Conclusions and Road Ahead

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Summary: Food Loss & Waste in US Supply Chain

Processing ------ Distribution ------ Consumption

Billion lbs/yr

- **44.3** Billion lbs/yr by BSR survey
- **43** Billion lbs/yr by USDA data
- **3.8** Billion lbs/yr

- **90** Billion lbs/yr

- 93% Residues
  - Concentrated (27,400 sites)

- 5% Residues

- 2% Residues

- 18% Consumer Products
  - Scattered (179,000 stores)

- 37% Consumer Products

- 45% Consumer Products

- >95% “Real Waste”
  - Dispersed
    - (1 million restaurants)
    - 117 million households

- Donation
- Recycle
- Disposal

BSR survey
USDA data

“Real Waste” Dispersed
(1 million restaurants
117 million households)
Wasted Food = Wasted Resources & Money!

$161 billion for retail and consumer food loss (Jean)

Consumer level Food Loss

Family of 4: 1164 lb/yr

National Geographic

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizer</td>
<td>67</td>
</tr>
<tr>
<td>Energy</td>
<td>8,516</td>
</tr>
<tr>
<td>Land</td>
<td>2.0</td>
</tr>
<tr>
<td>Water</td>
<td>58,000</td>
</tr>
</tbody>
</table>

Retail value: $2,085
Many Are Engaged in Food Rescue, Recovery, Recycling

- Emergency Food Network
- Gleaners Community Food Bank
- Mid-Atlantic Gleaning Network
- Philadelphia Orchard Project
- Project SHARE
- Society of St. Andrew
- Ample Harvest
- Campus Kitchen at Gettysburg College
- Chester County Food Bank
- City Harvest
- Convoy of Hope
- CropMobster Community Exchange
- Farm to Fork
- Feeding America
- Food Cowboy
- Food Donation Connection
- Food Recovery Network
- Food Research and Action Center (FRAC)
- Food Shift
- Food Waste Reduction Alliance
- FoodStar
- Fork It Over!
- Greater Berks Food Bank
- Grocers Against Hunger
- Hunger-Free Pennsylvania
- Narberth Community Food Bank
- No Kid Hungry
- No Kid Hungry 2
- No More Empty Pots
- ParePm
- Pennsylvania Association of Regional Food Banks
- Philabundance
- Project Bread
- Rock and Wrap It Up!, Inc.
- Second Helpings, Inc.
- The Campus Kitchens Project
- Waste No Food
- The Food Journal
- The Green Source News
- The Hungry Hack
- U.S. Composting Council
- Waste and Resources Action Programme (WRAP)
- Waste Not
- Waste to Wealth Initiative
- Wasted Food
- World Hunger Education Service
- World Resources Institute
- Zero Waste America
- Zero Waste Canada
- Bon Appétit Management Co. and Foundation
- End Food Waste Now
- Feeding the 5000
- Food Alliance
- Food Day
- Food Marketing Institute
- Food Recovery Challenge
- Food Tank
- Food Waste Focus
- Future Food 2050
- Good Food Web
- GRACE Communications Foundation (GCF)
- Green Restaurant Association
- GreenBiz, Inc.
- Harvard Food Law and Policy Clinic
- Harvest Power of We
- Institute for Local Self-Reliance (ILSR)
- Institute of Food Technologists (IFT)
- International Food Policy Research Institute
- iWasteNot Systems, Inc.
- Just-Food
- Mayor's Office of Sustainability, City of Philadelphia
- National Restaurant Association
- Natural Resources Defence Council
- New York City Coalition Against Hunger
- Northeast Recycling Council (NERC)
- Northern California Recycling Forum
- Penn Eco-Reps Program
- Penn Green Campus Partnership
- Pennsylvania Association for Sustainable Agriculture (PASA)
- PA Green Colleges/PA Environmental Resource Consortium (PERC)
- Pennsylvania Resources Council, Inc. (PRC)
- Philadelphia Society for Promoting Agriculture (PSPA)
- Postharvest Education Foundation
- Recycling Alliance of Philadelphia
- ResponsEcology
- Roberts Environmental Center, Claremont
- McKenna College
- Rodale Institute
- Save Food Initiative (FAO)
- School Nutrition Organization
- Small Plate Movement
- SmartBlog on Food and Beverage
- Sodexo Foundation
- Stop Waste
- Sustainable America
- Sustainable Foodservice
- Sustainable Table
- Sustainable Waste Solutions
- Switchboard (Dana Gunders’ NRDC blog)
- The Food Journal
- The Green Source News
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Food Recovery & Waste Diversion: A Glance

133+ B lbs Edible

1-2% For human
30 M (Society of St. Andrew)
700 M processing sector (BSR/FWRA)
670 M retail sector (BSR/FWRA)
405 M (Feeding America)
≈2 B lbs total

21% For animal & recycling
41.2 B lbs processing sector (BSR/FWRA)
1.4 B lbs retail sector (BSR/FWRA)
42-43 B lbs total

>75% Disposal
200+ B lbs total (edible + inedible)
We need to better understand consumer food behavior and affecting factors. We need to characterize food waste streams quantitatively. We need to set food waste reduction target. Without in-depth knowledge, we can’t work effectively. If we don’t measure it, we can’t manage it. Without target, we won’t get there.

Road Ahead

- Consumer-level food waste is the critical control point.
- Source reduction (homes, restaurants) is the key.
- Three critical needs at the national scale:
  - We need to better understand consumer food behavior and affecting factors.
  - We need to characterize food waste streams quantitatively.
  - We need to set food waste reduction target.
Engagement!

THANK YOU!
A Long Journey......

The Last Food Mile......

Processing  Distribution  Consumption