest that could capitalize on both organizations’ capabilities. From that central strategic priority, they identified seven major watersheds in the world where WWF had identified vulnerable ecosystems and Coke had significant operations. For each of these watersheds, some degree of local bilateral engagement was undertaken between the local Coke bottler and the local WWF office. Through the process, bottlers had to tackle ingrained beliefs that NGO’s were off limits for communication, and WWF personnel had to learn to see Coke as something more than philanthropic donors. Where these processes worked effectively, bottlers engaged with WWF on an even more ambitious scale than anticipated, for example addressing climate change as well as water.

Contacts for further information:

Process Innovations:
1. Create conditions for partnerships
2. Strategize
3. Build partnerships
4. See the System
5. Dialogue, Participatory Engagement, and Decision Making
6. Select indicators, monitor, collect feedback
7. Design to Institutionalize

Structural Innovations
1. Value Chain structure
2. Organizational Structure
3. Market Structure
Peter Senge, SOL
Dan Vermeer, The Coca Cola Company
Modular Implementation and Verification (MIV) Toolkit: 
For the phased application of forest management standards and certification

Context: The process of implementing responsible forestry standards and achieving forest certification is very challenging and there is a need for phased or stepwise approaches if certification is to become more accessible to forest managers in many parts of the world. The Modular Implementation and Verification (MIV) Tool Kit provides a credible mechanism for delivering a phased approach which is practical, consistent and easy to communicate. The toolkit was developed through the WWF/ IKEA Partnership

Description:
Responsible forestry standards are made up of a number of requirements which cover legal, technical, social and environmental activities and outcomes, all which must be implemented in phases. Modular Implementation and Verification (MIV) provides a practical solution through a set of predetermined modules which, like the standards themselves, cover legal, technical, environmental and social issues. All the requirements of the standards are included in the module. Through these modules, the MIV toolkit provides the basis for a consistent phased approach, thus facilitating communication and making comparisons between different companies relatively easy.

Process Innovations:
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2. Strategize
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6. Select indicators, monitor, collect feedback

Structural Innovations
1. Value Chain structure
2. Organizational Structure
3. Market Structure

Figure 2.1 The Modular Implementation and Verification (MIV) approach, shown schematically

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<th>Technical component</th>
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<td>T2 Operating legally</td>
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<td>T3 Control of unauthorised activities</td>
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<td>T7 Economic viability</td>
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<td>S19 Rights and needs of forest users</td>
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<td>T8 Forest operations and operational planning</td>
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<td>S20 Employment and local development</td>
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<td>T12 Chemicals and biological control</td>
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Chain of custody

Value chain strategy assessment
The MIV toolkit includes the modules themselves, information on how to adapt them for different uses, and guidance on how they can be used to achieve phased implementation of the standard and phased verification of progress.

**Example of Application:**
For example, a company making a commitment to improvement to a purchaser can tell them which modules have already been completed and the timetable for completing remaining modules. This provides an accurate picture of current performance and future progress for the purchaser. Similarly, a donor or investor can require compliance with certain modules as a prerequisite for funding, plus verified compliance with remaining modules required over an agreed timeframe. Verification of progress can then be linked to achieving each module, again making communication clear and consistent.

Additional Documents about this tool/method:
http://gftn.panda.org/resources/tools/index.cfm?uNewsID=14371

Contacts for further information:
Kerry Cesareo, World Wildlife Fund
Andrew Murphy, World Wildlife Fund
Guide to Responsible Purchasing of Forest Products

Context: A guide for organizations wishing to develop a responsible program for the procurement of forest products, developed by WWF’s Global Forest & Trade Network.

Description: This guide to responsible purchasing of Forest Products has been developed by WWF’s Global Forest & Trade Network (GFTN) for use by a purchasing organization wishing to develop a program for the responsible purchasing of forest products. The guide lays out a generic approach for the development and implementation of a responsible purchasing policy, hereafter referred to as a responsible purchasing program.

The guide is aimed at any medium-size or large enterprise, including primary mills, secondary processors, importers, manufacturers, wholesalers, and retailers, that purchase or procure forest products. In appropriate circumstances it may also serve to guide smaller enterprises. The guide also outlines the various ways in which purchasing organizations can demonstrate compliance with best practice and ultimately with their own purchasing policies. It is based on tried and tested mechanisms and on extensive experience in the development of responsible purchasing programs.

Example of Application:
The Responsible purchasing guide is one of the first documents provided to companies who wish to improve their wood sourcing, and is used as “How To” manual, augmented by the “Keep It Legal” Guide, “The Modular Implementation Tool Kit.” Companies work hand-in-hand with WWF Forest Trade Network Managers to use and implement the tools on their path towards credible certification.
Additional Documents about this tool/method:
http://gftn.panda.org/resources/tools/index.cfm?uNewsID=80500

Contacts for further information:
Kerry Cesareo, World Wildlife Fund
Andrew Murphy, World Wildlife Fund
**Risk sharing fund**

**Context:** Identified as an innovation by Los Angeles Salad Company and the Cuatro Pinos cooperative in the supply chain for green beans going from Guatemalan farms to Costco stores in North America.

**Description:** There are at least two measures of equity and fairness in global supply chains. The first is income - what percentage of the final sale price and profit ends up with producers in countries of origin? The second is risk - when those prices fluctuate due to changes in consumer demand and competitive supply, or product is lost in transport, who bears the risk? During down times, the absence of a safety cushion can mean starvation in a developing country of origin, while large-scale distributors and retailers merely suffer a dip in stock price. Risk management mechanisms can therefore be critical to ensure the equity and sustainability of supply chains, by ensuring payment to low-income producers even when product is lost due to exogenous events.

A risk sharing fund provides that safety cushion, offering an alternative to third party insurance or government subsidy and relief payments when such mechanisms are not available or appropriate. Contributions to the fund come from supply chain actors as a percentage of revenue during periods of steady sales. When payments to producers must occur without revenues (because product is lost in the middle of the chain), or when producers’ credit defaults and must be written off because of climate conditions that undermine production, money for these losses are drawn from the risk sharing fund.

**Example of Application:** Los Angeles Salad Company, an American produce importer, and Cuatro Pinos, a farming cooperative in Guatemala, created a settlement account that serves as a risk sharing fund. Together the two companies contribute 10% of the sales price of each box of French bean into a jointly managed fund to cover unforeseen difficulties. Items covered by this account include quality control in Guatemala, support travel, insurance, quality assurance in Miami, write-offs for damaged or rejected product, write-offs for lost product, air freight and promotions, and demos sold off invoice. The fund essentially ensures payment to farmers even when product is lost, and has also be used to write off loans from Cuatro Pinos to farmers after Hurricane Stan when production was impossible.

**Additional Documents about this tool/method:**
Mark Lundy, "Assessing Smallholder Participation in the French bean supply chain in Guatemala"

**Contacts for further information:**
Collaborative Foundation for chain upgrading

Context: Generalization of idea for Juan Francisco Garcia Comparini Foundation, which was designed to provide support for rural Guatemalan farming communities, and funded by chain actors' contributions from green bean revenues.

Description: A collaborative foundation is one that is created, funded, and/or managed jointly by members of a supply chain. Its purpose is to provide for the development and upgrading of the chain as a whole, including poverty alleviation and ecological improvement in stakeholder communities, and for proactively avoiding or mitigating any risks or deleterious effects (e.g. social inequality, ecological changes) of the supply chain's commerce. Such services are particularly valuable in countries of origin where government infrastructure may not be available to provide them. Examples of activities might be provision of health care, education, and technical assistance with sustainable agriculture to farmers, their families, and their communities.

Rather than being endowed through a one-time philanthropic donation, a Collaborative Foundation is funded through a portion of the revenues from the chain's economic activity. In this sense it is an integral part of the value chain, ensuring the longevity of its services and the need for ongoing collaboration among supply chain actors. Ideally, the Foundation achieves non-profit status in its country of operation, which may happen in return for some government oversight of its operations and philanthropic mandate. Governance is through a board of directors composed of representatives from the supply chain companies, and can also include representatives of the local communities in which it is operating. Third party auditing, monitoring, and impact assessment of funds allocation may also be used as a governance mechanism.

Example of Application:
In the supply chain for LA Salad-branded French beans going from Guatemalan farmers to Costco's shelves, the Juan Francisco Comparini Foundation is an example of a collaborative foundation. A mandate for the Foundation was established after a supply chain assessment identified opportunities for investment in remote rural farming communities. The Foundation is seeking non-profit status in Guatemala, and will be governed jointly by members of Costco, Los Angles Salad Company, and Cuatro Pinos cooperative, the key actors in the supply chain. The Foundation will support health care access and educational scholarships for workers’ families in Guatemala. It targets the most vulnerable populations – farm and packinghouse workers who participate in Cuatro Pinos’ production but are not co-op members. Funding for the Foundation will come from all of the supply chain actors, based on a number of dollars per crate of product sold that each actor has agreed to contribute. Once the Foundation has been established, it will include an

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on-going, third party auditing, monitoring and evaluation system impacts of these funds on rural poverty.

**Contacts for further information:**
Sheri Flies, Costco
Mark Lundy, CIAT
**Sustainability Manager embedded in buyer group**

**Context:** Generalization of Sheri Flies’ shift at Costco into the buying organization.

**Description:**
Over the past two decades, corporations have begun establishing central departments with labels such as “corporate responsibility,” “corporate social responsibility,” or “corporate sustainability.” These functional departments, which often bring together personnel from legal, Environmental Health and Safety, and public relations disciplines, serve as advisors to line business leaders. The challenge, as with any staff function like HR, IT, Legal, Purchasing, is one of limited visibility on line business issues, and limited influence over line managers.

When it comes to managing sustainability issues in value chains, such staff can be doubly removed – they are separate both from supplier organizations and the buyers responsible for maintaining quality, reliable supply to the core business.

One way of resolving this challenge is to “embed” a Sustainability Manager in the buying group of a corporation. Such an individual might come from one of the traditional CSR disciplines, but would have the same accountability for business profitability that other buyers do. In this way, they can serve as a translator – bringing a realistic business perspective to colleagues in the CSR function(s), and assisting fellow buyers in thinking about the sustainability implications of buying practices and policies.

**Example of Application:**
Sheri Flies had been the Corporate Counsel for Costco for thirteen years. In that capacity, she had helped write the company’s Vendor Code of Conduct, which specified minimal standards of social and environmental responsibility in Costco’s supply chain. Through her work on the Code, her participation in the Sustainable Food Lab, and her leadership of the Juan Francisco Project, she increasingly came to understand the pivotal role that buyers play in sustainability. Their choices about whom to buy from, the standards they held for suppliers, and the assistance they provided suppliers could have a tremendous impact on the inclusivity and sustainability of the supply line - in economic, social, and environmental terms. She therefore made a major career shift into a buying role, where she is responsible for billions in sales of produce in Costco stores. In this role, she is helping other buyers identify opportunities analogous to the Juan Francisco Project, to foster inclusivity and sustainability in the supply lines for which they are responsible.

**Contacts for further information:**
Sheri Flies, Costco

**Process Innovations:**
1. Create conditions for partnerships
2. Strategize
3. Build partnerships
4. See the System
5. Dialogue, Participatory Engagement, and Decision Making
6. Select indicators, monitor, collect feedback
7. Design to Institutionalize

**Structural Innovations**
1. Value Chain structure
2. Organizational Structure
3. Market Structure