Identity Preserved Grain Transportation



Heidi M. Reichert Transportation Services Transportation & Marketing Programs Agricultural Marketing Service U.S. Department of Agriculture

What is IP?

Identity Preservation

A system of production and delivery in which the grain is segregated based on intrinsic characteristics (such as variety or production process) during all stages of production, storage, and transportation



Growing Interest in IP

- Producers seeking means of diversifying or specializing (Niche markets)
- Technological advancements in communication, production, processing and marketing (JIT)
- Sophistication of customer demands (specific characteristics, color, protein, size)
- Low 'commodity' grain prices (higher returns for farmer)
- Refined consumer expectations (organic)

What are the issues?

- Traditional (bulk) system of moving grain has been designed to comingle
- Cost reduction based on economies of scale (IP is often in smaller movements)
- Specific issues
 - Elevators
 - Rail
 - Ships
 - International Buyers/Competitors

Comingling



Farm to elevator (storage)
Storage to rail/barge
Rail/barge to elevator
Elevator to ship

Grain Elevators

- Designed to bring together small loads of grain into one big one (economies of scale)
- Smaller, country elevators are less common
- Marketing niche
- Partition larger elevators?
- Re-open country elevators?





- Moving towards larger unit trains (>50 100 units)
- Not as accessible to smaller elevators
- How best to move smaller shipments?



Bulk Ships

- Growing in size (post-panamax)
- Dead freight
- Clean? Partition? (Low tolerance levels)



International Buyers

- Part of driving force for IP
- Strict demands (various reasons)
- Varied tolerance levels
- Able to keep product segregated upon arrival (Yes - use as an example; No why are we worrying so much?)
- Country requirement vs. buyer requirement

Foreign Competition

Competition already getting tougher
Better able to meet buyer demands?
How?



Possible solutions

- Bagging grain (more expensive; ex. soybeans)
- Containerized transport from farm/elevator to exporter (discuss further)
- Barge (less expensive, but slower)
- Small/country grain elevators
- Remove storage aspect (better coordination between transport modes)

Containerized Grain



Best means of IP transport

- Niche market for grain producers (Direct Marketing)
- Higher valued, specialty grain (JIT)

Containerized Grain (cont'd)

- Soybeans, animal feed, pulses, wheat, corn (not a new concept)
- Low ocean freight rates
- Accessible by truck
- Act as storage (on farm, at port, overseas)
- Direct (from farm) marketing opportunity
- Opportunities to reduce costs through logistics (service contracts, cooperatives)

Trends in Containerization

Product	1992		1998		Change
Cueflower	В	С	В	С	
Sunflower Seed	38%	62%	12%	88%	30%
Hops	2%	98%	0%	100%	2%
Pulses	34%	66%	26%	74%	11%

B: Bulk; C: Containerized

Source: PIERS, NY; 1992-8

Containerized Grain (cont'd)



Getting container supply near farm/elevator Move off farm/elevator Heavy load Disadvantage for some

- More expensive
- For premium product

USDA Programs



- IP Containerized Grain Information on Internet (www.ams.usda.gov/tmd/ipgrain)
- Containerized Grain Export Seminars (SD, ND, PNW)
- Containerized Grain Industry Profile
 - Phase I: Paper profiling the industry; soon to be on the Internet
 - Phase II: Industry Advisory Group and Data Collection; in the planning stages