

THE LAST FOOD MILE CONFERENCE

Food Loss and Food Waste in the U.S. Supply Chain

December 8-9, 2014
University of Pennsylvania
Philadelphia, PA



Notes

The Last Food Mile Conference was funded by USDA NIFA to examine food loss & waste in the U.S. supply chain. Featured in the 2-day conference were **four panels**: food industry, consumers, food rescue-recovery-recycling, and behavior change; and **keynotes** on sustainably feeding 9 billion, environmental footprint of food waste, U.S. food loss overview, food-water-energy, and food waste recycling.

Speakers and 200+ participants from academic, government, NGOs, and private enterprises were engaged in lively discussions through presentations, Q&As, information exchange and networking in and outside of the conference room.

A post-conference survey showed “overall level of *satisfaction* with the Conference” **8.33** and “the *quality of the speaker presentations*” **8.61** on a 1-10 scale.

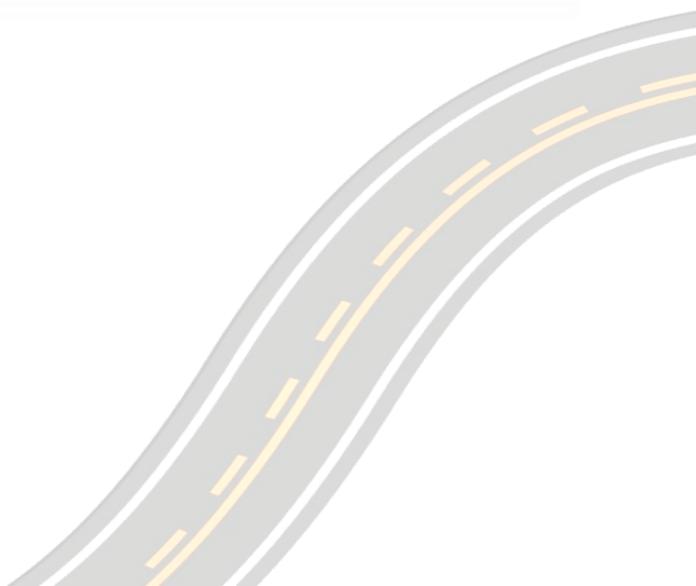
For complete conference agenda, speaker information, conference summary, survey results, attendee profile, and presentations, please visit: <http://www.vet.upenn.edu/last-food-mile-conference>

What follows here is the concluding remarks given by Dr. Zhengxia Dou at the end of the conference. She also delivered the talk at the PSPA January 2015 gathering when the speaker originally scheduled could not be present at the event. The original content was slightly modified by Dr. Dou for the purpose of online posting.

THE LAST FOOD MILE CONFERENCE

Conclusions and Road Ahead

Dr. Alan Kelly
Dr. Dave Galligan
Dr. Jim Ferguson
Mr. Steve Finn
Dr. Zhengxia Dou





Planting



Irrigation



Fertilization



Pest control



Cultivation



Harvest

Food production is a long journey.....



Slaughter



Cleaning



Milking



Feeding



Silage

Food supply chain is the last mile.....



Processing



Storage Transport



Distribution



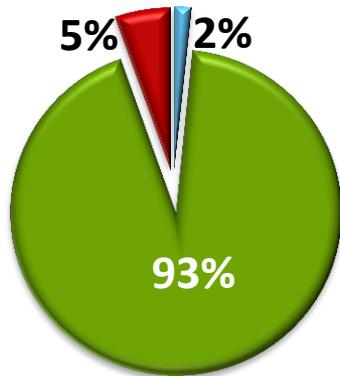
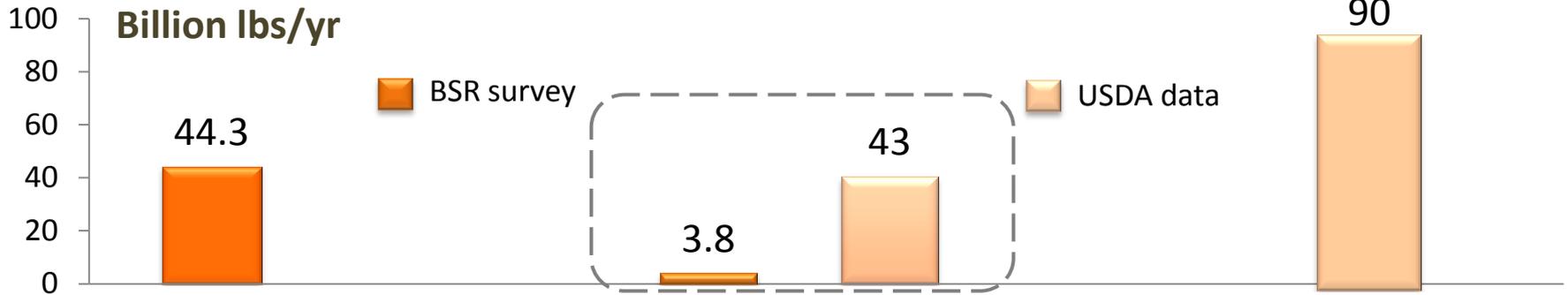
Consumption

Summary: Food Loss & Waste in US Supply Chain

Processing

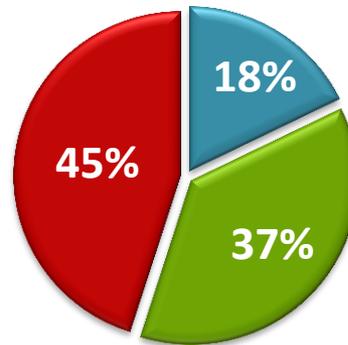
Distribution

Consumption



Residues
Concentrated
(27,400 sites)

- Donation
- Recycle
- Disposal



Consumer Products
Scattered
(179,000 stores)



"Real Waste"
Dispersed
(1 million restaurants
117 million households)

Wasted Food = Wasted Resources & Money!

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

Resource cost for consumer level food Loss (90 B lbs/yr)

| | |
|---------------------------|-----|
| Fertilizer (Million tons) | 2.6 |
| Land (Million ac) | 160 |
| Energy (M MWh) | 660 |
| Water (Trillion gal) | 4.5 |

Food loss & waste by a typical family of four: 1164 lb/yr

| Resource cost | |
|------------------|--------|
| Fertilizer (lbs) | 67 |
| Energy (kWh) | 8,516 |
| Land (ac) | 2.0 |
| Water (gal) | 58,000 |

Many organizations and individuals are engaged in food rescue, recovery, recycling



Food Recovery & Waste Diversion: A Glance

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



133+ B lbs Edible

**200+ B lbs total
(edible + inedible)**

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.**

Without in-depth knowledge, we can't work effectively.

– **We need to characterize food waste streams quantitatively.**

If we don't measure it, we can't manage it.

– **We need to set food waste reduction target.**

Without target, we won't get there.

Engagement!

THANK YOU!