The Secondary Market for Fresh Produce: Opportunities to Reduce Food Insecurity

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Introduction:

- In 2010, 14.5% of Americans were food insecure at some time during the year according to a USDA report on poverty and hunger (Coleman-Jensen, Nord, Andrews, Carlson, 2010).

- Not all of the fresh produce that is grown ends up in the market for which it was originally intended.
Objectives:

- Secondary market creation
- Factors affecting price & availability in secondary markets
- Opportunities for collaboration between growers & non-profits to address food insecurity
Background: Secondary Markets in the Fresh Produce Sector

- Supply is controlled for pricing reasons and the excess becomes available as recoverable food loss.
- Secondary markets, by definition, provide a non-competing outlet for excess or withheld supply from the primary market.
Background: Secondary Markets in the Fresh Produce Sector

NPO’s and NGO’s, such as food banks, have access to food distribution networks for low-income populations.

These organizations:

- Provide a local secondary channel for primary market redirection of excess or withheld supply
- Do not compete with the primary market
- Reduce food insecurity in the areas where these relationships develop
Factors That Enable Secondary Market Creation

- Price Elasticity
- Income Elasticity
- Shelf Life
Secondary Market Creation: Price Elasticity

- Consumer behavior responds as would be expected. For vegetables such as lettuce, the price elasticity is low compared to asparagus, where it is higher but still in the inelastic range:

- The more price inelastic a product is, the more consumers will bear a price increase because there are less substitutes.
Secondary Market Creation: Income Elasticity

Luxury Produce Items

Income

Staple Produce Items
Secondary Market Creation: Shelf Life

**Shelf Life - Difference in Market Price to Secondary Market Price**

$y = -0.48 \ln(x) + 2.9348$

$R^2 = 0.808$

Difference in Price per Pound

$P$ - in days
Conclusions:

• An integrated secondary market channel where product is most price-inelastic, and also has short shelf life, is most likely to benefit the grower and the secondary market channel in achieving supply-chain optimization

• For the grower, this translates to reduced price risk

• For the secondary market channel, this provides for more product at a lower cost

• The grower can better understand how much excess supply costs can be recovered if there is knowledge of secondary demand potential