“Sustainability” Trend is Growing

• Impact of industry practices on the environment, labor, water, and other resources
• Public interest stakeholders
• Economic viability
• Industry, CSR, which is increasingly moving beyond window dressing to become a tool for firms to identify means to reduce resource use and costs, and invest in practices that can increase competitiveness (Michael Porter)
• The media
“Sustainability” Trend from the Consumer Vantage Point - Hartman Research Results

- Most consumers have very limited understanding or usage of the concept of sustainability
- In general, food terms as used by the food industry are not understood: functional foods, IPM, food miles
- It appears that sustainability is becoming an umbrella term for health, wellness, organics, environmental consciousness, fair trade, simple living, buying local, etc.
- Personal sustainability linked to environmental sustainability for some
- Consumers are evolving from an interest in “earth-sustainable” products in the 80's (which were not top of mind in purchasing decisions and only embraced by 7% of consumers) to how products affect health and wellness
“Sustainability” Trend from the Consumer Vantage Point - PMA Survey Results, May 2008

- 32% of consumers described sustainability (in their own words) as anything related to green, ecological, environmentally responsible, plus 2% mention recycling or renewable resource issues
- 11% described it as long lasting/continuous
- 39% could not volunteer any association with the word
- The top 5 actions that consumers would like the produce industry to verifiably take are: pay workers a living wage, worker safety programs, water conservation, reduce pollution in transportation, and energy conservation.
- About 2/3’s of the respondents say they are willing to pay at least 11 cents more per pound for products from firms that carry out these actions.

Source: PMA Sustainability Survey, May 2008
The entry point for many consumers is perceived personal benefit more than benefit for the environment — organics and local as examples.

Convergence between consumer trends in health and wellness and the term sustainability as used by industry, media and public interest stakeholders — tipping point — making it a placeholder.

Term seems intuitive, giving it some legs, but not enough to market your fresh produce by simply adding a “Sustainable” label. Rather must highlight attributes directly beneficial to consumers (flavor, health, local), and secondarily any benefits to workers, the environment, etc.
Sustainability Products Consumers Currently Own or Might Purchase in the Future

What would you say are the one or two major reasons you've purchased *locally grown* produce?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresher / local always fresher</td>
<td>34%</td>
</tr>
<tr>
<td>Better taste/flavor</td>
<td>22%</td>
</tr>
<tr>
<td>Support local farmers/growers/local economy</td>
<td>20%</td>
</tr>
<tr>
<td>Cost / price / less expensive</td>
<td>7%</td>
</tr>
<tr>
<td>Healthy / good for you</td>
<td>6%</td>
</tr>
<tr>
<td>Know where it came from / where it grows</td>
<td>6%</td>
</tr>
<tr>
<td>Quality / best product / eye appeal</td>
<td>5%</td>
</tr>
<tr>
<td>Availability / seasonal availability</td>
<td>5%</td>
</tr>
<tr>
<td>Close / convenient</td>
<td>3%</td>
</tr>
<tr>
<td>Food safety</td>
<td>2%</td>
</tr>
<tr>
<td>Environmentally better / no pesticides/chemicals</td>
<td>2%</td>
</tr>
<tr>
<td>Never purchased locally grown produce</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
<tr>
<td>Don't know / Refused</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: The Hartman Group, 2008

1. Locally grown trend benefits Central Coast growers much of the year.
2. How far is local?
3. Higher and more diverse fruit and veggie consumption (eating healthier) in last 2 decades was based on long distance shipping, due to seasonal production constraints.
Properties Suggested by “Organic” (Increasingly Defined as the Absence of)

- Absence of pesticides: 83%
- No artificial flavors/colors/preservatives: 78%
- Absence of herbicides: 78%
- Absence of growth hormones: 75%
- Absence of antibiotics: 69%
- Absence of genetically modified foods: 67%
- Safer for one's health: 64%
- Environment-friendly: 63%
- Better for one's health: 58%
- Absence of food irradiation: 57%
- Fresh: 48%
- Absence of Mad Cow Disease (BSE): 45%
- Higher nutritional content: 34%
- Premium product: 31%
- Better taste: 27%
- Better treatment of farm animals: 27%
- Locally grown: 24%
- Family (small-scale) farms: 22%
- Sustainable production: 17%

Source: Harvey Hartman, 2008
Hartman Organizes the World of US Organic Consumers, of the 69% that are users

Source: The Hartman Group, 2008

- CORE: 21%
- MID-LEVEL: 65%
- PERIPHERY: 14%

Graph showing the distribution of organic consumers across different segments based on core, mid-level, and peripheral categories.
The Consumer World of Sustainability

Sustainability Consciousness

• Varies a lot by consumer and involves complex value systems and practical considerations in every day life

• Growers and shippers must find ways to understand what is meaningful to consumer segments/social networks and communicate those messages

• Do we want to be inclusive or reward the few with sustainability messages? I.e., some consumers might prefer to have production methods that are relatively benign to the environment and affordable to consumers.
Quality Trumps

- “High quality” food experiences may be the most significant long-term trend in food retailing
- Quality is being redefined, consumers are becoming more sophisticated and while more are focusing on health it is not at the expense of pleasure
- Healthy-eating, organic and local are increasingly more secondary experiential attributes within the pursuit of “authentic quality eating experiences”
- Locale may trump local, if it is premium and has a story
- Wellness evolving to quality experiences and “living the good life” - mind, body, spirit

Source: Harvey Hartman
Wellness Goes Mainstream

Wellness is no longer a niche market. Food is fundamental to definitions of wellness.

Connect food with health: Provide clarity and resources.

Food choices get linked to health: Different ways of eating linked to prevention.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Any Time, Any Place Health

Health management on the go, at work, at home, and in the store.

Highlight health & wellness benefits:
Optimize store design for wellness experience.

People shop in a health mode:
Shopping for food is health management.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Retailers Increasingly Focusing on Food and Wellness Services as a Competitive Tool/Strategy

- Whole Foods launched Secret Ingredient, an online weekly cooking show featuring its special products, on YouTube, iTunes, and its website.
- Whole Foods will offer computers in store to answer consumer questions and suggest food and wine pairings.
- Partnering with local schools for health eating training for children
- Hannaford Bros. has Guiding Star nutritional labeling system, others are following.
- Instore health clinics growing
Size of Leading Natural and Limited Assortment Supermarket Retailers

• As of Sept. 30, 2007 Whole Foods operated 276 stores* with $6.6 billion in FY 2007 sales, including Wild Oats; Whole Foods is about $\frac{1}{2}$ the size of HEB
• Trader Joe’s sales are estimated at over $5 billion, with 262 stores in 2006 (owned by the Albrecht family of Germany)
• Specialty retailers represent only about 5% of grocery store sales
• Conventional supermarket operators are still the primary customers for fresh produce suppliers, and most are changing their formats to emphasize freshness, including increased attention to produce departments and also organics
Biocitizens and Social Networking

Information, values, and behaviors travel through social networks around health affinities.

Leverage platforms for networked feedback: Develop practices for recognizing networks in the market.

New collectives, new authorities: User-generated media influence purchase decisions and brand identities.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Health in the Food System

As ecological approaches to health expand, pressure on stakeholders to support a healthy food system increases.

Go beyond healthy choices: Engage manufacturers and suppliers to foster health.

External expectations grow: Consumers and regulators demand a healthier food system.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
How confident are you that the food in your supermarket is safe?

Source: FMI US Grocery Shopper Trends, various years
### Which food-related items constitute a serious health risk?

<table>
<thead>
<tr>
<th>Item</th>
<th>'08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria or germs</td>
<td>53%</td>
</tr>
<tr>
<td>Product tampering</td>
<td>46%</td>
</tr>
<tr>
<td>Avian Influenza</td>
<td>38%</td>
</tr>
<tr>
<td>Terrorist tampering</td>
<td>46%</td>
</tr>
<tr>
<td>Residues from pesticides</td>
<td>43%</td>
</tr>
<tr>
<td>Antibiotics/hormones in livestock</td>
<td>27%</td>
</tr>
<tr>
<td>Food handling in supermarkets</td>
<td>18%</td>
</tr>
<tr>
<td>Foods produced by biotechnology</td>
<td>20%</td>
</tr>
<tr>
<td>Irradiated foods</td>
<td>21%</td>
</tr>
</tbody>
</table>

- **Declining since 1992**

Source: FMI US Grocery Shopper Trends 2008 and other issues
Health-driven Transparency

Invisible qualities become visible and create new health commons.

- Foster culture of openness: Anticipate and share information.
- Bottom-up & top-down transparency in conflict: Co-production, transport, and marketing practices exposed.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Spectrum of Green Health

Personal health increasingly tied to community and environmental health, creating new markets.

Build the green narrative: Follow through with products and services.

Market remains fragmented: Anticipate diverse interpretations of green health.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Nutrition Information Gets Customized

New dietary guidelines based on nutrigenomics and culturally specific needs will proliferate.

Map market needs: Build competencies of customization.

Coherence adds value: Filter information to meet consumer needs.

Source: Connecting the Dots Between Food and Health, Coca Cola Retailing Research Council
Central Coast organic sales value for vegetables was $115 million out of $221 million total Ca. organic veg sales, 2005

Central Coast organic sales value for fruit was $31 million out of $167 million total Ca. organic fruit sales, 2005

And both have grown rapidly since 2000

Ca. produces over half of the USA’s organic food

But demand still not high enough for many organic crops to sell them all on the organic mkt at a price premium

Source for sales: Karen Klonsky, UC Davis
## California Organic Agriculture by Commodity Group, Number of Growers, 2000 - 2005

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Field Crops</th>
<th>Fruit &amp; Nut Crops</th>
<th>Livestock, Dairy, Poultry &amp; Apiary</th>
<th>Nursery, Greenhouse &amp; Floriculture</th>
<th>Vegetable Crops</th>
<th>Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>245</td>
<td>1,365</td>
<td>57</td>
<td>186</td>
<td>643</td>
<td>1,903</td>
</tr>
<tr>
<td>2001</td>
<td>263</td>
<td>1,402</td>
<td>54</td>
<td>190</td>
<td>616</td>
<td>1,925</td>
</tr>
<tr>
<td>2002</td>
<td>261</td>
<td>1,332</td>
<td>65</td>
<td>194</td>
<td>585</td>
<td>1,847</td>
</tr>
<tr>
<td>2003</td>
<td>251</td>
<td>1,274</td>
<td>75</td>
<td>174</td>
<td>525</td>
<td>1,757</td>
</tr>
<tr>
<td>2004</td>
<td>210</td>
<td>1,248</td>
<td>103</td>
<td>177</td>
<td>499</td>
<td>1,722</td>
</tr>
<tr>
<td>2005</td>
<td>205</td>
<td>1,293</td>
<td>113</td>
<td>179</td>
<td>505</td>
<td>1,795</td>
</tr>
</tbody>
</table>

Row totals do not equal the sum of the columns because of growers in multiple categories.


76,500 total growers in Ca.
Leading US Fresh Market Vegetable States in 2007: Geographic concentration of production (due to climate) limits local sourcing potential, yet it is growing in the summer/fall.

<table>
<thead>
<tr>
<th>State</th>
<th>Area Harvested</th>
<th>Production</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>46% of Total</td>
<td>50% of Total</td>
<td>54% of Total</td>
</tr>
<tr>
<td>FL</td>
<td>9% of Total</td>
<td>8% of Total</td>
<td>12% of Total</td>
</tr>
<tr>
<td>GA</td>
<td>8% of Total</td>
<td>8% of Total</td>
<td>8% of Total</td>
</tr>
<tr>
<td>AZ</td>
<td>7% of Total</td>
<td>6% of Total</td>
<td>5% of Total</td>
</tr>
<tr>
<td>NY</td>
<td>4% of Total</td>
<td>4% of Total</td>
<td>4% of Total</td>
</tr>
</tbody>
</table>

Cost-Price Squeezes are Supply Chain-Wide

- The growth in new store formats and marketing channels selling fresh food means more pressure on retail margins.

- In addition, food price inflation is increasing.

- Whereas in the past, retailers could more readily pass on price increases from suppliers to consumers, the more competitive retail environment constrains retailers.

- This likely means more difficulty for fresh produce suppliers/shippers to achieve higher prices as their costs escalate (fertilizer, energy, food safety, labor, etc.).

- As costs increase, in this fierce competitive environment, growers cannot afford to offer even higher-cost products to consumers that are not rewarded with higher prices.
The fact that organics are still so small indicates that the constraints may be too great to sustainably produce in sufficient volumes to feed the public.

Conventional production has reduced input use to improve profitability and leave a smaller environmental footprint.

The positive story of what ag is doing to be good stewards of the land should be told. With the growing attention on sustainability if this message is not communicated negative messages are likely to prevail.

Economic viability is a fundamental attribute of sustainability.